

DISTINCTION

JUNIOR SCHOOL

GRADE 8

ENCYCLOPAEDIA ANSWERS

CBC COMPLIANT



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COMPETENCY BASED CURRICULUM

Table of Contents

1.	Agriculture	1
2.	Business Studies.....	10
3.	Christian Religious Education	25
4.	Islamic Religious Education	46
5.	Visual Arts	54
6	Home Science	67
7	Computer Studies.....	109
8	Pre-Technical Studies.....	131
9	Performing Arts.....	137

AGRICULTURE 8 ANSWERS

Revision exercise 1.1

1. Soil conservation is the act of preventing soil from being eroded and from losing its fertility. It could also mean the prevention of loss of the topmost layer of the soil.
2. a) The flashcard written burning vegetation.
b) Strip cropping: It is typical use of crops planted in strips to reduce soil erosion, both on sloped and flat fields, especially by combining species with different root systems. Deep-rooted plants hold the soil with their roots and protect it from erosion.
Grassed water way: Grassed water ways slow the water flow and protect the channel surface from the eroding forces of runoff water.
A stone line: It helps to reduce the speed of runoff, trap soil that is being washed away and increase water infiltration.
3. Strip cropping. (Assess other relevant answers)
4. C
5. Helps to maintain soil fertility, leads to high crop production, improves the soil structure. (Assess other relevant answers)

Revision exercise 1.2

1. Water harvesting is the collection and storage of rain water for future use. It involves the direct collection of rainwater and a surface runoff.
2. Water storage is the use of various facilities to keep water safe and available for use.
3. i) Shallow water pans: Water pans are a simple method of storing water, particularly for livestock consumption, crop irrigation and sometimes domestic purposes in areas regularly impacted by droughts or in arid areas.
ii) Water ponds: These are structures which serve as a reservoir of water for agricultural use. They are excavated on gently sloping lands. This makes construction easy and reduces soil erosion.

- iii) Water tanks: A water tank is a container for storing water. The water stored in tanks can be used for: drinking, irrigation, fire suppression, rearing of fish, food preparation and mixing of farm chemicals.
4. a) False b) True c) True d) True
5. Assess

Assessment 1

1. i) Soil erosion is the removal of the topmost layer of soil by agents of erosion such as wind and runoff water.
ii) Soil conservation.
iii) Effects of soil erosion include; low crop yield, poor quality of soil, loss of nutrients. (Assess other answers)
2. The importance of soil conservation includes;
i) To maintain an adequate amount of organic matter and biological life in the soil.
ii) To ensure a secure food supply at reasonable prices. Properly conserved soil leads to increased quality and quantity of crop yields over the long term because it keeps topsoil in its place and preserves the long-term productivity of the soil.
iii) To save farmers money. Farmers get a lot of losses due to low yields brought about by poor soil caused by erosion.
iv) To maintain water quality. Agricultural environment soil erosion is a major source of sedimentation and contamination of water sources. (Assess other answers)
3. To reduce soil erosion by slowing down the speed of surface runoff on the slope.
4. Using water tanks, water ponds and water pans.
5. Mulching is applying a layer of crop material to the surface of soil. Reasons for applying mulch include conservation of soil moisture, improving fertility and health of the soil, reducing weed growth.
6. The difference between a shallow water pan and a pond is in their sizes. A pond is larger and deeper compared to a shallow water pan.
7. a) False b) False c) True
8. Using shallow water pans, using water ponds or using water tanks.

9.

S	T	R	I	P	C	R	O	P	P	I	N	G	R	Y	Q
T	R	W	Y	J	O	P	K	L	U	Y	N	M	U	E	T
O	G	R	A	S	S	E	D	W	A	T	E	R	W	A	Y
N	S	O	P	K	L	U	Y	N	M	U	K	L	U	Y	
E	H	T	R	W	Y	J	O	P	K	L	U	U	Y	N	M
L	I	T	R	I	P	R	W	Y	J	O	P	K	L	U	L
I	N	O	P	K	L	U	Y	N	M	U	H	K	A	S	C
N	E	P	W	Z	X	C	B	O	P	K	L	U	Y	N	M
E	E	O	P	K	L	U	Y	N	M	K	Y	U	I	Q	R

Revision exercise 2.1

- Square foot gardening is a simple method which divides a raised plant bed into smaller equal squares, each with a size of roughly one foot in length.
- A square foot garden is made by creating a small garden bed with the size of 4 feet by 4 feet (120cm by 120cm) and dividing it into different grids of 1-foot square each (30cm by 30cm).
- Slasher, fork jembe or blade jembe, rake, spade, tape measure or a ruler, garden line or a string, wooden pegs, and wooden planks, nails, hammer, compost manure, polythene liner, planting materials- these may be seedlings, seeds or vegetative planting materials depending on crops that will be planted.
- Cabbage, broccoli, tomatoes, onions, lettuce, pepper, carrots, raddish. (Assess other answers)
- Use the appropriate tools to clear the allocated space.
 - Dig up the cleared area to achieve soil tilth for the crops you intend to plant.
 - Thoroughly mix the tilled soil with organic manure.
 - Take measurements of total length and width and mark the size of your garden.
 - Calculate the area of the garden.
 - Partition the area to have squares of 1 foot by 1 foot. The number of 1 square foot partitions you will have will depend on the space you have.
 - Use the wooden pegs to mark the one foot distance and the string or garden line to align the wooden pegs in straight lines.
 - Water the soil in your garden to make it ready for establishment of desired crops. Now your garden is ready for planting.

Revision exercise 2.2

- Crop management is a set of agricultural practices performed to improve the growth, development and yield of crops.
- They show signs of affected parts of the plant or they wither, they also have low yields.
- Observe for signs such as:
 - Punctured leaves.
 - Cut-off seedlings. (usually at the base of the stem)
 - Curling of leaves.
 - Stunted growth.
 - Inability to flower and honeydew (sticky liquid left behind on plants by some pests such as aphids)
- Cutworms, aphids, caterpillars, armyworms, thrips, maggots. (Assess other answers)
- Crop disease is an impairment of the normal state of the crop that interferes or changes the normal functions and growth of the crop.

Revision exercise 2.3

- Crop harvesting is the process of removing produce (fruits, vegetables and root crops) from the plant when mature, at the time they are ready for immediate consumption, sale or storage.
- Photographs B and C.
- Hand picking method.
 - Poles and clippers method.
 - Harvesting using cutting knives. (Assess other answers)
- To avoid damage to the crop or the produce, to reduce spoilage of crop produce. (Assess other answers)

Revision exercise 2.4

- Post-harvest practices are processes that follow crop harvest and are done to ensure the produce is kept fresh for long and avoid spoilage.
- Removing soil, drying, sorting, grading.
- Removing soil: Ensures the crop produce is clean.
 - Drying: To remove excess moisture from crop produce.
 - Sorting: To remove injured, those attacked by pests.
 - Grading: Mainly according to size and appearance to enable easy packaging.

Revision exercise 2.5

- Branding: Improves customer loyalty to the vegetable produce, makes it easier to identify the produce.
 - Weighing: Helps to determine the quantity of yield by weight. Also, helps to determine the pricing by weight.
 - Labelling: Helps in advertising the vegetable crop produce. It also makes products grading easy.
 - Packaging: Helps to maintain quality of the vegetable produce. It also makes transporting the produce convenient.
- Import duty.
- Value added tax.

Assessment 2

- A. Grasshopper B. Caterpillar
- Make sure her hands are clean before starting to pick the vegetable produce.
Ensure that no part of the crop that comes into contact with animal or bird droppings should be harvested.
She should not harvest produce that has fallen. She should remove as much soil as possible from harvested produce before she puts it in harvest bins.
- Tomatoes: Slightly soft when pressed gently with a finger, light red in colour.
 - Cabbage: Cabbage head is fully formed to the expected size, the cabbage head is firm throughout when squeezed.
- Easier for crop rotation because a wide variety of crops can easily be grown in alternate squares every season.
 - Mulching is easy since you do it per square garden and grow a lot of plants in a small space.
 - Minimal weeding is required because of the unique soil mix and the high density of plantings, many gardeners report that their plots are much less prone to weeds than the typical variety. Plus, they are just smaller, so it is less of a commitment than a huge vegetable garden.
 - Promotes water conservation in farming as irrigation is done per square depending on the water requirements of the crops in each square.

- Protecting crops from damage by small wild animals is easier since you can fence the whole of the square foot garden at a low cost.
 - Promotes house hold nutrition since irrigating the crops is easier, making food available during off-season.
- Crop management practices include; watering, weeding, training, harvesting ready produce. (Assess other crop management practices)
- Hand picking and killing, cutting the affected part of the crop, uprooting the affected crop and burning them, spraying with pest control chemicals and applying ash. (Assess other relevant answers)
- A good, even color over the entire fruit, firm structure.(Assess other relevant answers)
- Harvesting produce that has already fallen on the ground, storing produce with soil and moisture instead of cleaning and drying it first.
- Cleaning, sorting, grading and packaging.
- Marketing.

Revision exercise 3.1

- A crush.
 - Cattle, horses, calves (Assess other relevant answers)
 - kennel, calf pen, hutch.
- Doris should ask her brother to doge the bull by running in a zigzag manner to slow it down and turn back to run past it so that by the time the bull turns to charge him at him again he will have run to safety. (Assess other relevant answers)
 - Separating livestock from workers by using walk ways, using crushes having exit spots. Walk ways are paths that are only used by workers when handling animals. Exit spots are points where workers or the person handling the animal can easily escape through incase the animal becomes aggressive. (Assess other relevant answers)
 - use of wire mesh over fish ponds and poultry shed.
 - use of scaring devices to keep off predatory birds.
 - eliminate hiding places for predators like bushes by clearing them. (Assess other relevant answers)

Revision exercise 3.2

- Nails, wire mesh, pieces of iron sheets or grass, pieces of timber, hammer, hand saw.
 - Amount of space available, number of poultry to be kept, availability of resources. (Assess other relevant factors)
 - Wire meshed floor, handles, boarded section.
 - Wire meshed floor- allows poultry droppings to pass to the ground, allows poultry to feed on grass.
Handles- allow movement of the fold from one place to another.
Boarded section- provides some shade for poultry to rest and also lay their eggs.
- Rearing chicken using a poultry fold.
 - Rearing chicken using a cage.
- Assemble all the materials and tools needed.
 - Cut the pieces of wood or timber to the required size. Three of them should be 3.5 meters long. These will be used at the two lower sides and along the roof.
 - 6 pieces should be 1.5 meters long. These will be used at the sides.
 - Cut the iron sheets to be 1.5 meters long.
 - Using a hammer join the two 3.5 meters long pieces of timber with two 1.5 meters pieces of wood to form a rectangle.
 - Using a hammer, join the other two 1.5 m long sticks at the corners of the rectangle at an angle of 45 degrees to form an inverted v shaped structure.
 - Join the remaining 3.5-meter-long piece at the top to link the two v shaped structures at the extreme sides.
 - Cover one third of the fold with iron sheets.
 - Cover the remaining part with a wire mesh.

Revision exercise 3.3

- Refers to the various steps used in getting poultry carcass ready for consumption.
- Defeathering- the act of removing feathers from poultry after slaughtering.
 - Beheading- it means severing or breaking off of the head from the body using rapid, effective and humane methods.
 - Removing offal- it involves removal of internal or visceral organs of poultry.

- Scaling
 - Scaling helps in removal of scales from the fish.
Gutting – it is done to remove the guts and other internal organs of the fish.

Revision exercise 3.4

- The activity of keeping something fresh or free from damage for a long period.
- Salting, drying, smoking. (Assess relevant other answers)
- Assess relevant answers.
- Fresh milk is allowed to stand, at room temperature, in a loosely covered storage container. This allows micro-organisms in the milk and from the surrounding air to ferment the milk. Fermentation takes 1 to 2 days depending on the temperature. (Assess other relevant descriptions)
- Freezing.
 - To prevent spoilage of the meat.
 - To prolong shelf life by killing the micro-organisms that may cause spoilage.
 - To ensure surplus meat is fresh for use at a later date.

Assessment 3

- Handle animals quietly and calmly - aggression or loud sounds can irritate the animal making it aggressive.
Avoid walking or standing right behind the animal. It may hit you.
Avoid standing between two animals, between an animal and a wall or between an animal and a house. In case of aggression, the animal can hit you against the structure.
(Assess other relevant answers)
- Wire-mesh. (Assess other relevant answers)
- Using scare-crows, using scaring devices, using sound producing items to make sounds at certain intervals.
- Kennel
- False
 - True
 - True
 - False
- Beheading the poultry.
 - Defeathering the poultry.
 - Removing the offal.
 - Cleaning the carcass.

7. Can be composted and used as fertiliser, can be burnt, can be buried. (Assess other relevant answers)
8. Sun drying.
9. Boiling (Assess other relevant answers)
10. a) Meat, knife, appropriate container like a tray and salt.
b) Safety when handling the knife, hygiene by washing her hands before and after the process. (Assess other relevant answers)

Revision exercise 4.1

1. Any equipment or tool used to give water to domestic animals.
2. a) A. Metallic pipes. B. Plastic
b) Assess
c) Assess
3. i) The size of the container may not contain water that is enough for all the animals that need it.
ii) Excess water may spill out onto the floor of the animal house which creates a good habitat for disease causing organisms.
iii) Need for labour to keep checking and refilling the containers to maintain the right water level.
iv) The containers may lead to wastage of water and water contamination.
(Assess other relevant answers)

Revision exercise 4.2

1. They refer to various forms of support required by farmers during production of agricultural produce.
2. Input supply, market information, weather forecast and veterinary services. (Assess other relevant answers)
3. The internet has enabled access of agricultural support services with ease and at the comfort of one's home. (Assess other relevant answers)
4. This is the prediction of weather conditions that affect farming and therefore farmers need to know about, they are mainly rainfall, temperature and wind.

Assessment 4

1. Assess.
2. Assess.
3. Farmers can acquire support services by searching for the specific service and getting through the steps given till completion and delivery of the service.
4. Assess.
5. a) Through accessing information on the current weather conditions as well as prediction of weather conditions.
b) Through provision of treatment, care, advice or guidance concerning the health of domestic animals.
6. a) Can provide weather forecast information, information on seeds and fertilisers to use in a certain area. (Assess other relevant answers)
b) Television – weather forecast, information on seeds, fertilisers, seedlings and extension services.
7. Netiquette describes the rules of conduct for respectful and appropriate communication on the internet.
8. By using the internet in an ethical manner where you consider whether the use of ICT is moral, decent, right or socially acceptable. (Assess other relevant answers)
9. These are about farmers getting knowledge and skills on crop and animal management to improve their productivity, food security and livelihoods.
10. By marketing their produce using technology so as to broaden their market base and be able to sell more.

MODEL TEST PAPER 1

1. i) Moving the fold from one place to the other. It enables poultry to eat grass thus reducing the quantity of feeds consumed.
ii) Watering- replace the water for poultry with fresh water every day.
iii) Feeding- some feeds are provided in addition to those the poultry get from the natural environment.
(Assess other relevant answers)

2. It makes it easy to cook.
Makes it easy to package.
It makes it appealing when packaged.
3. Square-foot gardening.
4. Soil conservation is the prevention of loss of the topmost layer of the soil from erosion or prevention of reduced fertility.
5. Using water tanks. Storing using jerricans.
6. Mongoose.
7. Using a chicken fold or a chicken house.
8. Water harvesting is a technique used to collect and store rainwater that can be utilised later for agricultural purposes.
9. It conserves water by directing water directly to the roots of the crops or plants.
10. Crops planted in strips hold the soil firmly and reduces the speed of surface runoff.
11. Using stone lines.
12. Stone lines reduce the speed of surface runoff. The stones also trap some soil.
13. Secure housing.
Secure fences.
Use of wire mesh over fish ponds and poultry shed.
Use of scaring devices to keep off predatory birds.
14. Assess.
15. Assess.
16. Gully erosion.
17. Sheet erosion, gully erosion.
18. Planting grass on the water path. (Grassed water way method)
19. Rill, sheet, splash and gully erosion.
20. Crop rotation, cover crops, conservation tillage and planted windbreaks.
21. To maintain an adequate amount of organic matter and biological life in the soil.
To ensure a secure food supply at reasonable prices. Properly conserved soils lead to increased quality and quantity of crop yields over the long term because it keeps topsoil in its place and preserves the long-term productivity of the soil.
To save farmers money. Farmers get a lot of losses due to low yields brought about by poor soils caused by erosion
To maintain water quality. Agricultural environment soil erosion is a major source of sedimentation and contamination of water sources.
22. Beets, carrots, radishes, sweet potatoes and turnips. (Assess other answers)
23. Hand picking method, poles and clippers method, harvesting using cutting knives, harvesting by means of digging tools, using hand pruners to harvest crops with tougher stems, such as eggplants and cucumbers, using a garden fork to harvest root crops.
24. These are practices aimed at getting crop produce to the consumer in good condition.
25. Crop harvest is the removal of mature parts of crops or plants. (Assess other relevant answers)
26. Jembes, fork jembes, hoe. (Assess other relevant answers)
27. Leaf spots, rot, curls of warts and leaves, leaf rust. (common in corn) (Assess other relevant answers)
28. Spinach leaves are ready to harvest as soon as they are big enough to eat.
29. Square foot gardening is a method of farming that involves creating small, orderly and relatively more productive gardens per unit area of land.
30. Onions, broccoli, tomatoes, lettuce. (Assess other relevant answers)

MODEL TEST PAPER 2

1. Mongoose, snakes, foxes. (Assess other answers)
2. A poultry carcass refers to the cartilage "frame" of the chicken.
3. a) Defeathering- the act of removing feathers from poultry after slaughtering.
b) Beheading- it means severing or breaking off of the head from the body using rapid, effective and humane ways.
c) Removing offal- it involves removal of internal or visceral organs of poultry.
d) Cleaning- to remove any dirt or blood on the poultry carcass.
4. Building gabions, mulching. (Assess other relevant answers)
5. Bunds are formed by digging wide holes on a sloping ground and throwing soil up slope. A semicircular depression is formed.
6. Soil pollution refers to the presence of a chemical or harmful substance in the soil.
7. A water pond is deeper and bigger in size than a shallow water pan. (Assess other relevant answers)

20. Minimum tillage aims at causing minimal disturbance to the soil for example through uprooting weeds instead of digging them out. (Assess other relevant answers)
21. The practices of using water efficiently to reduce wastage or make water available for a longer period.
22. Minimum tillage are practices that aim at causing minimal disturbance on the soil. (Assess other relevant answers)
23. Assess.
24. Drying involves application of heat under controlled conditions by evaporation. This is aimed at reducing growth of organisms that cause spoilage and extend shelf life. This method is used to produce milk in powder form.
Use of preservatives. These are substances that are capable of inhibiting the growth of micro-organisms. Natural milk is preserved using natural preservatives such as honey, bio preservatives and chemical preservatives.
25. Chemical fertiliser overuse can contribute to soil acidification, thereby reducing the content of organic matter, humus content, beneficial species, stunting plant growth and altering the pH of the soil. (Assess other relevant answers)
26. Fertilisers, pest and disease control chemicals.
27. Assess.
28. A crop is established for production while a weed grows on its own in an unwanted place.
29. Thinning is the removal of some plants, or parts of plants, to make room for the growth of others.
30. Dibbling, drilling, broadcasting.

MODEL TEST PAPER 4

1. Gutting in fish involves removal of the internal parts of a fish.
2. Housing.
3. Housing protects domestic animals from predators and harsh weather conditions.
4. Container gardening means growing crops in available containers that are no longer in use.
5. It can be used where there is limited space. (Assess other relevant answers)

6. Always wear gardening gloves to protect your hands, use appropriate tools for digging instead of your fingers. (Assess other relevant answers)
7. Surface runoff is the flow of water over the ground surface.
8. Earth basin, water retention pit. (Assess other relevant answers)
9. Hand picking method, poles and clippers method, harvesting using cutting knives, harvesting by means of digging tools, using hand pruners to harvest crops with tougher stems, such as eggplants and cucumbers, using a garden fork to harvest root crops.
10. Strip cropping is a soil conservation measure which entails planting various in strips crops that provide a good ground cover.
11. They provide a firm grip to the soil and reduce speed of surface runoff.
12. Make sure their hands are clean before starting to pick the vegetable produce. Ensure that no part of the crop that comes into contact with animal or bird droppings should be harvested. They should not harvest produce that has fallen. They should remove as much soil as possible from harvested produce before they put it in harvest bins.
13. Cucumber.
14. Assess.
15. Assess.
16. They are long, firm and have an even colour.
17. Assess.
18. Easier for crop rotation because a wide variety of crops can easily be grown in alternate squares every season. Crop yield per unit area of land is higher as a result of each crop getting adequate water, nutrients and sunlight. Irrigating the crops is easier, making food available during off-season. Maximises land utilisation, using a small space to grow a variety of crops. Lesser labour used in carrying out field practices such as weeding, watering and control of pests and diseases.
19. Beheading, defeathering, removal of offal and cleaning.

20. Foxes, predatory birds, mongoose. (Assess other relevant answers)
 21. Produce products such as eggs, milk, milk etc. (Assess other relevant answers)
 22. Inheritance, buying from pet shops, adoption.
 23. Can be practised in limited space, cost of feeding is minimal since poultry can feed from grass on the ground, control of pests and disease is easy.
 24. Smoking - during smoking, meat is placed on a rack over a fire so that smoke acts as a drying agent and removes moisture from it. Smoking also adds flavour to the meat. Salting - this method is carried out by rubbing salt all over the meat and keeping it in an open area. Salt helps drain fluids from the meat and discourage micro-organisms that cause spoilage.
 25. Crop rotation, using minimal tillage practices. (Assess other relevant answers)
 26. Excessive use of farm chemicals, poor disposal of materials used to package chemicals and fertilisers. (Assess other relevant answers)
 27. Water conservation means using water efficiently to minimise wastage and make water available for a longer period. (Assess other relevant answers)
 28. Conserving surface runoff, harvesting rain water using water tanks.
 29. It makes water available after the rains, makes crops yields high, improves soil fertility. (Assess other relevant answers)
 30. Assess.
6. Food requirements for the pet, cost of buying the pet. (Assess other relevant answers)
 7. Increases the value of crop produce, increases the market value of crop produce.
 8. Tilling, uprooting and slashing.
 9. Assess.
 10. Cleaning.
 11. Drying, sorting, grading and packaging.
 12. Storing them in good conditions, preserving them. (Assess other relevant answers)
 13. First picture - cutworms
Second picture - white flies
 14. Cutworms eat the stems of crops.
White flies cause stunted growth, yellowing and falling off of leaves.
 15. Aprons, handgloves. (Assess other relevant answers)
 16. Assess.
 17. A crush, a kennel, a hatch, cattery. (Assess other relevant answers)
 18. Cows, chicken, goats, camels. (Assess other relevant answers)
 19. Seeds, suckers. (Assess other relevant answers)
 20. Watering, weeding, training, shading.
 21. Maize seeds, banana suckers. (Assess other relevant answers)
 22. To increase its market value. (Assess other relevant answers)
 23. First picture - salting.
Second picture - sun drying
 24. Freezing, refrigeration, smoking. (Assess other relevant answers)
 25. On river banks, in valleys. (Assess other relevant answers)
 26. Peat moss, pebbles. (Assess other relevant answers)
 27. Cost of buying the pet, allergic reactions. (Assess other relevant answers)
 28. Removal of unwanted plants among crops.
 29. Potatoes, cassava. (Assess other relevant answers)
 30. Broadcasting involves spreading seeds by hand or using a machine on the surface of the soil.

MODEL TEST PAPER 5

1. Maximises land utilisation, using a small space to grow a variety of crops.
2. Salt helps drain fluids from the meat and discourage micro-organisms that cause spoilage.
3. Fermentation.
4. Fresh milk is allowed to stand, at room temperature, in loosely covered container. This allows micro-organisms in the milk and from the surrounding air to ferment the milk.
5. Refrigeration, freezing. (Assess other relevant answers)

BUSINESS STUDIES ANSWERS



BUSINESS AND MONEY MANAGEMENT

1.1 Financial Goals

Revision exercise 1.1

1.

A	C	H	I	E	V	A	B	L	E
T	I	D	E	L	T	Z	C	L	A
E	F	A	S	S	O	I	B	D	B
T	I	M	O	U	R	A	G	A	L
Q	C	W	Q	K	R	M	R	X	Y
S	E	N	R	U	L	P	F	L	C
H	P	U	S	U	C	C	E	S	S
J	S	A	T	V	Y	M	M	B	H
V	E	L	B	A	I	L	E	R	E
M	S	Z	X	T	Y	V	A	S	R

Assess relevant response

- Breaking down goals, financial assessment, Risk tolerance, Prioritization, Tracking and review of her goals.
- Assess relevant response
- Demotivation
Ending up with a huge debt
Emotionally detached (angry, stressed, depressed and quitting)
-

Financial Goal	Achievability
Buying a Home	NO
Investing in real estate	NO
Paying part of his school fees	YES
Buying stationery	YES
Saving for retirement	NO
Buying a car	NO

Are specific objectives or targets that individuals or entities set to manage their finances effectively and achieve certain milestones.

- Assess relevant responses
- Assess relevant responses
- Assess relevant responses. Ensure that there is a mention of SMART in the response.

1.2 Income

- Income refers to the money or earnings received by an individual or entity, typically on a regular basis, from various sources such as employment, investments, or business activities.
- ✓ Employment or salary
 - ✓ Rental income from real estate
 - ✓ Dividends and interest from investments
 - ✓ Business profits
 - ✓ Royalties from intellectual property
 - ✓ Social security or government benefits
 - ✓ Freelance or self-employment earnings
- Gross income is the total earnings before deductions, such as taxes and expenses. Net income is what remains after subtracting all deductions, reflecting the actual income an individual or business retains.
- Personal income tax is calculated based on a person's taxable income, which is their gross income minus deductions and exemptions. Tax rates vary by country and often have progressive tiers.
- Passive income is money earned with minimal effort or active involvement, such as rental income, dividends, or royalties. It is often considered a form of income that generates revenue without constant work.
- Advancing in one's career or seeking higher-paying job opportunities
Investing in income-generating assets
Starting a side business or freelancing
Developing new skills or acquiring additional education
Managing expenses and saving more effectively
- Earned income is money earned through active work, such as a salary or wages. Unearned income, on the other hand, includes income from investments, rental properties, or other sources where the recipient isn't actively working for the income.
- Budgeting helps individuals and households manage their income effectively by tracking expenses, setting financial goals, and ensuring that spending aligns with income to avoid debt and save for the future.

9. Inflation reduces the purchasing power of income over time, meaning that the same amount of money will buy less in the future. This underscores the importance of investments and strategies to beat inflation.
10. Passive income can be generated through investments in stocks, real estate, bonds, peer-to-peer lending, creating and licensing intellectual property, or building online businesses that generate recurring revenue.

1.3 Budgeting and Spending

Revision exercise 1.3

1. Assess
2. Budgeting allows you to have better control over your finances.
Budgets enable you to set and work towards financial goals.
By budgeting, you can prioritize your spending based on your needs and values
If you have debt, a budget helps you allocate funds for debt repayment, preventing it from accumulating further and improving your financial health

3. Assess
4. Assess
5. Assess
6. Assess
7. Leadership
Public Speaking
Critical thinking
Problem solving
8. Public speaking
Leadership
9. She might venture into politics, public speaking, and law.
10. She is a talented dancer something Nancy isn't. It must be noted that despite having different abilities, everyone deserves equal Opportunities.
11. ✓ Problem solving. ✓ Critical thinking

2. BUSINESS AND ITS ENVIRONMENT

2.1 Types of business enterprises

Revision exercise 2.1

1. ✓ He will earn profits
2. ✓ He will get better quality goods
3. ✓ He will earn interest on capital invested
4. ✓ He will enjoy credit facilities
5. ✓ He will buy goods on fair prices
6. ✓ He will be assured of protection against malpractice
7. ✓ Will get advice in area or finances
✓ Earn interest on investment
✓ Receive loans at low interest rates
✓ Receive credit facilities
✓ Assisted in times of problems
✓ A source of savings
8. minor
General
Active
Nominal

9. Temporary or joint venture
- 10.

CO-OPERATIVE SOCIETY	PARTNERSHIP
Managed by a committee of 9 members	Managed by active members
Formed by a minimum of 10 members with no maximum	Formed by 2-20 partners, unless for professional partnership which goes to a maximum of 50 partners
Governed by a collectives act	Governed by a partnership act
The main motive is to improve the welfare of its members	The main motive is to make profits

Members have limited liability	Some partners may have unlimited liability
Notes affected by death, in sanity, exit or entry of a member	Maybe dissolved due to exit, death in sanity and bankruptcy of a member

if the partners mutually agreed to resolve the business

In case of death insanity or bankruptcy of a partner

In case of completion of the intended purpose or end of the agreed time

A court orders the business to dissolve

Where are Patna requests for the dissolution in writing

If the business engages in unlawful practices, it will be noted that a change in law may render business activities unlawful

In case of continued disagreements among the partners

In a case of retirement for admission of a new partner this may lead to a permanent or temporary the dissolution

11. ✓ They provide loans to members
 - ✓ Most Kenyans practice agricultural farming
 - ✓ Sell goods of high quality
 - ✓ They eliminate middlemen by selling direct from the farmers
12. ✓ If the partners mutually agreed to dissolve the business
 - ✓ Incase of death, insanity or bankruptcy of a partner
 - ✓ Incase of completion of the intended purpose or end of the agreed time
 - ✓ Court order

2.2 Entrepreneurship

Revision exercise 2.2

1. Entrepreneurship is the process of creating and managing a business, typically with the goal of earning a profit. It involves identifying opportunities, taking risks, and organizing resources to bring innovative ideas to market.
2. Successful entrepreneurs often possess qualities like creativity, resilience, adaptability, leadership, and a strong work ethic. They are also skilled at problem-solving and risk management.

3. A business plan is crucial in entrepreneurship as it outlines the goals, strategies, and financial projections of a business. It serves as a roadmap and helps secure funding from investors or lenders.
4. Startups are typically innovative, high-growth businesses that aim to disrupt markets with new products or services. Small businesses are more traditional and focus on providing goods or services in established markets.
5. Entrepreneurs often identify market opportunities by conducting market research, analyzing consumer needs, and observing trends. They look for gaps or pain points in the market that their products or services can address.
6. Funding is essential for entrepreneurs to start and grow their businesses. It can come from various sources, including personal savings, loans, venture capital, or crowd funding, and it helps cover startup costs and operational expenses.
7. Entrepreneurs often face challenges such as financial constraints, competition, market volatility, and the need to constantly adapt to changing business conditions.
8. Entrepreneurs can manage risk by conducting thorough market research, diversifying their products or services, having a solid business plan, and building a financial safety net.
9. Networking is crucial in entrepreneurship as it helps entrepreneurs connect with mentors, potential partners, investors, and customers. It provides valuable opportunities for learning and growth.
10. Entrepreneurship drives economic development by creating jobs, fostering innovation, and promoting competition, which can lead to increased productivity and economic growth in a region.

2.3 Networking in Business

Revision exercise 2.3

1. Networking in business is the process of building and maintaining relationships with individuals and organizations to exchange information, support, and opportunities for mutual benefit.
2. Networking is crucial in business because it helps identify opportunities, access resources, share knowledge, and foster growth through connections and relationships.

3. You can network in business through events, conferences, industry associations, online platforms like LinkedIn, and local business organizations.
4. The goal of effective networking is to build and maintain meaningful relationships that lead to opportunities, support, and mutual success in business.
5. To make networking more effective, focus on building genuine relationships, offering value, and maintaining a professional and proactive approach to connecting with others.
6. Networking plays a significant role in career advancement by providing access to job opportunities, mentorship, and professional development.
7. Networking can contribute to business innovation by connecting individuals with diverse perspectives, insights, and ideas, fostering creativity and problem-solving.
8. When networking in business, avoid being overly self-promotional, disrespectful, or insincere in your interactions. Building trust and authenticity is crucial.
9. Online networking platforms like LinkedIn can benefit businesses by providing a digital space to connect, share expertise, and access a wide network of professionals and potential clients.
10. Assess
5. Phone calls enable real-time voice communication, making them suitable for quick discussions, negotiation, and building rapport with clients and colleagues.
6. Video conferencing allows for face-to-face communication over the internet, making it ideal for remote collaboration, presentations, and virtual meetings.
7. During a crisis, businesses should use multiple channels, such as emergency notifications, social media, and direct communication, to keep employees, customers, and stakeholders informed and safe.
8. Feedback is crucial for improving communication within a business. It helps identify areas for improvement, ensures clarity, and enhances overall effectiveness.
- 9.

E	D	S	E	V	E	C	E	R
C	M	L	E	T	T	E	R	S
S	E	A	N	D	R	O	I	D
E	N	D	I	R	E	P	L	Y
N	O	S	S	L	L	A	C	B
D	A	O	L	W	I	N	N	O
E	M	Q	M	E	M	O	S	S
R	E	M	A	I	T	E	T	S
Z	T	E	N	R	E	T	N	I

10. In-person meetings are valuable for discussing sensitive topics, negotiating deals, brainstorming, or building rapport with clients and partners.

2.4 Business Communication

Revision exercise 2.4

1. Business communication channels are the methods or avenues through which information, messages, and data are exchanged within an organization and with external stakeholders.
2. The main types of business communication channels include email, phone calls, meetings, video conferencing, instant messaging, internal intranets, social media, and written documents.
3. Businesses choose communication channels based on factors such as the nature of the message, audience preferences, urgency, complexity, accessibility, cost, privacy, and compliance requirements.
4. Email is widely used in business because it allows for formal communication, document sharing, record-keeping, and asynchronous communication across distances.

2.5 Location and size of a production unit

Revision exercise 2.5

1. The location of a production unit affects costs, accessibility to resources, and market reach.
2. Factors include demand, economies of scale, available resources, and budget.
3. Economies of scale mean cost savings as production quantity increases.
4. Being close to suppliers reduces transportation costs and delays.
5. Larger units can often achieve higher efficiency and lower per-unit costs.
6. Transportation and logistics for international distribution.
7. By having flexibility in its size and location.
8. Technology can enhance efficiency, allowing

smaller units to compete.

9. Tax incentives, regulations, and tariffs can impact location decisions.
10. Larger units may face higher initial investment risk but lower operational risk.
11. Choose locations with access to renewable energy and minimize environmental impact.
12. To maximize efficiency, minimize costs, and meet market demand.

2.6 Marketing of goods and services

Revision exercise 2.6

1. The marketing mix, also known as the 4Ps, includes Product, Price, Place, and Promotion. These elements are essential for creating a successful marketing strategy.
2. Businesses can determine their pricing strategy by considering factors such as production costs, competitor pricing, and customer demand. They can choose from strategies like cost-plus pricing, value-based pricing, or competitive pricing.
3. The customer journey represents the path a customer takes from awareness to purchase and beyond. Understanding this journey helps businesses tailor their marketing efforts at each stage to maximize conversions and customer satisfaction.
4. Content marketing focuses on creating valuable, informative content to engage and educate customers, while traditional advertising promotes products or services directly through paid channels like TV or print media.
5. Market segmentation involves dividing a broad target market into smaller, more manageable segments based on common characteristics. It's important because it allows businesses to tailor their marketing strategies to specific customer groups, increasing the effectiveness of their campaigns.
6. Businesses can collaborate with influencers who have a significant following in their niche. Influencers can authentically promote products or services to their engaged audience, increasing brand visibility and credibility.
7. The rise of e-commerce has forced brick-and-mortar retailers to adapt by enhancing their online presence and leveraging technology for personalized marketing to remain competitive.

2.7 Demand and supply

Revision exercise 2.7

1. Demand in economics refers to the quantity of a good or service that consumers are willing and able to purchase at various prices during a specific time period.
2. Several factors can influence demand, including:
 - Price of the product, consumer income, tastes and preferences, the prices of related goods (substitutes and complements), population and demographics, consumer expectations about future prices or income.
3. Supply in economics represents the quantity of a good or service that producers are willing and able to offer for sale at different prices during a specific time period.
4. The cost of production.
 - Technology and innovation
 - Government policies and regulations
 - Input prices (e.g., raw materials, labor)
 - The number of producers in the market
 - Natural events (e.g., weather affecting agriculture)
5. When demand increases while supply remains constant, both the equilibrium price and quantity rise. Conversely, if demand decreases while supply stays the same, the equilibrium price and quantity decrease. Changes in both demand and supply can lead to shifts in the equilibrium point.
6. The equilibrium price is the price at which the quantity demanded equals the quantity supplied in a market. It's the price where there is no shortage or surplus of the product.
7. A price ceiling is a government-imposed limit on how high a price can be charged for a particular good or service. It is typically set below the equilibrium price. Price ceilings can lead to shortages because they discourage producers from supplying as much as consumers demand.
8. Elasticity of demand measures how sensitive the quantity demanded of a good is to changes in its price. If demand is elastic, a small price change leads to a proportionally larger change in quantity demanded. If it's inelastic, quantity demanded changes only slightly in response to price changes.



GOVERNMENT AND GLOBAL INFLUENCE ON BUSINESS

3.1

Government Economic Policies affecting Business in Kenya

Revision exercise 3.1

1. Fiscal policy refers to government decisions regarding taxation and spending. When the government increases taxes, it can reduce disposable income for consumers, affecting businesses negatively as consumer spending may decrease. Conversely, tax cuts can stimulate spending and benefit businesses.
2. Monetary policies are controlled by central banks. When central banks raise interest rates, it becomes more expensive for businesses to borrow money, potentially slowing down investments and expansion. Conversely, lowering interest rates can encourage business investments and borrowing.
3. Government regulations can impact businesses by setting rules and standards for various industries. For example, environmental regulations may require businesses to invest in cleaner technologies, affecting their expenses and competitiveness.
4. Trade policies encompass tariffs, trade agreements, and import/export regulations. Tariffs can increase the cost of imported goods, impacting businesses that rely on those imports. Trade agreements can open up new markets for businesses, promoting growth.
5. Economic stimulus packages involve government spending to boost economic activity during recessions. This spending can benefit businesses directly through contracts and indirectly by increasing consumer spending, supporting their revenues.
6. Government subsidies are financial aid provided to businesses in various forms, such as grants or tax breaks. They can help businesses lower costs, improve competitiveness, and encourage investment in specific sectors.
7. Inflation can erode the purchasing power of money, affecting businesses by increasing costs. Government policies, such as controlling money supply or implementing price controls, aim to manage inflation and stabilize business environments.
8. Government policies can support small businesses through initiatives like low-interest loans, tax incentives, and streamlined regulations. These measures can reduce barriers to entry and foster entrepreneurship.
9. While government intervention can provide stability, it can also lead to bureaucracy, increased taxes, and regulatory burdens that can hinder business growth and innovation.
10. Businesses can engage with policymakers through advocacy groups, lobbying efforts, and participating in public consultations to voice their concerns and provide input into economic policy decisions.

3.2

Taxation in Kenya

Revision exercise 3.2

1. VAT Amount = Product Price × VAT Rate
 $1200 \times 0.18 = 216/=$
2. A tax return is a document that individuals and businesses file with the government to report their income and calculate the amount of taxes they owe or are owed as a refund.
3. The Tax Amnesty program in Kenya provides an opportunity for taxpayers to declare and pay their outstanding taxes without penalties or interest. It is a limited-time initiative aimed at encouraging tax compliance.
4. Kenya Revenue Authority (KRA).
5. Tax evasion is the illegal act of not paying taxes that you owe, while tax avoidance is the legal practice of minimizing your tax liability through legitimate means.

6. A tax audit is an examination of an individual's or business's financial records and tax returns by the government to ensure they have paid the correct amount of taxes.
7. Income tax is a tax levied on an individual's or a business's income, which include wages, salary, and profits.
8. A tax bracket is a range of income where a

specific income tax rate applies. As income increases, taxpayers move into higher tax brackets and pay a higher percentage of their income in taxes.

9. Tax education is important for individuals to understand their tax obligations, maximize their tax benefits, and avoid legal issues related to taxes.



4. FINANCIAL RECORDS IN BUSINESS



4.1 Financial and costing of goods and services

Revision Exercise 4.1

1. Pricing strategy is a plan or approach that businesses use to set the selling price of their products or services to achieve specific goals, such as profitability or market share.
2. The key elements of a pricing strategy include cost analysis, market research, competition analysis, and setting clear pricing objectives.
3. The cost of goods sold is calculated by adding the cost of direct materials, direct labor, and manufacturing overhead used in the production of the product.
4. Fixed costs remain constant regardless of production levels, while variable costs change in proportion to production levels.
5. Businesses should consider ethical factors, such as avoiding price discrimination, providing fair value, and being transparent with customers in their pricing strategies.
6. Businesses can increase profit margins by reducing production costs, improving efficiency, and expanding their customer base
7. Accurate product costing is essential for setting competitive prices, making informed business decisions, and ensuring profitability.
8. Pricing refers to the process of setting a specific selling price for a product or service, while costing involves calculating the expenses incurred in producing that product or service.
9. Price elasticity of demand measures how sensitive consumer demand is to price changes. Understanding this helps businesses determine

how much they can adjust prices without losing customers.

10. During economic downturns, businesses might lower prices, offer promotions, or introduce cost-effective product variations to maintain sales.



MODEL TEST PAPERS

MODEL TEST PAPER 1

1. A financial goal is a specific, measurable objective you set for your financial future, such as saving for a house, paying off debt, or building an emergency fund.
2. Budgeting is crucial for managing your finances and allocating resources to achieve your goals. It helps you track income and expenses, ensuring you have money to put toward your objectives.
3. 16%
4. The primary source of income for most people is earned income, which comes from employment or self-employment.
5. Diversifying income sources involves creating multiple streams of revenue. This can be done by investing, starting a side business, or exploring alternative income opportunities.
6. Passive income sources include rental income from real estate, dividends from stocks, royalties from intellectual property, and interest from savings accounts.

7. A budget is a financial plan that outlines your expected income and expenses.
8. Sole proprietorships are easy to set up, offer full control to the owner, and have simplified tax reporting.
9. Prioritizing saving in your budget ensures you're building an emergency fund and saving for future goals, creating financial security and flexibility.
10. Budgeting is a tool to help you reach your financial goals. It ensures you allocate resources to specific goals and track your progress toward achieving them.
11. Investment income comes from investments like stocks, bonds, or real estate. It's generated through capital gains, dividends, or interest, without direct involvement in daily work.
12. SMART stands for Specific, Measurable, Achievable, Relevant, and Time-bound. It's a framework for making your financial goals clear and actionable.
13. You can track your progress by regularly reviewing your budget, monitoring your savings or investments, and adjusting your plan as needed to stay on course.
14. Tax = product price × tax rate
 22000×0.16
 $3520/=$ multiply by 2 for they sold 2 fridges
 $3520 \times 2 = 7040/=$
15. Zoom
 Microsoft Teams
16. ✓ Test goods to ensure they are safe for consumers use
 - ✓ Destroy contaminated goods or poisonous goods
 - ✓ Destroy poor quality goods
 - ✓ Ensure all producers have met required standards when producing their goods
 - ✓ Check labels and packages to ensure they have correct information
 - ✓ Control and monitor the use of standardization marks
17. ✓ By joining consumer associations
 - ✓ By reporting traders who exploit them
 - ✓ Enlightening other consumers about their rights
 - ✓ Boycotting traders who sell defective products
18. A financial goal is the specific target you want to achieve, while a financial plan is the strategy and steps you create to reach that goal. The plan outlines how you'll save, invest, and spend your money.
19. The 50/30/20 rule suggests allocating 50% of your income to needs (e.g., housing, groceries), 30% to wants (entertainment, dining out), and 20% to savings and debt repayment.
20. Unconventional sources can include income from hobbies, online content creation (like YouTube or blogging), affiliate marketing, and even renting out your personal belongings.
21. ✓ Membership contribution
 - ✓ Retained profit
 - ✓ Investments
 - ✓ Hire purchase
 - ✓ Credit purchasing
 - ✓ Interest from credit extended
 - ✓ Borrowing loans
22. ✓ Will have full control of the business.
 - ✓ No sharing of profits.
 - ✓ Easy decision making.
 - ✓ There are few legal formalities.
 - ✓ Top secrecy.
 - ✓ Flexible.
23. The liability of the partners is not limited to the amount of capital invested but extends to their personal properties.
24. In partnership decision making is shared by all partners
25. Shared according to the terms of the partnership deed or partnership act
26. Each partner is an agent of the partnership of the business or the purpose of the operation
27. That's my ship has a short life that can be terminated by the death insanity bankruptcy or withdrawal of a partner
28. Usually prone to disagreements among the partners onto these slows the process of decision making
29. Common mistakes include setting vague goals, not adjusting for changing circumstances, and neglecting to establish an emergency fund before pursuing other goals.
30. It's crucial because it helps you manage your money, achieve financial goals, and avoid overspending.

MODEL TEST PAPER 2

1. Excise duty = Volume × Rate

In this case;

$$50\% = 70/=$$

$$100\% = ?? \quad 100\% \times 70/= \cdot 7000 \div 5 = 140/=$$

2.

L	A	R	E	N	E	G
A	Z	A	O	B	E	C
M	F	R	E	V	N	H
I	M	M	I	N	O	R
K	P	T	N	N	O	J
Q	C	E	D	X	G	L
A	L	A	M	R	O	N

16%

3. Authority responsible for collecting taxes

4. Variable Costs (change in production costs by the manufacturers)

5. Tastes and preferences

6. Market demand

7. Economic conditions

Seasonality

8. Operating costs

Fixed costs

9. ✓ The tax collected at source and hence predictable

✓ It is simpler to administer

✓ The tax has a wide base and therefore more is collected

✓ A small change in tax rate is not easily felt by the taxpayer

10. ✓ Treasury bonds and bills

✓ Court fines

✓ Fees of government services

✓ Rent and rates for use of government property

✓ Licenses

✓ Donor aid and grants

11. ✓ Equitable

✓ Certain

✓ Convenient

✓ Economical

✓ Flexible

✓ Ability to pay

✓ Diversified

✓ Simplicity

12. ✓ may fuel inflation

✓ Less equitable tax

✓ Expensive in collection

✓ Lack of contributors awareness

✓ Uncertainty in revenue yield

13. ✓ If the target market is small

✓ If there is limited production capacity

✓ If it's the nature of the product

✓ If it's the owner's decision to remain small

✓ Easier to manage

✓ It's flexible

✓ Fast decision making

14. ✓ When the raw materials are heavy and bulky that makes cost of transport is high

✓ The nature of raw materials

✓ Perishable raw materials

15. ✓ Profitability

✓ Level of competition

✓ Availability of resources

✓ Government policy

✓ Demand/ Market

✓ Cost of production

16. ✓ Availability of buyers

✓ Availability of goods and services

✓ Freedom to buy and sell

✓ Availability of medium of exchange

✓ Availability of sellers

✓ A platform for conducting transactions

17. ✓ By government order

✓ Where the Cooperative continuously make losses

✓ Where stipulated majority of members agree to dissolve it

✓ By a court order

✓ Where the Cooperative society has achieved objectives for which it was formed.

18. ✓ Newspapers

✓ Magazines and articles

✓ Shows and exhibitions

✓ Surveys

✓ Hobbies

✓ Spotting a marget gap (niche)

✓ Waste products

✓ Vocational training and experience

19. ✓ Creating a new good

✓ Improving on an existing good

✓ Improving the process of production

✓ Discouraging unnecessary noise

✓ Provision of adequate furniture and equipment

20. ✓ Availability of capital
 - ✓ Developed infrastructure
 - ✓ Availability of skilled labour
 - ✓ Government support
21. ✓ Air pollution causes airborne diseases
 - ✓ Social evils e.g. immorality
 - ✓ Solid and plastic waste pollution causing many diseases
 - ✓ Global warming
 - ✓ Congestion (created by as more people come to look for work)
22. ✓ Where persistent decline in profitability exist
 - ✓ Where there is intention to venture into new line
 - ✓ Where there is need to expand capital base
 - ✓ Where there is need to bring on board new skills and competencies
 - ✓ Where there is need to share market information
 - ✓ To control output
 - ✓ To control a wider market
23. When there is need to call a person to attend to an emergency in a specific location
24. Where there is need to send a copy of printed document urgently
25. When there is need to give a coordinated Information through a central point
26. Sending and receiving written messages
27. ✓ High demand (wide market)
 - ✓ Increase in the cost of production
 - ✓ Increase in operation costs such as transportation
28. ✓ Advancing in one's career or seeking higher-paying job opportunities
 - ✓ Investing in income-generating assets
 - ✓ Starting a side business or freelancing
 - ✓ Developing new skills or acquiring additional education
 - ✓ Managing expenses and saving more effectively
29. ✓ Where there is need to negotiate a deal
 - ✓ Where there is need to explain the use and features of a product
 - ✓ When there is need for immediate feedback
 - ✓ When there is need to give immediate complaint
 - ✓ When selling over the counter

30. ✓ To ensure fair competition
 - ✓ To protect consumers
 - ✓ To protect the environment
 - ✓ To protect the rights of employees
 - ✓ To promote social responsibility
 - ✓ To promote positive cultural practices

MODEL TEST PAPER 3

1. Effective business communication is crucial because it helps organizations convey information, make informed decisions, build strong relationships, and achieve their goals efficiently.
2. The marketing mix, also known as the 4Ps (Product, Price, Place, and Promotion), is a framework used to plan and execute marketing strategies. It applies to both products and services, helping to define how they will be marketed.
3. Factors influencing demand include consumer income, the price of related goods (substitutes and complements), consumer preferences, population changes, and economic conditions.
4. A well-structured business email should include a clear subject line, a professional greeting, a concise and relevant message, a polite closing, and contact information in the signature.
5. Active listening in business involves giving your full attention to the speaker, asking clarifying questions, and providing feedback. To improve these skills, practice by listening to colleagues and clients actively.
6. A product is a tangible item that can be held, while a service is an intangible offering that involves a task, action, or skill. Both can be marketed, but the strategies differ.
7. Market segmentation involves dividing the market into distinct groups based on characteristics. Targeting is the process of selecting specific segments to focus on. This allows businesses to tailor their offerings and messages.
8. A flexible production approach allows businesses to quickly adjust the size and output of a production unit in response to changing market conditions, helping to optimize efficiency.

9. Seasonal fluctuations in demand may require a production unit to adjust its size periodically to meet peak demand while avoiding excess capacity during off-peak seasons.
10. Businesses can use sales forecasts and market demand projections to estimate the required production capacity and, subsequently, the size of the production unit.
11. In the early stages of a product's life cycle, a smaller production unit may be sufficient. As demand grows, the production unit may need to expand to meet market requirements. The size of the unit can evolve with the product's life cycle.
12. Factors influencing the decision include market demand, production capacity, cost considerations, and the need for flexibility. Businesses should evaluate these factors to determine the appropriate size.
13. Factors influencing the decision include market demand, production capacity, cost considerations, and the need for flexibility. Businesses should evaluate these factors to determine the appropriate size.
14. Active listening in business involves giving your full attention to the speaker, asking clarifying questions, and providing feedback. To improve these skills, practice by listening to colleagues and clients actively.
15. Common barriers to effective business communication include language barriers, cultural differences, distractions, technical issues, and misinterpretation of non-verbal cues.
16. Non-verbal communication, including body language, facial expressions, and tone of voice, plays a significant role in conveying emotions, intentions, and trust, which are essential in business interactions.
17. Constructive feedback in business should be specific, focused on behavior rather than personality, and offer suggestions for improvement. It should be delivered in a respectful and private setting.
18. Digital marketing uses online channels like social media, email, and search engines to reach and engage with audiences, while traditional marketing relies on offline methods such as print ads and TV commercials.
- Digital marketing offers more targeting and interactivity.
19. Marketers should ensure that their practices are transparent, honest, and respectful of consumer privacy. They should avoid false advertising, use customer data responsibly, and comply with relevant regulations.
20. To use social media effectively, businesses should create engaging content, interact with followers, utilize paid advertising, and monitor analytics to adjust their strategies based on audience responses.
21. The law of demand states that, all else being equal, as the price of a product decreases, the quantity demanded increases, and vice versa. This means that there is an inverse relationship between price and demand.
22. Elasticity of demand measures how sensitive the quantity demanded is to changes in price. Businesses use this concept to determine how consumers will react to price changes, helping them make pricing decisions.
23. Factors influencing demand include consumer income, the price of related goods (substitutes and complements), consumer preferences, population changes, and economic conditions.
24. The law of supply states that, all else being equal, as the price of a product increases, the quantity supplied by producers also increases. There is a direct relationship between price and supply.
25. Production costs, such as labor, materials, and overhead, impact a producer's willingness to supply a product. If costs increase, it may reduce the quantity supplied.
26. Equilibrium occurs when the quantity demanded equals the quantity supplied at a specific price. It represents a balance between supply and demand in the market.
27. A supply and demand curve is a graphical representation of the relationship between price and quantity. It helps analyze how changes in price affect the quantity demanded and supplied in the market.
28. A price floor is a minimum price set by the government, while a price ceiling is a maximum price. They can impact markets by creating surpluses (price floors) or shortages (price ceilings).

29. Consumer surplus is the difference between what consumers are willing to pay for a product and what they actually pay. Producer surplus is the difference between the price at which producers are willing to sell and the actual price they receive. These concepts relate to the efficiency of markets.
30. Government policies can impact supply and demand by altering production costs, influencing prices, or encouraging or discouraging the production of certain goods through taxes, subsidies, or regulations.

MODEL TEST PAPER 4

1. Businesses should consider factors like proximity to raw materials, access to transportation, labor availability, market demand, infrastructure, and government regulations when selecting a production unit location.
2. Clusters are geographic concentrations of interconnected businesses in a particular industry. They provide advantages such as a skilled workforce, shared infrastructure, and knowledge spillovers, making them attractive locations for production units.
3. The choice between rural and urban locations depends on the nature of the business, cost considerations, and logistical needs. Urban areas offer access to markets and resources, while rural areas may provide lower costs and more space.
4. A feasibility study helps evaluate the viability of different location options. It considers costs, benefits, risks, and potential returns, assisting businesses in making informed decisions.
5. Cultural and social factors can impact labor availability, work ethic, and consumer preferences. These factors can influence the decision to locate a production unit in a specific region.
6. Diseconomies of scale occur when a production unit becomes too large, resulting in inefficiencies, increased coordination challenges, and rising costs per unit. This can limit the optimal size of a production unit.
7. Technological advancements can increase productivity and allow for smaller, more efficient production units. Automation, for example, can reduce the need for extensive labor and potentially reduce the size of a production facility.
8. Businesses should consider factors like land and labor costs, utility expenses, taxes, and transportation costs when assessing the financial feasibility of a location.
9. Agglomeration economies refer to the cost savings and advantages that businesses gain by being located near other similar businesses. These benefits may include shared infrastructure, a skilled labor pool, and a network of suppliers and customers.
10. The political and regulatory environment can affect a company's ability to operate smoothly. Businesses need to consider factors such as taxation, trade policies, and labor laws when selecting a location.
11. Assessing environmental impact is crucial to ensure compliance with regulations and demonstrate corporate social responsibility. It can also mitigate risks associated with environmental issues.
12. A larger production unit often benefits from lower average costs per unit, increased bargaining power with suppliers, and the ability to invest in more advanced technology and machinery.
13. Diseconomies of scale can occur when a production unit becomes too large to manage efficiently, resulting in increased complexity, communication challenges, and higher costs per unit.
14. Businesses can use sales forecasts and market demand projections to estimate the required production capacity and, subsequently, the size of the production unit.
15. Seasonal fluctuations in demand may require a production unit to adjust its size periodically to meet peak demand while avoiding excess capacity during off-peak seasons.
16. A flexible production approach allows businesses to quickly adjust the size and output of a production unit in response to changing market conditions, helping to optimize efficiency.

17. Entrepreneurship is the process of identifying, creating, and pursuing opportunities to start and manage a new business or project. It involves taking risks and utilizing innovation and resources to achieve success.
18. Successful entrepreneurs often possess traits like creativity, risk-taking, resilience, adaptability, and a strong work ethic. They also have a clear vision and the ability to execute their ideas.
19. Business ideas can come from identifying unmet needs, observing market trends, personal passions, or solving problems you've encountered. Brainstorming, market research, and networking can help generate ideas.
20. A business plan is a roadmap for your business, outlining its goals, strategies, and financial projections. It's crucial for securing funding, setting direction, and measuring progress.
21. Entrepreneurs can use various funding sources, including personal savings, loans, venture capital, angel investors, crowd funding, and bootstrapping (self-funding). The choice depends on the business's stage and needs.
22. Innovation is central to entrepreneurship. It involves developing new products, services, or processes to gain a competitive advantage and meet the changing needs of the market.
23. Entrepreneurs can manage risk by conducting thorough market research, having a contingency plan, seeking advice from mentors, and minimizing personal financial exposure. Insurance and legal protections can also help.
24. A sole proprietorship is a business owned and operated by one individual, while a corporation is a separate legal entity with shareholders. Corporations provide liability protection but involve more complex legal and tax structures.
25. Building a strong brand involves defining your brand identity, delivering consistent value, and effectively marketing your products or services. It's about creating a positive reputation in the minds of customers.
26. Common challenges include securing funding, finding the right team, market competition, scaling the business, and managing cash flow. Adapting to changes in the business environment is also a significant challenge.
27. A budget is a financial plan that outlines your income and expenses. It's important because it helps you manage your money, track your spending, and achieve financial goals.
28. To create a basic budget, list your sources of income, track your expenses, categorize them, and allocate a portion of your income to cover each expense category. Ensure that your income exceeds your expenses.
29. Common budgeting methods include the 50/30/20 rule (50% for needs, 30% for wants, and 20% for savings), zero-based budgeting (allocating every dollar), and envelope budgeting (using cash for specific categories).
30. The main objective of a cooperative society is to provide economic and social benefits to its member-owners by working together for their mutual welfare.

MODEL TEST PAPER 5

1. To control spending, track expenses, set spending limits, differentiate between needs and wants, and consider using cash or digital tools to help manage your money.
2. The best way to save for an emergency fund is to allocate a portion of your income each month (e.g., 10% or more) into a separate savings account until you have enough to cover 3-6 months' worth of expenses.
3. To budget for irregular expenses, estimate the annual cost, divide it by 12, and set aside that amount each month. This way, you'll have the money when the expense arises.
4. To stick to a budget, set realistic goals, track your spending regularly, avoid impulsive purchases, and stay accountable by sharing your budgeting goals with someone you trust.
5. It's generally a good idea to focus on high-interest debt first, while also saving a small amount for emergencies. Once high-interest debt is under control, you can prioritize saving more aggressively.
6. ✓ Primary
✓ Secondary
✓ Tertiary
7. Signs that you need to adjust your budget include consistently overspending, struggling to pay bills, having no emergency fund, and not making progress toward financial goals.

8. Business networking refers to the process of establishing and nurturing professional relationships to exchange information, resources, and support for mutual benefit.
9. Networking is crucial for business because it can lead to new opportunities, partnerships, and valuable insights. It helps in building a strong reputation and can open doors to potential clients or customers.
10. Effective networking strategies include attending industry events, joining professional organizations, leveraging social media, and following up with contacts regularly to maintain relationships.
11. Making a good first impression involves being approachable, maintaining eye contact, and having a clear and concise introduction. Show genuine interest in others and be a good listener.
12. LinkedIn is one of the most popular online platforms for professional networking. Others include industry-specific forums, Facebook Groups, and Twitter.
13. Let your network know about your job search or services you offer. Ask for referrals, recommendations, and introductions to potential employers or clients.
14. Maintaining your network is vital because relationships can lead to long-term opportunities. Regular follow-ups, providing value, and being supportive are key to nurturing your network.
15. Common networking mistakes include being too self-centered, not following up, and not being respectful of others' time. Avoid being overly aggressive or insincere.
16. Success can be measured by the quality of opportunities gained through your network, the strength of your relationships, and your ability to help others within your network.
17. A sole proprietorship is a business structure where a single individual owns and operates the business.
18. Advantages include ease of setup, full control, and direct profits.
19. A partnership is a business structure where two or more individuals or entities share ownership and responsibility.
20. Advantages include shared decision-making, combined resources, and potentially reduced financial burden.
21. A cooperative society is a business entity owned and operated by a group of people with common interests, pooling their resources for mutual benefit.
22. Advantages include shared risks and rewards, collective decision-making, and a sense of community.
23. Disadvantages include limited access to capital, personal liability, and potential limited growth.
24. Disadvantages include the potential for conflicts among partners, shared profits, and the risk of personal liability.
25. Disadvantages include complex decision-making, slower decision-making processes, and potential difficulties in raising capital.
26. In a sole proprietorship, business income is typically reported on the owner's personal tax return, and they are responsible for all taxes.
27. Partnerships are typically not taxed at the entity level. Instead, profits and losses flow through to the individual partners, who report them on their personal tax returns.
28. Cooperative societies are structured with member-owners who have a say in decision-making and share in the profits or benefits generated by the cooperative.
29. Yes, a sole proprietorship can hire employees to assist in the business operations.
30. Yes, a Limited Liability Partnership (LLP) is a type of partnership that provides limited liability to some or all of the partners.

1.0 CREATION



Revision exercise 1.1

1. According to the Bible, sin originated from the disobedience of Adam and Eve in the Garden of Eden. In the book of Genesis, God commanded Adam and Eve not to eat from the tree of the knowledge of good and evil. However, they were tempted by the serpent and succumbed to that temptation, eating the forbidden fruit. This act of disobedience introduced sin into the world.
2. The serpent, often identified as Satan or the devil, played a significant role in the origin of sin. In the Garden of Eden, the serpent approached Eve and tempted her by questioning God's command and suggesting that eating the forbidden fruit would make her like God, knowing good and evil. The serpent deceived Eve, leading her to doubt God's word and enticing her to disobey His commandment. By succumbing to the serpent's temptation, Eve and Adam introduced sin into the world.
3. Succumbing to temptation can be a cause of sin because it involves giving in to desires or actions that go against God's commands or moral principles. Temptation often appeals to our weaknesses or desires, presenting an opportunity to choose immediate gratification over what is right or just. When we yield to temptation and act upon it, we transgress the boundaries of what is morally acceptable, leading to sinful behaviour.
4. Lack of self-control can factor into the cause of sin because it involves an inability or failure to resist impulses or desires that conflict with moral standards. Self-control is the ability to regulate and govern one's own actions, thoughts and emotions. When people lack self-control, they may give in to immediate gratification, disregarding the potential consequences or the moral principles they should uphold. This lack of self-control can lead to sinful behaviour and the violation of moral boundaries.

5. Empathy is an essential moral value when it comes to resisting and overcoming temptations because it allows us to understand and connect with the experiences and emotions of others. When we empathise with others, we develop a deeper awareness of the potential impact of our actions on their well-being. This understanding can serve as a moral compass, guiding us to make choices that consider the welfare of others rather than succumbing to self-centered desires. Empathy helps us to cultivate compassion, kindness and fairness, which are vital in resisting temptations that may harm others or violate ethical principles.



Revision exercise 1.2

1. Ephesians 1:7 states that through Jesus Christ, we have received redemption through His blood, the forgiveness of sins, in accordance with the riches of God's grace.
2. The forgiveness of our sins demonstrates God's grace and love because it shows that despite our failings and shortcomings, God extends His mercy and compassion towards us. It highlights His willingness to forgive and restore us, emphasising His unconditional love for humanity.
3. It is important for us to be forgiven our sins because sin creates a barrier between us and God, disrupting our relationship with Him. Forgiveness allows us to reconcile with God, restoring that broken relationship and enabling us to experience His love and grace fully.
4. Jesus Christ's sacrifice on the cross demonstrates God's love for us in the most profound way possible. By willingly laying down His life for humanity, Jesus exemplified the depth of God's love and His desire for our redemption. It shows that God was willing to go to extraordinary lengths to save us from sin and reconcile us to Himself.
5. In Genesis 3:15, it is God speaking, addressing the serpent (representing Satan) and indirectly addressing humanity, specifically Eve and Adam, who were present during the events of the fall of man.

6. Genesis 3:15 hints at God's plan for redemption by foreshadowing the eventual victory over sin and evil through the offspring of the woman, who Christians interpret as referring to Jesus Christ. This verse suggests that despite the consequences of sin, God had already planned a solution for humanity's redemption, ultimately fulfilled in the person and work of Jesus Christ.

Assessment 1

1. The result of the first sin in the Garden of Eden was the introduction of sin and disobedience into the world. Adam and Eve's disobedience led to a rupture in humanity's relationship with God, introducing separation, guilt and the consequences of sin.
2. Forgiveness assists individuals in overcoming temptations and moving forward by providing a pathway for healing and restoration. When individuals forgive themselves or others for succumbing to temptations and committing sins, it releases the burden of guilt and shame, allowing them to let go of the past and start afresh.
3. Integrity: Upholding honesty, transparency and ethical principles even in the face of temptation.
Compassion: Showing empathy and concern for others, which can help resist temptations that harm or exploit others.
Self-control: Exercising restraint and discipline to resist immediate gratification and make choices aligned with moral principles
4. Self-discipline is an important moral value in resisting and overcoming temptations because it empowers individuals to exercise control over their thoughts, actions and desires. It involves setting boundaries, practicing restraint and making conscious choices that align with one's values and moral standard.
5. Ignorance or a lack of awareness can contribute to the cause of sin by clouding one's judgment and understanding of right and wrong.
6. The biblical account on the origin of sin is found in the book of Genesis. According to the narrative, God created the first man, Adam and placed him in the Garden of Eden. God

- gave Adam the freedom to eat from any tree in the garden except the tree of the knowledge of good and evil. However, Adam and Eve were tempted by the serpent, who deceived them into eating the forbidden fruit from that tree. By disobeying God's command, Adam and Eve introduced sin into the world and experienced the consequences of their actions, including their expulsion from the garden.
7. The concept of redemption is closely related to being saved or rescued from something harmful. It involves the idea of regaining or saving something that was lost or in a compromised state, often through a costly sacrifice. Redemption was necessary after the fall of man because humanity needed to be saved from the consequences of sin, which included spiritual separation from God, guilt and the effects of sin in the world.
The story of redemption shows God's love and mercy by highlighting His willingness to provide a way for humanity to be reconciled with Him despite their disobedience. The sacrifice required for redemption demonstrates God's love and commitment to restoring the relationship with His creation. The story of redemption gives hope to individuals who have made mistakes or faced challenges by offering the possibility of forgiveness, restoration and a renewed relationship with God through faith in the redemptive work of Jesus Christ.
 8. The story of Cain and Abel demonstrates the relationship between personal responsibility, choices and the consequences of sin. Cain's story provides us with a deeper understanding of the consequences of sin and the need for repentance and reconciliation. It shows that sin not only harms the individual who commits it but also damages relationships and brings about severe consequence.
 9. In Genesis 4:6-12, God warned Cain about the sin that was lurking within him and advised him to master it. God told Cain that if he did what was right, he would be accepted, but if he did not, sin would have a desire for him and he needed to rule over it. This warning conveyed the importance of resisting the temptation to let sin control his actions and emotions, emphasising the need for self control and personal responsibility.

10. Jesus talked about His role in fulfilling God's plan of salvation, such as in Matthew 20:28 where He states that He came to give His life as a ransom for many.
11. The consequences of sin continue to affect our world today in various ways, including moral and spiritual brokenness, suffering, injustice and the general fallen nature of humanity.
12. The fulfillment of God's plan of salvation through Jesus impacts our relationship with God today by offering reconciliation, forgiveness and the hope of eternal life to all who trust in Him. Believers can experience a restored relationship with God through faith in Jesus Christ.
13. We can apply the lessons from the consequences of sin to our own lives and moral decision-making by recognising the significance of our actions and the potential ramifications they may have.
14. Genesis 4:6-12 teaches us the importance of self-control and resisting the destructive impulses of sin. It reveals that sin desires to control and dominate individuals, but they have the responsibility and ability to rule over it.
15. Several Old Testament prophecies and symbols point towards Jesus as the fulfillment of God's plan of salvation, such as Isaiah 53, which describes a suffering servant and the sacrificial system in the Levitical law, which foreshadows the ultimate sacrifice of Christ.

2.0 THE BIBLE

Revision exercise 2.1

- | | | |
|-----------------|-------------------|----------|
| 1. Abraham | 2. Haran | 3. Ur |
| 4. 99 years old | 5. Isaac was born | 6. Terah |
| 7. Obedience | | |

Revision exercise 2.2

1. The Abrahamic Covenant is an agreement made between God and Abraham.
2. God promised Abraham many descendants, a special land and blessings.
3. God asked Abraham's descendants to be circumcised as a sign of their commitment to the covenant.
4. Circumcision was a visible symbol, showing they belonged to God's covenant family.

5. The land of Canaan was the place where Abraham's family would live. It was a special promise in the covenant.
6. Abraham showed his faith by believing God's promises, even when they seemed impossible.
7. The covenant extended to Abraham's family, making them part of God's special plan.

Revision exercise 2.3

1. Ensuring our actions for God are done with the right heart involves sincerity, humility and a genuine desire to align with God's will rather than seeking personal gain or recognition.
2. Obedience to God is considered important today as it provides a moral and ethical framework, fosters spiritual growth and helps individuals live in harmony with divine principles.
3. One can show obedience to God in today's world through acts of kindness, compassion, justice and by following moral and ethical principles outlined in religious teachings. (Assess other answers)
4. Samuel played a key role in anointing Saul as the first king of Israel, marking the transition from the era of judges to kings. His leadership impacted the request for a king by highlighting the potential consequences and responsibilities of having a human ruler.
5. God responded to the people's request for a king by granting their wish but also warning them about the potential negative consequences of having a human king.
6. The Israelites hoped a king would solve challenges such as external threats, provide stability and create a centralised authority to address issues of governance and justice.
7. The role of judges, who were appointed by God in times of crisis, contributed to the argument against kingship as the people believed that God's direct leadership through judges was sufficient.
8. The people feared that a king might exploit his power by imposing heavy taxes, conscripting their sons into the military and ruling with tyranny rather than justice.
9. The concept of kingship clashed with the idea of God being the ultimate ruler and leader of the Israelites because it introduced a human authority that could potentially undermine the direct relationship between the people and God.

Assessment 2

1. Saul's disobedience: Saul disobeyed God's commands on several occasions, including sparing King Agag and the best livestock from the Amalekites when God had commanded their total destruction. This disobedience led to God rejecting Saul as king, which negatively affected his rule and ultimately led to instability within the kingdom of Israel.
2. Abraham's willingness: Abraham's readiness to leave his homeland without knowing his destination demonstrated immense faith. He trusted God's promise of blessings and a great nation, showing his deep belief in God's faithfulness and providence.
3. Faith in difficult times: Faith can provide a sense of hope and purpose during tough times, offering strength beyond one's own capabilities and a trust that there is a larger plan, which helps individuals persevere through challenges.
4. Key failures of King Saul: Saul's major failures included disobedience to God's commands and consulting a medium for guidance. These actions led to his loss of divine favour and his kingdom's instability, affecting Israel's political and spiritual condition.
5. Major promises to Abraham: God promised Abraham that he would become the father of a great nation, his descendants would be as numerous as the stars and they would inherit the land of Canaan. These promises are foundational to the Abrahamic covenant.
6. Role of Canaan: Canaan was promised as the perpetual homeland for Abraham's descendants, central to God's promise of land, which symbolised a place of blessing, identity and rest for his people.
7. Abraham's obedience: Abraham's obedience was crucial; it demonstrated his trust and faithfulness, which were key to his relationship with God and pivotal in the fulfillment of God's promises, including the covenant.
8. Testing Abraham's faith: Abraham's faith was notably tested when God asked him to sacrifice his son Isaac. Abraham's response, to obey, underscored his unwavering faith, although God ultimately stopped him from carrying out the act.
9. God's response to Saul's failures: God eventually rejected Saul as king, choosing David instead. Saul's story teaches the importance of obedience to God's will and the consequences of its neglect, particularly for leaders.
10. Understanding the Abrahamic Covenant: Reflecting on this covenant helps appreciate God's unwavering commitment to His promises and His plan for humanity, illustrating how personal faith can have generational impacts.
11. Saul's jealousy of David: Saul's jealousy led to paranoia and irrational behaviour, undermining his own authority and leading to his eventual downfall as he became consumed by the pursuit of David rather than leading his people.
12. Saul's lack of trust: Specific instances include Saul offering sacrifices himself because he was impatient for Samuel's arrival and consulting a witch at Endor, both of which directly contravened God's directives and led to negative consequences.
13. Lessons from Abraham's faith: Abraham's example teaches the value of faithfulness and trust in God's promises, no matter the circumstances. Applying this in our lives means maintaining faith and integrity even when the path forward is not clear.
14. Term describing Abraham's willingness: The term often used is "The Binding of Isaac," or in Hebrew, "Akedah," referring to Abraham's test of faith when he was asked to sacrifice his son.
15. Saul's impatience: Saul's impatience, notably when he offered sacrifices himself instead of waiting for Samuel, showed his lack of trust in God's timing. This impatience was a significant factor in his failure as a king, as it indicated a tendency to rely on his judgment over the divine guidance of God.

3.0 MIRACLES OF JESUS CHRIST

Revision exercise 3.1

1. i) Do not let anybody silence your voice or dampen your enthusiasm when you are chasing after Jesus.
ii) Like the blind beggar, we need to throw off our wants. We need to recognise our needs so that Jesus can fix our visions.
(Mark 10:51).

- iii) It teaches us that our creator, God, declares our worth and nothing can change that.
 - iv) It also teaches us that knowledge makes you aware of opportunities as Bartimaeus knew who Jesus was and believed Jesus was the 'Promised one'- the son of David.
 - v) Faith is required to achieve your goals. After he had been healed, Jesus said, "Go, your faith has healed you." (Mark: 10:52).
2. Strengthening one's faith amid health difficulties: Prayer, meditation on scriptures and seeking support from a faith community are ways to strengthen faith during health challenges. (Assess other answers)
 3. Persistence in seeking healing: Blind Bartimaeus consistently called out to Jesus, ignoring discouragement from others.
 4. Role of faith in healing: Faith played a crucial role in blind Bartimaeus' healing, as Jesus commended his faith and granted healing.
 5. Inspiration from blind Bartimaeus' story: blind Bartimaeus' story inspires overcoming obstacles through persistent faith and trust in divine intervention.
 6. Jesus' response to Bartimaeus: Jesus responded compassionately to blind Bartimaeus, acknowledging his faith and granting healing.

Revision exercise 3.2

1. We can stay calm in difficult situations by practicing mindfulness, deep breathing and focusing on solutions. (Assess other answers)
2. Seek help by reaching out to friends, family, or professionals and leverage support networks or counselling services. (Assess)
3. Jesus asked the disciples why they were afraid to prompt reflection on their faith amid challenges.
4. Faith and trust play a crucial role in overcoming challenges by providing a foundation for resilience, hope and perseverance.
5. Address doubts and fears through prayer, self-reflection, seeking guidance and focusing on positive affirmations. (Assess other answers)
6. Seeking guidance from mentors, friends, or family can provide valuable perspectives, advice and emotional support during challenges.

Revision exercise 3.3

1. Jesus addressed Pharisees' doubts by demonstrating authority through healing and forgiveness.
2. Jesus meant forgiving sins and physical healing both demonstrate divine authority.
3. Lessons learnt from the story of the paralytic man include: faith, persistence, community support and Jesus' transformative compassion.
4. Friends of the paralytic man overcame challenges like a crowded house and the paralysed man's condition to bring him to Jesus.
5. The people were amazed and glorified God after witnessing the healing of the paralysed man.
6. Doubt hinders faith by creating skepticism and questioning God's ability, leading to a lack of trust.
7. Nurturing faith involves prayer, studying scriptures, seeking community and reflecting on past experiences of God's faithfulness. (Assess other answers)

Assessment 3

1. The blind Bartimaeus' unwavering determination contributed to his healing, showcasing the power of persistent faith.
2. The story emphasises the importance of reaching out for help, highlighting the transformative impact of seeking assistance in times of need.
3.
 - i) Do not let anybody silence your voice or dampen your enthusiasm when you are chasing after Jesus.
 - ii) Like the blind beggar, we need to throw off our wants. We need to recognise our needs so that Jesus can fix our visions. (Mark 10:51).
 - iii) It teaches us that our creator God declares our worth and nothing can change that.
 - iv) It also teaches us that knowledge makes you aware of opportunities as Bartimaeus knew who Jesus was and believed Jesus was the 'Promised one'- the son of David.
 - v) Faith is required to achieve your goals. After he had been healed, Jesus said, "Go, your faith has healed you." (Mark: 10:52).
4. Common challenges in daily routine include time constraints, pressure from work and personal responsibilities.

5. Jesus calming the storm demonstrates His divine power and authority over nature.
6. Addressing fears and doubts, inspired by Jesus calming the storm, helps approach challenges with confidence and trust.
7. God's protection can shield from harm, adversity and spiritual challenges. (Assess other answers)
8. Faith when facing challenges, is a deep trust and belief in God's guidance, strength and purpose.
9. Pharisees and teachers were present to observe, question and challenge Jesus' teachings and actions.
10. Lessons from Pharisees' opposition include dangers of pride, legalism and rigid thinking hindering openness to divine authority.
11. Jesus' compassion is evident in recognising the man's spiritual needs and addressing them before physical healing.
12. Faith played a crucial role in the paralytic's healing and the friends' efforts, emphasising believe in and community support.
13. Christians can overcome opposition by staying rooted in faith, prayer and demonstrating love and understanding.
14. Pharisees and teachers reacted negatively to Jesus dining with tax collectors and sinners.

4.0 TEACHINGS OF JESUS CHRIST

Revision exercise 4.1

1. Sought God's guidance in areas of decision making, relationships and personal growth through prayer. (Assess other answers)
2. Writing a gratitude journal fosters a sense of closeness to God through reflection on blessings and thanksgiving.
3. Commitment to praying for all people enhances compassion, empathy and love, fostering a broader sense of interconnectedness.
4. Demonstrating love through prayer goes beyond words by inspiring genuine care, empathy and tangible actions for others.
5. Jesus provided the disciples with the model of prayer known as the Lord's Prayer.
6. Jesus states that asking, seeking and knocking in prayer will result in receiving, finding and having doors opened.

7. The Lord's Prayer includes elements like addressing God as Father, seeking God's kingdom, asking for daily needs, seeking forgiveness and protection from temptation.

Revision exercise 4.2

1. Jesus taught us to care for people through actions such as feeding the hungry, healing the sick and showing compassion to the marginalised.
2. Assess.
3. It is important to help people different from us to promote understanding, unity and to reflect the inclusivity of God's love.
4. Working together to make our community better involves collaboration, volunteering and addressing shared challenges for collective well-being.
5. Assess
6. Reaching out to the spiritually lost is important in our faith journey to fulfill the great commission, sharing the message of God's love and salvation.

Assessment 4

1. Addressing God as "Our Father in heaven" reveals an intimate, familial relationship and shapes our approach to prayer with reverence and trust.
2. According to James 5:16, believers are encouraged to confess their sins and pray for one another.
3. The prayer of a righteous person is powerful and effective, according to James, emphasising the connection between righteousness and impactful prayer.
4. Lessons from Jesus on prayer include persistence, faith, aligning with God's will and acknowledging God's sovereignty.
5. The Bible encourages believers to cultivate faith through prayer, studying scriptures and relying on the Holy Spirit.
6. Sharing prayers and faith journeys with others contributes to a sense of community, encouragement and mutual spiritual growth.
7. Maintaining faith in moments of disappointment involves trusting God's wisdom, acknowledging His sovereignty and seeking understanding in unanswered prayers.
8. Assess.

9. Engaging in mission work aligns with Jesus' teachings by demonstrating love, compassion and fulfilling the great mission.
10. Challenges in mission work may include cultural differences, language barriers and navigating complex social issues. (Assess)
11. Essential qualities for effective mission work include humility, cultural sensitivity, adaptability, and a genuine desire to serve others.
12. The parable of the lost sheep illustrates God's unconditional love for all people, emphasising His pursuit of those who have strayed.
13. Creative local mission idea: Starting a community garden that provides fresh produce for those in need while building connections among volunteers. (Assess other answers)
14. Jesus used the shepherd seeking a lost sheep to convey a powerful image of God's relentless love and commitment to each individual.
15. Inspiring others to join in reaching the spiritually lost involves sharing personal stories, organising outreach events and emphasising the collective impact. (Assess)

5.0 THE CHURCH

Revision exercise 5.1

1. Responsibility in church activities involves taking ownership, fulfilling commitments and actively contributing to the community.
2. Active participation in church activities is essential for building community, fostering spiritual growth and fulfilling the church's mission.
3. Examples of church activities requiring responsibility include serving in leadership roles, volunteering for community outreach and participating in worship teams.
4. Taking part in church activities contributes to overall well-being by creating a sense of belonging, fostering connections and achieving common goals.
5. Participating in church activities promotes spiritual and personal growth through shared experiences, learning and the support of the community.
6. Church leaders and mentors can encourage responsibility by providing guidance, recognising contributions and offering opportunities for leadership roles.

7. Individuals can find and commit to church activities by exploring their interests, skills and passions and actively seeking opportunities to get involved.

Revision exercise 5.2

1. Christ's teachings emphasise helping the needy to demonstrate love, compassion and to fulfill the Christian duty of caring for others.
2. Helping the needy aligns with core Christian values of love, charity and following the example of Jesus, who showed compassion to the marginalised.
3. Specific teachings and parables of Jesus focusing on helping the needy include the Good Samaritan and the feeding of the five thousand.
4. Christ's teachings about helping the needy positively impact both the giver and receiver by fostering compassion, empathy and building a sense of community.
5. Overcoming challenges involves fostering a mindset of compassion, actively seeking opportunities to help and collaborating with others to address obstacles.
6. Genuine desire is ensured by examining motives, seeking humility and focusing on the well-being of others rather than personal gain or recognition.
7. Assess.

Assessment 5

1. Participating in community service activities helps learners develop life skills such as teamwork, leadership, communication and problem-solving. (Assess other answers)
2. Factors and needs within the school neighbourhood, like educational resources, environmental concerns, or food insecurity, would be considered when planning community service initiatives. (Assess other answers)
3. Community service activities foster responsibility and empathy among learners by creating a direct connection to the needs of others and instilling a sense of duty to contribute positively.
4. Challenges learners might face include logistical issues and lack of resources. Overcoming these challenges involves planning, resource mobilisation and collaboration. (Assess)

5. Community service activities contribute to building a stronger sense of community within the school neighbourhood by creating shared goals, fostering connections and addressing common concerns.
6. Communication and collaboration play a vital role in the success of community service activities, ensuring effective planning, coordination and engagement.
7. Learners' involvement in community service activities is important for instilling a sense of civic responsibility, empathy and active citizenship. (Assess other answers)
8. Learners benefit through personal growth, skill development and a sense of purpose. The community benefits from improved conditions, increased resources and a sense of unity.
9. Reasons for helping those in need according to Christian teachings include expressing love, fulfilling the command to love thy neighbour and following the example of Jesus. (Assess)
10. Empathy plays a crucial role in Christian responsibility towards helping the needy. It allows believers to understand and share the feelings of others, compelling them to act compassionately and selflessly. By putting themselves in others' shoes, Christians can better address the real needs of those suffering or in lack, mirroring the empathetic nature of Christ.
11. Christians can overcome personal barriers like time constraints or limited resources by prioritising their activities, sharing responsibilities within their community and trusting in God's provision. Small, consistent acts of kindness, like donating small amounts regularly or volunteering time whenever possible, can collectively make a significant impact.
12. A community of believers can collectively contribute to helping the needy by pooling resources, organising group activities like food drives or building projects and supporting local charities. Churches can create specific ministries dedicated to these efforts, ensuring structured and sustained assistance.
13. Christians can exemplify the Fruit of the Holy Spirit - love, joy, peace, patience, kindness, goodness, faithfulness, gentleness and self control - by living out these qualities in daily interactions and decisions. These fruits should

be evident in how they treat others, reflecting the character of Christ through their actions and attitudes.

14. The Holy Spirit played a transformative role when He descended upon the disciples at Pentecost. He empowered them to speak in various tongues, thus enabling them to spread the gospel across diverse linguistic and cultural barriers. This event marks the beginning of the Church's global mission.
15. The day of Pentecost is significant to Christians as it commemorates the descent of the Holy Spirit on the disciples, marking the birth of the Christian Church. It symbolises the empowerment of believers worldwide to fulfill Christ's mission on earth and is a celebration of the new covenant between God and His people, enabling them to live holy lives and witness to all nations.

6.0 CHRISTIAN LIVING TODAY

Revision exercise 6.1

1. It is important for families to love and care for each other to create a supportive and nurturing environment. (Assess other answers)
2. Respecting one another in a family context means acknowledging each member's value, opinions and boundaries.
3. Talking openly with family members can make relationships better by fostering understanding, resolving conflicts and strengthening communication.
4. From Jesus Christ, we learn to be kind and helpful in our families by demonstrating love, selflessness and a willingness to serve others.
5. Doing things together and supporting each other strengthens family bonds, promotes unity and creates shared memories.
6. Parents can guide their kids in a loving and helpful way, like Jesus, by providing guidance, setting a positive example and encouraging growth.
7. Praying together brings a family closer by creating a shared spiritual connection and promoting a sense of unity.
8. Spending quality time together contributes to a healthy family bond by creating positive interactions, building memories and fostering a sense of belonging.



Revision exercise 6.2

1. A strong sense of self-respect guides in setting boundaries by establishing clear expectations and limits that align with personal values and comfort levels.
2. Handling situations where friends encourage choices that do not align with values involves staying true to personal principles, expressing boundaries and making choices in line with one's values. (Assess other answers)
3. Faith or belief systems influence relationship values by providing a moral and ethical framework that guides choices in line with religious teachings.
4. Assess.
5. Values from the Bible that guide responsible choices include love, compassion, honesty and maintaining sexual purity. (Assess)



Revision exercise 6.3

1. The sacredness of life refers to the belief that all human lives are inherently valuable and deserve respect and protection. This concept often stems from philosophical, religious and moral principles that view life as a precious gift and a fundamental right. It emphasises that every individual, regardless of background, abilities, or status, has an intrinsic worth that should be honoured and safeguarded.
2. The right to life is considered one of the most fundamental human rights because it forms the basis for all other rights and is essential for human dignity and well-being.
3. Killing is generally considered morally wrong because it directly violates the sanctity of life. Morally, each person has the right to live without fear of their life being taken away. Killing undermines this basic human right. It also inflicts pain and loss on the individual and their community, leading to grief and suffering. Furthermore, killing erodes social trust and stability, as it disregards the mutual respect on which societal norms are built.
4. Violating the right to life affects the victim's family and loved ones by causing profound grief, trauma and a lasting sense of loss.

5. Individuals may experience emotional and psychological impacts such as post-traumatic stress, anxiety and depression when the right to life is violated.
6. Violating the right to life erodes society's trust and sense of security by creating fear, suspicion and a breakdown of social cohesion.
7. Perpetrators of violations may face legal consequences such as criminal charges, imprisonment, or other forms of legal accountability.
8. Violating the right to life conflicts with values of empathy and compassion, undermining the principles that uphold human dignity and respect for life.
9. Violating the right to life can occur in various forms, including:
 - Murder and manslaughter.
 - Genocide and acts of terrorism.
 - Unjustified lethal use of force by law enforcement.
 - Euthanasia and assisted suicide, when conducted without consent or ethical justification.
 - Abortion, considered by many as a violation depending on one's ethical or religious beliefs.
 - Neglecting the basic needs of individuals, leading to death (For example; in cases of severe poverty and lack of healthcare).
10. Values and life skills to uphold the sacredness of life:
 - a) Self-control: Mastering self-control helps individuals manage impulsive behaviour and aggressive urges. By regulating one's actions and emotions, people are less likely to commit acts of violence and more likely to make decisions that respect the lives of others.
 - b) Love: Embracing love encourages compassion and kindness towards others. Love leads us to value others' well-being as much as our own, promoting actions that protect and enhance life rather than endanger it. Love builds community and fosters an environment where the sacredness of life is a shared priority.

- c) Integrity: Integrity involves adhering to moral and ethical principles, even when faced with challenges. A person with integrity is committed to doing the right thing, which includes respecting others' lives and rights. This commitment supports a societal framework where life is treated as sacred.
- d) Empathy: Developing empathy allows individuals to understand and share the feelings of others. It helps in recognising the pain and consequences that violent actions can have on others. Empathetic individuals are more likely to act in ways that preserve and respect life, as they can emotionally connect with the value of each person's life experience.



Revision exercise 6.4

1. Bullying is a type of abusive behaviour in which one person purposefully and repeatedly causes harm or discomfort to another. It can occur through verbal abuse or physical aggression.
2. Showing respect for others' opinions contributes to peaceful co-existence by fostering an atmosphere of tolerance and understanding.
3. Trying to understand someone else's point of view, even if you do not agree, is important because it promotes empathy, encourages open dialogue and reduces conflict.
4. Assess.
5. Clear and honest communication is important for resolving conflicts peacefully as it helps in expressing needs, addressing concerns and finding mutually agreeable solutions.
6. Listening actively helps prevent misunderstandings and arguments by ensuring that all parties feel heard and understood.
7. Working together as a team contributes to a peaceful environment by promoting collaboration, leveraging diverse strengths and achieving common goals.
8. Benefits of collaborating with classmates or family members on projects include improved creativity, shared responsibilities and the opportunity to learn from different perspectives. (Assess other answers)

9. An experience where teamwork led to a positive outcome might involve successful project completion, increased efficiency and a sense of accomplishment among team members. (Assess other answers)



Revision exercise 6.5

1. Work is any activity that involves mental or physical effort done to achieve a purpose or result. This can include employment in a job where one earns a wage, running a business, or doing tasks that contribute to society like volunteering. Work is essential because it not only helps in earning a livelihood but also in building skills, providing services and contributing to the economy.
2. Keeping track of the money you earn is crucial for understanding the health of your business. You can use several methods to manage this effectively:
Use a spreadsheet to log every transaction, including income and expenses.
Maintain a dedicated business bank account to keep personal and business finances separate.
Regularly review and reconcile your financial records with bank statements to ensure accuracy.
3. Saving money from your project demonstrates financial responsibility by preparing for future uncertainties and enabling investment in growth opportunities. It shows foresight - planning for potential downturns or unexpected expenses - and discipline, as it requires prioritising long-term stability over immediate gratification.
4. Launching an enterprise teaches financial literacy hands-on. You learn budgeting, managing cash flows, assessing financial health through balance sheets and income statements and understanding financial risks and returns. This real-world experience is invaluable, helping you make informed decisions and improving your ability to manage personal and business finances effectively.

5. Financial literacy is crucial for entrepreneurs because it helps you make informed decisions about your business operations. It enables you to understand financial statements, manage financial risks, price your products or services correctly and plan for sustainable growth. Being financially literate helps in securing funding from investors or loans from banks, as you can confidently explain the financial projections and the viability of your business model.
6. There are numerous exciting avenues to explore, depending on your interests and resources:
 Online businesses, such as e-commerce stores or digital marketing services.
 Agricultural ventures, like organic farming or boutique gardening supplies.
 Craft and handmade goods, selling products on platforms like Etsy or at local markets.
 Food services, such as starting a food truck, catering business, or a small cafe.



Revision exercise 6.6

1. Reading is a leisure activity that contributes to my personal growth by expanding my knowledge and fostering critical thinking. (Assess other answers)
2. Misusing leisure time refers to engaging in activities that are unproductive, harmful, or detrimental to well-being. An example is excessive screen time without any educational value.
3. Spending excessive hours on social media.
 Engaging in substance abuse, such as alcohol or drugs.
 Playing violent video games.
 Participating in risky behaviour like street racing or extreme sports without proper safety precautions.
 Binge-watching TV shows or movies instead of engaging in productive activities.
4. Decline in academic or work performance.
 Poor physical and mental health outcomes.
 Strained relationships with family and friends.
 Increased likelihood of engaging in criminal activities.
 Wasted potential and missed opportunities for personal growth.

5. Sedentary lifestyle leading to obesity and related health issues.
 Increased risk of developing chronic diseases like diabetes and cardiovascular disorders.
 Exposure to harmful substances through drug and substance use.
 Accidents or injuries resulting from reckless behaviour.
6. Consequences of misusing leisure time, such as academic setbacks or damaged relationships, can hinder future goals and aspirations.

Assessment 6

1. Showing appreciation and gratitude within a family is important for fostering a positive atmosphere, strengthening bonds and promoting emotional well-being.
2. Helping one another with chores and responsibilities strengthens family relationships by promoting teamwork, responsibility and a sense of shared contribution.
3. Implementing and enforcing laws that safeguard human rights.
 Providing access to quality healthcare and education for all.
 Promoting awareness of human rights through education and advocacy efforts.
 Supporting initiatives that address social inequalities and poverty.
 Fostering a culture of respect for life and dignity of all individuals.
4. Assess.
5. I can encourage others by recognising their talents, offering support and creating a collaborative environment.
6. Communication plays a crucial role in resolving conflicts within a family by facilitating understanding, expressing needs and finding mutually beneficial solutions.
7. Engaging in illegal activities such as vandalism or theft.
 Skipping school or work to engage in leisure activities.
 Ignoring personal responsibilities in favour of leisure pursuits.
 Excessive spending on materialistic pleasures.
 Using leisure time to spread rumours or engage in gossip.

8. Regular family meals or activities together contribute to a strong family connection by providing quality time, promoting communication and creating shared experiences.
9. Setting goals and priorities for leisure activities. Engaging in constructive hobbies or volunteering. Balancing leisure time with responsibilities and obligations. Seeking positive influences and role models. Practicing self-discipline and moderation in leisure pursuits.
10. Open and honest communication. Active listening and empathy. Seeking mediation or counselling when needed. Setting boundaries and respecting each other's perspectives. Working together to find mutually acceptable solutions.
11. Unplanned pregnancies. Sexually transmitted infections (STIs) including HIV/AIDS. Emotional trauma and psychological distress. Negative impact on relationships and self esteem.
12. Ongoing bullying can negatively impact a person's self-esteem and confidence, leading to long-term emotional consequences.
13. Social stigma and discrimination. Limited educational and career opportunities. Financial strain and dependency. Emotional stress and isolation. Health risks associated with pregnancy and childbirth at a young age.
14. Peer pressure can influence a young person's decision to have an abortion by shaping their perceptions, attitudes and choices based on social expectations.
15. Education and awareness play a role in preventing violations of the right to life by fostering understanding, empathy and advocacy for human rights.
16. Knowing how to solve conflicts peacefully is important because it fosters positive relationships, reduces tension and contributes to a harmonious community.
17. Creating a supportive environment for those isolated due to bullying involves promoting inclusivity, educating the community and fostering empathy.
18. Increased susceptibility to negative peer influences. Lack of awareness about healthy leisure activities. Absence of role models promoting responsible behaviour. Vulnerability to societal pressures and unhealthy trends. Difficulty in developing self-regulation skills and setting positive goals.
19. Long-term consequences of bullying may include anxiety, depression and difficulty forming relationships.
20. Personal insecurities or struggles can contribute to someone becoming a bully as a way to exert control or mask their own issues. (Assess other answers)
21. Assess.
22. I can use my talents in writing to contribute articles for my school newspaper, impacting my school community positively. (Assess other answers)
23. Being bullied can make someone feel emotionally distressed, humiliated and powerless.
24. I can invest in my talents by taking relevant classes, joining clubs and seeking mentorship, similar to the servants' investment in the parable.
25. Setting goals for leisure time can transform idle hours into productive and fulfilling periods. It allows for prioritising activities that enhance personal growth, health, or skills instead of engaging in aimless or potentially negative behaviour. Goal-oriented leisure time can lead to learning new skills, improving health, or connecting meaningfully with others, making leisure time both enjoyable and beneficial.
26. Several factors can lead to early pregnancies among teenagers:
Peer pressure: Feeling pressured by peers to engage in sexual activities.
Low self-esteem: Seeking affection and validation through relationships.
Lack of parental guidance: Absence of open, trusting relationships with parents who can provide guidance.
27. Assess.

28. Values such as discipline, respect, responsibility and self-improvement can help guide the use of leisure time. By upholding these values, individuals can choose activities that are not only enjoyable but also contribute to personal growth and community well-being.
29. Practical steps include setting goals, seeking feedback and being open to learn from others in my journey of personal growth. (Assess other answers)
30. Misusing leisure time can lead to behaviour that negatively impact others, such as excessive noise, public disturbances, or engaging in illegal activities that create unsafe environments. It can also set a poor example for younger community members who look to adults and peers for behavioral cues.
31. The right to life can be violated in numerous ways, including:
 - Homicide and acts of violence.
 - War and armed conflicts.
 - State-sanctioned practices like capital punishment.
 - Lack of access to essential life-sustaining resources, such as food, water, healthcare and shelter.
 - Preventable medical negligence.
32. A hobby is a regular activity done for enjoyment, typically during one's leisure time.
33. Promoting positive digital behaviour can be achieved through:
 - Education: Teaching users, especially young ones, about the consequences of their online actions.
 - Encouragement of empathy: Fostering an understanding of the emotional impact of words and actions online.
 - Setting a good example: Adults modeling respectful and considerate behaviour on social media.
 - Use of technology solutions: Employing filters and monitoring software to detect harmful behaviour.
 - Policies and rules: Establishing clear guidelines and consequences for cyberbullying in schools and communities.
34. According to 1 Timothy 5:13, behaviour such as gossiping and being idle are discouraged.
35. Dennis, who spends most of his leisure time gossiping, could be advised to choose more positive and constructive activities that contribute to personal growth and well-being. (Assess relevant answers)

MODEL PAPERS

MODEL PAPER 1

1. Miracles played a significant role in Jesus' ministry to demonstrate divine power and confirm His identity as the Son of God.
2. Jane can use her talents and abilities by joining a choir or dance group, participating in talent shows, creating and sharing her performances on social media platforms and using her skills to inspire and uplift others.
3. Daniel can demonstrate the fruit of love in his mission of work by treating colleagues with kindness, understanding and empathy, fostering a positive work environment.
4. The miracles of Jesus had a profound impact on the people who witnessed them, inspiring awe, faith and belief in His divine authority.
5. Self-control.
6. The miracles of Jesus reveal His identity as the Messiah and His mission to bring salvation, healing and restoration to humanity.
7. When people questioned or doubted His miracles, Jesus often responded with teachings or further acts of compassion, addressing both physical and spiritual needs.
8. Jesus used miracles to teach important spiritual lessons, emphasising faith, repentance and the Kingdom of God.
9. The miracles of Jesus still hold relevance and meaning for people today, providing a foundation for faith and illustrating God's power and compassion.
10. The miracles of Jesus can inspire us to live faith-filled and compassionate lives by trusting in God's power and actively participating in acts of love and service.
11. Marriage is a social and legal union between two adult individuals, typically recognised by religious or cultural institutions.
12. Two reasons why girls are married off at an early age may include cultural traditions and economic strains. (Assess other answers)
13. Two reasons why early marriages should be discouraged are the risk of limiting educational opportunities for young girls and potential negative health consequences. (Assess other answers)

14. Talent is a natural aptitude or skill, while ability is the capacity to perform a specific task or skill through knowledge and practice.
15. A commandment is a divine order or instruction, often used to refer to moral and ethical principles outlined in religious texts.
16. a) Assess b) Assess c) Assess
17. Temptation is the desire to engage in actions that go against moral or ethical principles.
18. We overcome temptations through self discipline, prayer, seeking support from others and relying on faith.
19. The birth of Jesus Christ is significant in Christianity as it represents the incarnation of God, bringing salvation and fulfilling prophecies.
20. The Ten Commandments are foundational principles for Christians, emphasising ethical and moral conduct, including love for God and neighbours.
21. The parable of the lost sheep is a story told by Jesus in the Bible, found in Luke 15:3-7. In this parable, a shepherd has 100 sheep, but one goes missing. The shepherd leaves the 99 sheep and searches tirelessly until he finds the lost one. When he finds it, he joyfully carries it home and there is great celebration. The message of this parable is about the immense value God places on each individual. It illustrates God's relentless love and pursuit of those who are lost or have strayed away. It emphasises the joy in heaven when even one person turns back to God.
22. Forgiveness is central in Jesus' teachings, exemplified by His forgiveness on the cross, and believers are encouraged to forgive others.
23. Pentecostal feast: The disciples were gathered in Jerusalem to celebrate the Jewish festival of Pentecost, which occurred 50 days after Passover.
Sound of a mighty wind: Suddenly, there came a sound from heaven like a mighty rushing wind, filling the house where the disciples were gathered.
Divided tongues of fire: Tongues of fire appeared and rested on each of the disciples, symbolising the presence and empowerment of the Holy Spirit.
Speaking in other languages: The disciples began to speak in languages they did not know, but people from various regions who were present in Jerusalem for the feast understood them in their own languages.

Confusion and amazement: The crowd was perplexed and amazed, questioning how Galileans could speak in diverse languages. Some thought they were drunk, prompting Peter to address the crowd.

Peter's sermon: Peter explained that what was happening was a fulfillment of the prophecy from the book of Joel about God pouring out His Spirit. He also proclaimed the significance of Jesus' death, resurrection and ascension.

Conversion of thousands: Peter's sermon convicted the crowd, leading to the conversion of about 3,000 people who repented, were baptised and joined the early Christian community.

Community life: The new believers devoted themselves to the apostles' teaching, fellowship, breaking of bread and prayer.

24. The Holy Spirit is crucial to believers for several reasons:

Guidance: The Holy Spirit serves as a guide, providing believers with wisdom and direction in making decisions and navigating life's challenges

Comfort: The Holy Spirit brings comfort and solace in times of sorrow, hardship, or distress, providing a sense of peace that surpasses understanding.

Empowerment: Believers receive empowerment from the Holy Spirit to live out their faith, overcome obstacles and fulfill their purpose in accordance with God's will.

Conviction: The Holy Spirit convicts individuals of sin, leading to repentance and a transformed life aligned with God's standards.

Understanding scripture: The Holy Spirit helps believers understand and apply the teachings of the Bible, illuminating its meaning and relevance in their lives.

25. The Last Supper is significant as it marks the institution of the Lord's Supper, emphasising remembrance and communion with Christ.
26. Salvation in Christianity is the deliverance from sin through faith in Jesus Christ as Lord and Saviour.
27. One of the miracles performed by Jesus, such as the healing of the blind or raising the dead, carries spiritual significance by illustrating divine power and the importance of faith. (Assess other answers)

28. The story of creation in Genesis describes God's creation of the world in six days.
29. Abraham is a central figure in the Bible, particularly in the Book of Genesis. He is often referred to as the "father of faith." Abraham, originally known as Abram, was a descendant of Noah and the patriarch of the Hebrew people. God called Abraham to leave his homeland and go to a land that God would show him.
- Faith as righteousness: In the New Testament, particularly in Romans 4 and Galatians 3, Abraham is cited as an example of faith leading to righteousness. His trust in God's promises, especially the promise of descendants, was counted as righteousness.
- The Covenant: God made a covenant with Abraham, promising to bless him, make him the father of many nations and give his descendants the land of Canaan. This covenant is foundational to the biblical narrative and is often referenced in the Bible.
- Sacrifice of Isaac: Perhaps the most profound demonstration of Abraham's obedience was when God asked him to sacrifice his son, Isaac. Abraham's willingness to obey, even in the face of great personal sacrifice, is seen as an exemplary act of faith. In the end, God provided a ram for the sacrifice, sparing Isaac's life.
- Foreshadowing Christ: Christian theology often sees parallels between Abraham's willingness to offer his son and God's sacrifice of His Son, Jesus Christ. Abraham's act is seen as a foreshadowing of God's redemptive plan through Christ.
30. Three of the Ten Commandments are: "You shall not murder," "You shall not commit adultery," and "You shall not bear false witness against your neighbour." (Assess other relevant answers)

MODEL PAPER 2

1. God showed His love and care for humanity after Adam and Eve's disobedience by providing a promise of redemption through the future Messiah (Genesis 3:15).

2. The commandment "You shall not covet" remains relevant in our modern world, guiding us to cultivate contentment and avoid excessive desire for others' possessions or circumstances.
3. The commandments about honouring parents and keeping the Sabbath contribute to strong family and spiritual foundations by emphasising respect, gratitude and the importance of spiritual rest.
4. The healing of blind Bartimaeus is a powerful narrative found in the Gospel of Mark (Mark 10:46-52) and the Gospel of Luke (Luke 18:35-43). This story offers several lessons about God's love and forgiveness:
- Persistence in faith: Bartimaeus, a blind beggar, heard that Jesus was passing by and cried out for mercy. Despite the crowd's attempts to silence him, he persisted in calling out to Jesus. This underscores the importance of persistence in seeking God's mercy and healing.
- Recognition of need: Bartimaeus recognised his need for healing and openly acknowledged his dependence on Jesus. This highlights the importance of humility and acknowledging our spiritual need when seeking God's love and forgiveness.
- Jesus' compassion: Jesus, moved by Bartimaeus' faith and need, stopped and called him. This demonstrates God's compassion and willingness to respond to the cries of those who seek Him, emphasising that God's love is accessible to all who reach out in faith.
- Immediate healing: Jesus, in response to Bartimaeus' request for sight, immediately restored his vision. This illustrates the immediacy of God's healing and forgiveness when sought with a sincere heart.
5. The resurrection of Jesus brought hope and reassurance to His disciples and followers by proving His victory over death and validating His claims as the Son of God.
6. Jesus' teachings about humility and serving others challenged cultural norms by promoting a selfless and servant-hearted approach contrary to the prevailing attitudes of power and status.

7. The miracle of calming the storm, as recounted in the Gospels of Matthew, Mark and Luke, reveals a pivotal moment in Jesus' ministry. As He and His disciples embarked on a boat journey across the Sea of Galilee, a sudden and violent storm erupted, threatening their safety. Despite the chaos, Jesus remained asleep in the boat, displaying an extraordinary calmness and trust amid the turmoil. Filled with fear, the disciples woke Jesus, questioning His concern for their lives. In response, Jesus stood, rebuked the wind and waves and commanded, "Peace, be still!" Instantly, the storm ceased and a profound calm settled over the sea. The disciples, witnessing this miraculous event, were awestruck and filled with a reverent fear, recognising Jesus' divine authority over nature. Seizing the opportunity as a teaching moment, Jesus urged them to have faith, highlighting that trust in Him is the antidote to fear. This miracle serves as a compelling testament to Jesus' sovereignty over creation, emphasising the importance of unwavering faith in the face of life's storms and challenges. It is a poignant reminder that true peace is found in trusting Jesus, who holds authority even over the tumultuous aspects of life.
8. Faith: Like Bartimaeus, we can approach challenges in our lives with unwavering faith, trusting that God has the power to heal and transform our circumstances.
Persistence: Bartimaeus persisted in calling out to Jesus despite discouragement from others. We can learn to persevere in prayer and pursuit of our goals, trusting that God hears and answers our petitions.
Gratitude: After being healed, Bartimaeus followed Jesus with gratitude. We can cultivate a heart of thankfulness for the blessings we receive, recognising God's goodness in our lives.
Compassion: Bartimaeus' healing demonstrates Jesus' compassion for the marginalised and suffering. We can emulate this compassion by reaching out to those in need and showing kindness and empathy towards others.
9. Advice from Matthew 25:35-46 regarding needy people:
a) The hungry: We are advised to feed them.
b) The thirsty: We are advised to give them something to drink.
c) Strangers: We are advised to welcome them.
d) The sick: We are advised to visit and care for them.
e) Prisoners: We are advised to visit them.
10. Pentecost marked the beginning of the early Christian Church, as the Holy Spirit descended upon the apostles, empowering them to spread the message of Jesus.
11. Our bodies are temples of the Holy Spirit (1 Corinthians 6:19-20), so we should treat them with respect and care. We are encouraged to eat healthy (1 Corinthians 10:31) and avoid substances that harm our bodies. Regular exercise and rest are essential for maintaining physical well-being (Ecclesiastes 4:6). Seeking medical attention when needed shows stewardship of our bodies (Luke 5:31).
12. Using free time responsibly involves balancing relaxation and productivity. Engaging in activities that promote personal growth, such as reading, learning new skills, or volunteering. Spending quality time with loved ones and nurturing relationships. Avoiding activities that are harmful to oneself or others, such as excessive screen time, drug and substance use, or engaging in risky behaviour.
13. Hobbies that can help you learn new things include reading, painting, playing musical instruments, or engaging in educational games.
14. Helping others during free time can evoke a sense of fulfillment and joy, fostering a positive impact on your well-being.
15. Activities promoting unity in the church today include communal worship, fellowship and collaborative efforts in community outreach and service.
16. Assess.
17. Two people in the Bible who showed faith in God are Abraham and David. (Assess other answers)
18. Ways to help a sick person in your family include providing emotional support, assisting with daily tasks and ensuring they receive proper medical care.
19. Churches in your community may help the sick through prayer ministries, organising visits and providing material or financial support. (Assess other answers)

20. Advantages of translating the Bible into local languages include increased accessibility, better understanding and preserving cultural nuances.
21. Three reasons to always read the Bible are spiritual nourishment, guidance for life and deepening one's relationship with God. (Assess other answers.)
22. God gave the Israelites the Ten Commandments to provide them with moral and ethical guidelines for righteous living.
23. Rules are important in a community to maintain order, ensure fairness and promote the well-being of its members.
24. Values from the Ten Commandments that foster good relationships include honesty, love, respect and integrity. (Assess other answers)
25. Saul, David, Solomon.
26. Values from the eighth commandment include honesty, integrity and respect for others' property. (Assess other answers)
27. God demonstrated His power through Samson by empowering him with supernatural strength to defeat Israel's enemies.
28. Three qualities of a good friend are loyalty, trustworthiness and empathy. (Assess)
29. Lessons from the story of Samson include the consequences of compromise, the importance of obedience to God and the impact of personal choices. (Assess other answers)
30. Christians depend on God's power to overcome challenges through prayer, faith and seeking guidance from the Holy Spirit.

MODEL PAPER 3

1. Four things we believe in the Apostles' Creed are the existence of God the Father, Jesus Christ as His Son, the Holy Spirit and the forgiveness of sins.
2. Christian suffering is the experience of pain, distress, or hardship, physical, emotional, or spiritual due to one's faith.
3. Two difficult situations for a Christian could include facing persecution for their faith or grappling with personal moral dilemmas.
4. It is important that the Apostles' Creed talks about God the Father, Jesus and the Holy Spirit because it affirms the foundational beliefs of the Christian faith, acknowledging the Trinity and the redemptive work of Jesus.

5. The Apostles' Creed helps us remember what we believe by clearly summarising key principles of the Christian faith, serving as a declaration of faith and a guide for theological understanding.
6. King Saul displayed disobedience to God on several occasions, leading to significant consequences in his reign. One notable instance is recorded in 1 Samuel 15: God commanded Saul, through the prophet Samuel, to utterly destroy the Amalekite people, including men, women, children and animals, due to their wickedness against the Israelites. However, Saul did not fully obey this command. When Saul and his army defeated the Amalekites, he spared King Agag and allowed the soldiers to keep the best of the livestock. Samuel confronted Saul about his disobedience and Saul justified his actions by claiming that he saved the best animals to offer them as sacrifices to God. Samuel responded with the famous words: "Does the Lord delight in burnt offerings and sacrifices as much as in obeying the Lord? To obey is better than sacrifice and to heed is better than the fat of rams" (1 Samuel 15:22, NIV). As a consequence of Saul's disobedience, Samuel declared that God had rejected Saul as king, emphasising the importance of obedience over religious rituals. This event marked a turning point in Saul's reign and set the stage for the eventual rise of David as the future king of Israel.
7. Church unity means Christians coming together in a spirit of co-operation and mutual support, despite differences in denomination or tradition.
8. Faith.
9. It is important for Christians to work together and support each other in their faith to strengthen the overall Christian community, promote solidarity and enhance the impact of their collective efforts.
10. Church unity helps people understand the love of God better by demonstrating the power of love in action through a unified and compassionate Christian community.
11. Different Christian groups can show unity by participating in joint worship services, collaborative community service projects and engaging in respectful dialogue to understand and appreciate theological differences.

12. Showing kindness and respect to people from different Christian backgrounds promotes church unity by fostering an environment of love and acceptance within the broader Christian community.
13. Good citizenship means being actively involved in and contributing positively to one's community and nation, following laws and respecting the rights of others.
14. The teachings of Jesus and the Bible guide us to be responsible and caring citizens by emphasising love for neighbours, justice and serving others.
15. Qualities associated with being a good citizen in a community include honesty, integrity, responsibility and a commitment to the well-being of others.
16. Showing respect to others and treating them kindly reflects the principles of good citizenship by fostering a harmonious and inclusive community.
17. Honesty and integrity play a crucial role in being a responsible citizen as they contribute to trust, fairness and the overall well-being of the community.
18. Actively involving oneself in community service and helping those in need aligns with the concept of good citizenship by contributing positively to the community's welfare.
19. Christians can be good citizens by obeying the laws of their country while also following their faith through peaceful advocacy and adherence to moral principles.
20. An example of good citizenship in the Bible is Daniel, who demonstrated loyalty to God while serving as a responsible and respectful citizen in Babylon. (Assess other answers)
21. The Bible teaches about the importance of respecting and valuing our bodies as temples of the Holy Spirit (1 Corinthians 6:19-20).
22. The Bible emphasises the importance of purity and self-control in human sexuality, promoting God's design for intimacy within the bounds of marriage.
23. Biblical principles guiding healthy relationships include love, respect, faithfulness and mutual submission (Ephesians 5:21-33).
24. Human sexuality is the physical and emotional characteristics that make us male or female. It is the aspect which makes one a boy or girl.
25. The biblical teaching of loving our neighbours as ourselves relates to respecting and treating others with dignity, valuing their well-being.
26. Communication and consent are important in building healthy relationships as they ensure understanding, mutual agreement and respect for boundaries.
27. The teachings of Jesus guide our attitudes and behaviour towards human sexuality by emphasising love, purity and faithfulness.
28. Self-control is relevant in making responsible choices regarding alcohol and substances, aligning with biblical principles of moderation.
29. Peer pressure can influence decisions related to alcohol and substance use by exerting social influence and challenging personal values.
30. Understanding God's purpose for our lives guides us in making choices that promote our well-being and avoid harmful behaviour, aligning with His plan for abundant life.

MODEL PAPER 4

1. Faith has played a significant role in shaping my life by providing a moral compass, offering hope in challenging times and guiding decisions based on principles and beliefs. (Assess other answers)
2. Abraham's unwavering faith set an example for future generations by demonstrating trust and obedience to God's promises. We can draw inspiration by trusting in God's plans, being obedient to His commands and having faith in His promises upon our own lives
3. Abraham's willingness to follow God's command to circumcise himself and his household reflected his deep faith in the covenant by symbolising obedience, commitment and a separation from the ways of the world.
4. During the test of faith with the sacrifice of Isaac, Abraham likely experienced conflicting emotions such as fear, sorrow and confusion. However, his ultimate trust in God prevailed, showing an unwavering commitment to follow divine guidance.
5. Abraham's unwavering faith in God's promises serves as a model for Christian believers, emphasising the importance of trust and obedience. Christian teachings on faith and trust in God encourage believers to rely on God's promises despite challenges and uncertainties.
6. Prayers help in overcoming temptations by seeking strength, guidance and discernment from a higher power. Prayer provides a spiritual connection that reinforces one's commitment to living a righteous life.

7. Causes of sin in society today include moral decay, societal influences, lack of religious or ethical guidance, greed, selfishness and a disconnect from spiritual values.
8. Acts of mercy young people can participate in include volunteering at shelters, visiting the sick or elderly, providing food for the hungry and engaging in community service projects.
9. According to John 3:16, God demonstrated love to the world by giving His only Son, Jesus, for the salvation of humanity.
10. Hebrews 11:6 states that it is impossible to please God without faith because faith reflects a trust and belief in God's existence and His reward for those who seek Him.
11. The birth of Isaac fulfilled God's promise to Abraham and Sarah as it marked the beginning of the fulfillment of God's covenant to make Abraham the father of many nations.
12. God intervened to prevent Isaac from being sacrificed by providing a ram caught in a thicket as a substitute, demonstrating His mercy and provision.
13. According to Matthew 7:16-18, ungodly covenants can be distinguished from godly ones by their fruits, meaning that the outcomes and consequences reveal their nature.
14. Elements of the covenant between God and Abraham include witnesses (God Himself), a seal (circumcision), a symbol (the promised land), participants (Abraham's descendants), promises (land and descendants) and consequences (blessings and curses).
15. Abraham was hesitant to accept God's promise in Genesis 15:2 because he was childless and Eliezer of Damascus was set to inherit his estate.
16. According to Prophet Samuel, reasons against kingship in Israel include potential exploitation by kings, loss of freedom and an increase in taxation and military service.
17. As a leader in school, one can avoid making the same mistakes as King Saul by remaining humble, seeking guidance, listening to advice and prioritising the well-being of the people.
18. a) Advise Brian's family to seek professional medical help, consult with specialists and explore alternative treatment options. Encourage them to maintain a positive mindset and provide emotional support to each other. Additionally, they may consider reaching out to their community for assistance and prayer.
- b) To improve the health condition of Brian's mother, the family should:
 - i) Consult with healthcare professionals for a comprehensive diagnosis and treatment plan.
 - ii) Follow prescribed medical advice, including medications, therapies and lifestyle changes.
 - iii) Create a supportive and nurturing environment at home
 - iv) Seek emotional and spiritual support from friends, family and the community.
19. i) Trust in Jesus: The disciples learned to trust Jesus even in the midst of a storm. Likewise, we should trust in God's power and guidance during challenging times.
- ii) Faith over fear: The disciples' initial fear turned to amazement when they witnessed Jesus calming the storm. This teaches us to choose faith over fear in the face of difficulties.
- iii) Power of prayer: Jesus' command to the storm demonstrates the power of prayer. It reminds us of the importance of turning to God in prayer during turbulent times.
- iv) Source of strength: Faith in Jesus provides individuals with a source of strength beyond their own capabilities. It taps into a divine power that transcends human limitations.
- v) Peace in turmoil: Faith in Jesus brings about a sense of peace in the midst of turmoil. Knowing that there is a higher power in control can calm anxieties and fears.
- vi) Hope and assurance: Faith instills hope and assurance that, regardless of the current circumstances, there is a purpose and a plan for the future. This hope becomes a driving force to persevere.
- vii) Guidance and wisdom: Trusting in Jesus allows individuals to seek guidance and wisdom from a higher source. This can be through prayer, meditation on scripture, or seeking spiritual counsel.
20. Faith in God gives us hope that we shall overcome the challenge.
21. i) Encourage Dennis to prioritise honesty and integrity in his interactions.
- ii) Suggest that he reflects on the impact of unfulfilled promises on relationships and trust.

- iii) Share the importance of keeping commitments as a reflection of Christian values.
 - iv) Recommend seeking forgiveness and making amends for broken promises.
22. Business contracts: Ensure fair and legal transactions, outlining terms and conditions.
 Marriage: Establish mutual commitments and responsibilities within a marital relationship.
 Treaties between nations: Promote peaceful co-existence and define international relationships.
23. Marriage as a Covenant:
- a) Witness: God as the witness to the marriage vows.(congregation, family members and friends)
 - b) Seal: The exchange of rings symbolising the commitment and permanence of the covenant.
 - c) Symbol: The marital union itself is a symbol of unity and partnership.
 - d) Participants: The couple entering into the covenant.
 - e) Promises: Vows exchanged, outlining commitments to love, honour and cherish.
 - f) Consequences: The mutual growth and fulfillment of the couple, as well as the responsibilities that come with marriage.
24. a) Life skills: Assertiveness, decision-making.
 b) Values: Integrity, discernment.
 c) Advice: Encourage responsible leisure choices, suggest alternative activities and emphasise the importance of content that aligns with personal values.
25. i) Lack of guidance and supervision.
 ii) Peer pressure and influence.
 iii) Excessive use of technology and screen time.
 iv) Limited awareness of constructive leisure activities.
26. God's plan of redemption is fulfilled through Jesus Christ, who, through His sacrificial death and resurrection, provides forgiveness of sins and the offer of eternal life to those who believe in Him.
27. Organise community prayer sessions for rain. Engage in collective acts of faith, such as fasting and seeking divine intervention Encourage community members to remain patient and hopeful, trusting in God's timing.
28. Deception and dishonesty, exploitative motives, lack of consideration for the wellbeing of all parties involved.

29. Trusting in Jesus: Encourage them to trust in God's guidance and power.
 Faith over fear: Remind them to choose faith over fear in the face of challenges.
 Power of prayer: Advocate for the power of prayer and seeking spiritual support.
30. The Holy Spirit guides, strengthens and teaches Christians or believers.

MODEL PAPER 5

1. Maina, as a Grade 8 learner with free time after completing house chores, can engage in activities like reading books, exploring hobbies (drawing, writing, or playing a musical instrument), joining clubs or sports teams at school, volunteering in the community, or pursuing educational online courses.
2. Reasons for the misuse of leisure among youth today include excessive use of technology, lack of guidance and supervision, peer pressure, alcohol and substance use, societal expectations and a lack of awareness about constructive leisure activities.
3. If bullied by a stranger, it is advisable to stay calm, avoid confrontation and seek help from authorities or passersby. Report the incident to the police, school, or local community security. (Assess other relevant answers)
4. Kelvin should practice values like empathy, kindness and respect. Encourage him to channel his strength positively through sports or other activities that promote teamwork and cooperation.
5. The sacredness of life refers to the inherent value and reverence attributed to every individual's life, emphasising its importance and sanctity.
6. Assess relevant answers.
7. Causes of suicide in society today include mental health issues, depression, isolation, bullying, drug and substance use, financial problems and relationship difficulties.
8. Violations of the right to life today include murder, terrorism, war, capital punishment, euthanasia and neglect of vulnerable populations.
9. Values and life skills to uphold the sacredness of life include empathy, compassion, respect for diversity, conflict resolution skills, communication skills and a sense of responsibility.

10. If a friend has been defiled, advise them to report the incident to the authorities, seek medical attention and reach out to a counselor or support group for emotional help.
11. Other causes of early pregnancies among teenage girls include peer pressure, poverty, family issues and a lack of access to reproductive health services.
12. Different forms of sexual abuse in society today include rape, verbal sexual harassment, exploitation for favours such as job opportunities. (Assess other answers)
13. Practices leading to healthy family relationships include open communication, mutual respect, quality time spent together, shared responsibilities and resolving conflicts through dialogue.
14. During a church seminar on Christian teachings on healthy relationships, topics could include love, forgiveness, trust, communication and the importance of shared values.
15. Causes of conflict in families today include communication breakdown, financial issues, differing values, drug and substance use and generational gaps.
16. Positive ways of using leisure time as a youth include engaging in sports, cultural activities, volunteer work, educational pursuits and hobbies that contribute to personal growth.
17. Having faith when you pray is important as it reflects trust and belief in a higher power, allowing individuals to remain hopeful and focused on positive outcomes.
18. The church and Christians show God's love through acts of kindness, charity, community service, spreading the Gospel and practicing inclusivity and forgiveness.
19. Sarah can use her wealth to help the less fortunate in society by supporting education, healthcare, providing employment opportunities and contributing to community development projects
20. The Holy Spirit descended upon believers in the forms of "tongues of fire" that rested on each person and they were filled with the Holy Spirit, enabling them to speak in different languages.
21. Assess.
22. Assess.
23. Social media can cause family conflicts by influencing values, communication patterns and expectations, leading to misunderstandings and generational gaps.
24. Youths should start income-generating enterprises to gain financial independence, develop entrepreneurial skills, create job opportunities and contribute to economic growth.
25. Using talents and abilities to serve the community involves volunteering, mentoring, participating in community projects and sharing skills for a better society.
26. A person with bullying tendencies can be helped through counseling, education on empathy and conflict resolution, fostering a supportive environment and addressing underlying issues.
27. Ways to uphold the sacredness of life include promoting human rights, advocating for peace, supporting mental health initiatives, preventing violence and respecting the dignity of every individual.
28. Baptism symbolises the washing away of sins and the new life believers have in Christ (Romans 6:4).
It is a public declaration of one's faith in Jesus Christ and commitment to follow Him. Baptism signifies the believer's participation in the death and resurrection of Jesus Christ (Colossians 2:12).
It marks the beginning of a journey of discipleship and belonging to the community of faith.
29. Salvation is the forgiveness of sins and reconciliation with God through faith in Jesus Christ (Ephesians 2:8-9).
It is a free gift from God, not something that can be earned through good works. Salvation involves repentance, turning away from sin and surrendering to Jesus as Lord and Saviour. It results in eternal life and a restored relationship with God.
30. Human responsibility: Adam and Eve were given dominion over the earth but also the responsibility to obey God's commands. Obedience to God: Their disobedience resulted in consequences for themselves and future generations, highlighting the importance of obeying God's word. Consequences of sin: The story illustrates the consequences of sin, including shame, broken relationships and separation from God. God's mercy and grace: Despite their disobedience, God showed mercy by providing a plan for redemption through Jesus Christ.

ISLAMIC RELIGIOUS EDUCATION ANSWERS

1.0

QUR'AN

1.1 Modes of preservation of the Quran

Sub strand 1.1 Self-assessment

1. To continue its existence for the future generations.
2. Caliph Abubakar (R.A)
3. 23 years
4. (i) By reciting it in the daily prayers.
(ii) Writing it down on materials such as skins, bones, tree barks etc
(iii) Listening
5. (i) Through Qur'an competitions
(ii) Through radio stations and television channels.

1.2 Divisions of the Quran

Sub strand 1.2 Self-assessment

1. Most people were yet to accept
2. The portions are called Juzuu and they are thirty in number.
3. The Madinan surahs
4. Surah Al-Baqarah
5. The Ayat

1.3 Selected verses (Al-Luqman 12-19)

Sub strand 1.3 Self-assessment

1. He was a wise man used by Allah to advise his son on various important aspects of Islam
2. A Muslim should be grateful to Allah (S.W.T) for his own benefit
3. A Muslim should not walk on the earth with pride

4. To encourage the doing of good and forbid evil
5. To associate with partners

STRAND 1.0 ASSESSMENT TASK

1. (i) The Qur'an was recited wholly in the month of Ramadhan.
(ii) The new converts were taught how to recite the Qur'an correctly.
2. To ensure that they were reciting it correctly and had also memorized it correctly.
3. The companions from Makkah (Muhajirun)
4. They applied the teachings of the Qur'an.
5. Caliph Uthman bin Affan (R.A)
6. The Qur'an was standardized during the time of caliph Uthman in order to ensure uniformity in its recitation and understanding.
7. There are numerous Qur'an recitation programmes throughout which enables Muslims to follow and memorize.
8. The competition will help me to memorize the part that I am supposed to recite hence helping in the preservation of the Qur'an.
9. Many people are able to access it and use it for memorization.
10. Ayat (verse)
11. 128 words
12. 114
13. Surah At-Tawbah.
14. The Makkan surahs.
15. The donkey.

2.0

HADITH

2.1 Ulum al-Hadith

Sub strand 2.1 Self-assessment

1. Teaching his hadith to the public gatherings he attended.
2. They used to teach other women what they had learnt from the prophet.
3. They were used as learning centres.
4. They used the hadith in the administration of their caliphates.
5. To check whether or not they had understood what he had taught them.

2.2 Selected hadith

Sub strand 2.2 Self-assessment

1. How many matters will man be questioned on the Day of Resurrection?
Four matters.
2. Zamzam is a reknown businesswoman who has accumulated a lot of wealth. Which two questions will she be questioned on during the Day of Resurrection?
 - (i) How she acquired her wealth.
 - (ii) How she used her wealth.
3. Politely refuse because alcohol is haram.
4. When they command us on what is right.
5.
 - (i) Listening to them.
 - (ii) Obeying them.

STRAND 2.0 ASSESSMENT TASK

1. The sciences of the Qur'an.
2. It is a command of Allah and His Prophet (S.A.W)
3. He taught his hadith to the Swahaba and asked them to teach others.
4. He sent out teachers to go and teach Qur'an and his hadith.
5.
 - (i) Abdullah Ibn Masud (R.A)
 - (ii) Abu Hurairah (R.A)
6.
 - (i) Swalat performance
 - (ii) Performance of wudhu
7. Some pious Muslims and the swahaba.
8.
 - (i) Abubakr (R.A)
 - (ii) Umar (R.A)
 - (iii) Uthman (R.A)
 - (iv) Ali (R.A)
9. They established numerous learning centres where Qur'an and hadith were taught.
10. He used hadith.
11. Iqraar
12. In order to ensure that the swahabas had understood it correctly.
13. By worshipping Allah and doing what is right.
14. Share the hadith with other people.
15. He committed a sin for disobeying his teacher who is authority.

3.0

PILLARS OF IMAN

3.1 Belief in revealed scriptures

Activity 6

Taurat, Zabur, Qur'an, Injil, Suhuf

Sub strand 3.1 Self-assessment

1. Zabur - Daud
2. (i) To guide man to the right path.
(ii) To teach man good morals.
3. Revealed scriptures help man to differentiate between right and wrong.
4. The Holy Qur'an because it was revealed to the last prophet.
5. They contain similar message on the oneness of Allah.

3.2 Ulul-Azm Prophets

Sub strand 3.2 Self-assessment

1. Ali
2. Nabii Musa (A.S)
3. He feared for his life after killing the Egyptian.
4. Nabii Salih and Zakaria
5. Be enabling him to meet with Al-Khidhr who taught him patience.

STRAND 3.0 ASSESSMENT TASK

1. The Book of Zabur.
2. Nabii Musa
3. Nabii Issa (A.S)
4. Nabii Nuh (A.S)
5. He used a miraculous staff given to him by Allah to divide the sea
6. Prophets who had strongest patience.
7. (i) They enjoy good and forbid evil.
(ii) They call people to worship one God.
8. To ensure that no book is placed on top of the Qur'an.
9. He spoke at infancy.
10. To guide man to the right path.
11. (i) Musa (A.S)
(ii) Muhammad (S.A.W)
(iii) Issa (A.S)
(iv) Nuh (A.S)
(v) Ibrahim (A.S)
12. They were both Nabii and Rasul.
13. Maryam bint Imran.
14. (i) He did not die but was raised by Allah to the heavens.
(ii) He will come back to complete his mission.
15. The Suhuf

4.0

DEVOTIONAL ACTS

4.1 Prayers on special occasion

Sub strand 4.1 Self-assessment

1. To perform swaltul Istikhara to seek for Allah's guidance.
2. Two rakaats.
3. Swalatul Istisqaa.
4. An open field / ground
5. They both have two rakaats

4.2 Hajj

Sub strand 4.2 Self-assessment

1. Hajj
2. (i) Putting on Ihram.
(ii) Preparation and intention.
3. The farewell Tawaaf
4. White
5. At Miqaat

STRAND 4.0 ASSESSMENT TASK

1. Swalatul Istisqaa
2. Five Takbirahs
3. It is a sunnah of the prophet.
4. When he is unable to choose between two matters.
5. Two rakaat
6. Saying a dua
7. It promotes reliance on Allah (S.W.T)
8. To perform swalatul Istikharah
9. Dhul-Hijjah
10. Tawaaful Ifadha
11. To commemorate the act done by Ismail on the eve of his sacrifice
12. During the month of Ramadhan
13. (i) Putting on Ihram
(ii) Performing Sa'ay
(iii) Performing Tawaaf
(iv) Shaving the hair
(v) Going to Arafat
14. One
15. To listen to the prophet's farewell speech

5.0

AKHLAQ (MORAL VALUES)

5.1 Commanding good and forbidding evil

Sub strand 5.1 Self-assessment

1. Tell them why it is wrong to backbite others
2. The ummah of Muhammad (S.A.W)
3. Wisdom, humility
4. Forgiving those who wrong you
5. Allah (S.W.T) will reward him/her

5.2 Virtues in Islam

Sub strand 5.2 Self-assessment

1. Ask him to sit down if he was standing.
2. You will get sins.
3. It makes a person to be respected in the society.
4. You can make a bad decision which can affect you and other people.
5. The one who can control his anger.

5.3 Prohibitions in Islam

Sub strand 5.3 Self-assessment

1. (a) Bestiality
(b) Prostitution
(c) Homosexual
2. Sexual relations with an animal.
3. One in a marriage relationship
4. Procreation of children
5. They may lead to crime and criminal activities.

STRAND 5.0 ASSESSMENT TASK

1. Good and evil
2. (a) Obey Allah and His messenger
(b) Saying the truth every time
3. Those you remind will strive not to go beyond the limits,
4. People will believe in what you will be telling them.
5. To command good and forbid evil
6. I will help people to attain happiness in this world and the Hereafter
7. Sincerity and patience
8. Not fulfilling a promise
9. It makes a person to be respected in the society
10. (a) Sit down if he was standing.
(b) Lie down if he was sitting.
11. Allah (S.W.T.)
12. (a) By using hands
(b) By using the tongue
(c) By hating at heart
13. Homosexuality
14. Economic difficulties
15. (a) Homosexuality
(b) Prostitution

6.0

MUAMALAT

6.1 Divorce

Sub strand 6.1 Self-assessment

1. The dissolution of a marriage.
2. To have a conversation with her husband to solve the problems.
3. Give her a light beating but do not cause her pain or injuries.
4. Two people, one from the side of the husband and one from the side of the wife.
5. When the mediation process fails.

6.2 Types of divorces

Sub strand 6.2 Self-assessment

1. Khul'u
2. She must pay back all the dowry.
3. They lack the parental love and care.
4. Must pronounce divorce three times on three different occasions or instances
5. The families may not be happy with what may have happened.

6.3 Trade and finance in Islam

Sub strand 6.3 Self-assessment

1. (a) They protect the rights of all parties.
(b) They make promises to be legally enforceable
2. To safeguard their interests and rights.
3. (a) It should be consistent with the Qur'an and hadith.
(b) The parties involved must be Mukallaf (mature)
4. So that all the parties can understand the contents.
5. One of the parties has not attained maturity.

6.4 Human rights

Sub strand 6.2 Self-assessment

1. Right / freedom of speech
2. We were created into tribes and nations so that we may know each other
3. Right to be treated according to the law
4. It protects the vulnerable groups from abuse
5. Retirement Benefit Authority

STRAND 6.0 ASSESSMENT TASK

1. Unfaithfulness of either couple
2. Talaq
3. Khul'u
4. They should appoint a mediator, one from each side
5. Talaq is divorce while Nikkah is marriage
6. Talaq
7. Three times
8. They lack a parental love from one or all parents
9. They will bear witness in case of any difference
10. It is necessary for future references
11. Retirement Benefits Authority (RBA)
12. The Central Bank of Kenya (CBK)
13. They may not be having an agreement
14. It has formed the Kenya Bureau of Standards
15. The one who is most deeply conscious of Him

7.0

ISLAMIC HERITAGE AND CIVILIZATION

7.1 The Rightly Guided Caliphs

Sub strand 7.1 Self-assessment

- (a) Abubakar (R.A)
(b) Umar (R.A)
(c) Uthman (R.A)
(d) Ali (R.A)
- The rightly guided caliph
- He practiced nepotism in the appointment of some governors
- Uthman (R.A)
- Kufah (Iraq)

STRAND 7.0 ASSESSMENT TASK

- Maryam a Grade 8 learner was asked to arrange the Khulafau Rashidun from the last to the first. Write the order that Maryam came up with.
(a) Ali (R.A)
(b) Uthman (R.A)
(c) Umar (R.A)
(d) Abubakar (R.A)
- At what point did Abubakar (R.A) became a caliph of Islam?
After the prophet's death
- Which work was taken over by the caliphs after the death of the Prophet (S.A.W)?
The work of spreading Islam and expanding the Muslim empire
- What was the role of Abubakar (R.A) during his caliphate?
He was the head of state and the government
- Mention one challenge that was faced by caliph Abubakar (R.A) during his caliphate.
Problems of groups that refused to pay zakat
- Umar (R.A)
- Have private businesses
- Caliph Umar (R.A)
- He established the Baitul Maal
- Caliph Uthman (R.A)
- They were all from the Ummayyad clan
- Muawiya (R.A)
- He built water canals
- Caliph Uthman (R.A)

MODEL TEST PAPERS

MODEL TEST PAPER I

- Reciting it in the daily prayers
- Caliph Uthman bin Affan (R.A)
- (a) It saves the Qur'an from distortion
(b) It enables the spread of Islam all over the world
- Surah Tawbah
- Politely refuse
- Abdullahi Ibn Masud and Abu Hurairah
- (a) By answering the questions asked by the swahabas
(b) By teaching his wives and asking them to teach other women
- Musa (A.S)
- They direct man to worship Allah correctly
- A person must physically be clean
- He preached for over 900 years but convinced only a few people
- He was sent by Allah to go and preach to Firaun
- He spoke at infancy
- The Imam delivers a sermon (khutbah)
- Surah Al-Kafirun and Al-Ikhlash
- Once
- Sa'ay
- Five rites
- Sunnah rite
- (a) It is a means of attaining happiness
(b) It reminds a person of his mistakes
- (a) Sincerity
(b) Wisdom
- The one who can control his/her anger
- It promotes acquisition and the spread of sexually transmitted diseases
- Two, one from each side
- The wife must have completed her waiting period
- Right to fair trial
- Public morals and provision of social services was enhanced through the empowerment of the governors

28. Consolidating and expanding the Islamic empire
29. Uthman (R.A)
30. He wanted to deal with the issue of Muawiya bin Abu Sufyan who had refused to step down as a governor of Syria.

MODEL TEST PAPER 2

1. Companions of the prophet
2. Abubakar (R.A)
3. To check whether they were reciting it correctly or not
4. (a) Resurrection
(b) Day of Judgement
5. Encouraging good and forbidding evil
6. (a) His life and how he used it
(b) His wealth and how he earned and spent it
7. Arrogant
8. Gospel
9. They teach moral values that man should have
10. They all possessed strong will and perseverance in their mission
11. Asiya, the wife of Pharaoh
12. He had accidentally killed an Egyptian
13. Prophet Yahya (A.S) and Muhammad (S.A.W)
14. (a) Seeking for forgiveness
(b) Reciting the Qur'an over and over
15. Raising ones hands and saying dua
16. One who is financially able
17. Tawaaful Ifadha
18. Seven times
19. (a) It is a pillar of Islam and a commandment of Allah (S.W.T)
(b) Hajj promotes the Islamic brotherhood
20. A hypocrite
21. "Do not become angry"
22. Deviant behaviour
23. Talaq
24. Talking about the matter to see if a solution can be found
25. Unfaithfulness (adultery)
26. This Talaq was invalid because it did not meet the requirements
27. Communication Authority of Kenya (CAK)
28. Fustat
29. Markets were constructed and market officers appointed to maintain security and order
30. Muawiya bin Sufyan

MODEL TEST PAPER 3

1. (a) Bones
(b) Skines
(c) Tree barks
2. Uthman bin Affan
3. The Qur'an recitation is broadcasted in the channels
4. It is only Allah (S.W.T) who knows their meaning
5. Makkan surahs
6. (a) Abubakar Assidiq (R.A)
(b) Umar Al-Khattab (R.A)
(c) Uthman bin Affan (R.A)
(d) Ali bin Abu Talib (R.A)
7. We must always obey our leader so long as they are right
8. Ibrahim (A.S)
9. To make His teachings easier for man to follow
10. Preaching to Firaun about oneness of Allah
11. He was put in a basket and floated in River Nile
12. The one who spoke to Allah
13. She used to work at the temple
14. To perform swalatul Istisqaa
15. (a) It is a sunnah of the Prophet (S.A.W)
(b) It earns rewards
16. (a) It is an act of worship and is rewarded by Allah (S.W.T)
(b) It promotes the reliance on Allah by people
17. Seven times
18. The assembly at Arafat on the 9th of Dhul-hijjah
19. (a) Taking an optional bath before going to Arafat
(b) To drink from the well of Zamzam
20. Tell him the evils of lying
21. "When they get angry they forgive"
22. It will help to make the right decision
23. To try and talk to her husband and seek solution
24. The mediation process by arbitrators from both sides
25. At-Talaq
26. To give room to a person to exit if they are not comfortable with the agreement
27. Abubakar (R.A)
28. The institution that maintained law and order
29. Bringing to justice the assassins of caliph Umar (R.A)
30. He was his cousin and son-in-law

MODEL TEST PAPER 4

1. He used to send angel Jibril with the verses of Qur'an
2. The Muhajirun
3. (a) Through Qur'an competitions
(b) Recording in audio visual materials
4. Ayah (verse)
5. Makkan surahs are mostly short and precise while Madinan surahs are long and detailed
6. The prophet taught his wives hadith and asked them to teach other women
7. Because they will account for their deeds on the day of Judgement
8. Zabur
9. Because he learns of the rewards and punishments of Allah (S.W.T)
10. Those with a lot of perseverance or patience
11. He was put in a blazing fire but he survived
12. Kalimullah
13. (a) He made the blind to see
(b) He made a bird from clay and made it to fly
14. Twelve
15. Two rakaats
16. Hajj
17. They symbolizing the hitting of shaitan that was done by Ismail before his sacrifice
18. Tawaaful Qudum
19. (a) Putting on Ihram at Miqaat
(b) To perform Tawaaful widaa
20. By avoiding to harm other people
21. It makes a person to be respected in the society
22. Say a dua to seek patience from Allah or sit down
23. Talaq
24. Admonish her with a light beating
25. The process of Talaq will start
26. The contract was not valid because it was in the language that one of them did not understand
27. Umar bin Al-Khattab (R.A)
28. (a) Chief secretary
(b) Military secretary
(c) Treasury officer
29. For them to boost their trade
30. Ali bin Abu Talib (R.A)
4. Verse 282 of surah Al-Baqarah
5. Madinan surahs
6. The prophet used to send there teachers to teach new Muslims
7. How she earned and spent it
8. The Qur'an
9. Allah created man so as to worship Him
10. (a) Muhammad (S.A.W)
(b) Ibrahim (A.S)
(c) Issa (A.S)
11. Twenty five
12. Because he (Musa) spoke to Allah (S.W.T)
13. When Musa was brought back to her mother in the house of Firaun
14. (a) It is performed in congregation
(b) It is done in an open field or ground
15. To perform swalatul Istikharah
16. By performing swalatul Istikharah
17. Two rakaats
18. Tawaaful Widaa
19. Ihram
20. We cannot compare evil and good therefore we should stop evil with what is good
21. (a) Lying when speaking
(b) Not fulfilling promises
(c) Betraying trust when trusted
22. (a) Seeking refuge in Allah from shaitan
(b) Avoiding moving about but either sit down or lie down
23. They may result in marriage breakdown for those who are married
24. He should refuse to share a bed with her
25. The divorce which is requested by the wife but granted by the husband
26. The agreement was not legal because it did not conform with the Qur'an or sunnah
27. An advisory council that comprised of all the companions
28. (a) Iran
(b) Syria
(c) Hijaz
29. He ruled with impartial justice and mild in human policies based on the obedience of Allah and his prophets (S.A.W)
30. Caliph Ali (R.A)

MODEL TEST PAPER 5

1. 23 years
2. Use of the electronic media
3. Those who compete must memorize the Qur'an hence its preservation

VISUAL ARTS ANSWERS

1 THE ARTS AND ENTREPRENEURSHIP

1.1 Marketing of Artworks

End of Sub strand 1.1 Self-assessment

- Hourly wage
 - Time taken in production
 - Cost of materials
 - Overhead costs
 - Commission
 - Market price
- Identifying the amount of money used to create the artwork
- Function of artwork
 - Size of artwork
 - Economic factors
 - Social status of buyer
 - Aesthetic aspects of artwork
 - Packaging or presentation of the artwork
 - Communication skills of the seller
 - Physical presentation of the seller
- The target audience's demographics, such as age, income, and education level, play a significant role in their purchasing decisions. For example, younger audiences may be more inclined to purchase contemporary artworks, while older audiences may prefer traditional art forms.
- The artist's reputation is crucial in influencing consumers' purchasing decisions. A reputable artist can command higher prices for their work, and consumers are more likely to purchase artworks from artists they recognize.

End of Strand 1.0 Assessment Task

- Consumers' purchasing decisions are essential in the marketing of artworks because they ultimately determine the success and value of an artwork. If consumers are not interested in a particular artwork, it may not sell, regardless of its quality or the artist's reputation.
- Artists can increase the likelihood of consumers making a purchasing decision by creating high-quality, unique, and engaging artworks. Additionally, artists can effectively market their work through social media, networking events, and collaborations with other artists.
- The artist plays a crucial role in influencing consumers' purchasing decisions by creating high-quality, unique, and engaging artworks.
- Additionally, artists can effectively market their work through social media, networking events, and collaborations with other artists.
- Market trends and consumer preferences significantly affect the marketing of artworks. Artists need to stay up-to-date with market trends and adapt their work to meet the changing preferences of consumers.
- Pricing is an essential factor in influencing consumers' purchasing decisions. Artists need to set competitive and fair prices for their work to attract potential buyers.
- Artists can research the market by examining the prices of similar artworks, considering their own costs, and taking into account their experience and reputation.
- Setting a fair price for artworks benefits both the artist and the buyer. A fair price ensures that the artist is fairly compensated for their work, while the buyer receives a high-quality artwork at a reasonable price.
- Artists can handle pricing and negotiation in a professional manner by being well-informed about the market, setting a fair price for their work, and maintaining a respectful and open dialogue with potential buyers.
- Social media plays a significant role in influencing consumers' purchasing decisions in art. Artists can use social media platforms to showcase their work, engage with potential buyers, and build a loyal customer base.
- Artists can use networking events to increase their chances of selling artworks by connecting with potential buyers, showcasing their work, and building relationships with other artists and industry professionals.
- Collaboration is important in the marketing of artworks because it allows artists to reach new audiences, share resources, and learn from one another.
- Artists can effectively market their artworks through collaborations by choosing compatible partners, setting clear goals, and promoting their collaborative efforts to their combined audience.
- Participating in art fairs and exhibitions benefits artists by providing them with opportunities to showcase their work, network with potential buyers and other artists, and increase their visibility in the art world.

14. Artists can use their website to market their artworks effectively by showcasing high-quality images of their work, providing detailed information about their artworks, and promoting their work through social media and other online channels.
15. Art galleries play a crucial role in the marketing and sales of artworks by representing artists, organizing exhibitions, and promoting their artists' work to potential buyers.

2

PICTURE MAKING

2.1 Drawing

End of sub strand 2.1 Self-assessment

1. Perspective is a drawing technique used to represent 3D objects on a 2D surfaces creating an illusion of depth and distance in a composition.
2. Linear perspective and atmospheric perspective
3. (a) Horizon is the line in the distance where the earth appears to meet the sky.
(b) Vanishing point is where projection lines meet in the horizon.
(c) Projection lines are the lines of objects that meet at the vanishing point.
4. Horizon and vanishing point.
5. Birds eye view
6. Start with drawing two vanishing points followed by the projection lines and finally joining the points of intersections.

2.2 Painting

End of sub strand 2.2 Self-assessment

1. Warm colors are red, orange, and yellow, while cool colors are green, blue, and purple. Warm colors are associated with energy, passion, and excitement, while cool colors are associated with calmness, serenity, and relaxation.
2. Warm and cool colors can be used to create contrast, balance, and harmony in art. For example, using warm colors for the foreground and cool colors for the background can create depth and perspective. Using complementary warm and cool colors can create a vibrant and dynamic composition.

3. A color wheel is a visual representation of the relationships between colors. It is a circular diagram that shows the primary, secondary, and tertiary colors, as well as warm and cool colors. The color wheel is a useful tool for artists to understand color theory and create harmonious color schemes.
4. Balancing warm and cool colors in a painting can create a sense of unity and coherence. One way to balance warm and cool colors is to use an ultra-limited palette of warm and cool colors, such as burnt sienna and ultramarine blue. Another way is to use a color scheme that combines warm and cool colors in a complementary or analogous way.
5. Warm and cool colors can be identified by their visual properties. Warm colors tend to be brighter, more vibrant, and closer to red, orange, and yellow, while cool colors tend to be more subdued, muted, and closer to green, blue, and purple. Another way to identify warm and cool colors is to compare them to each other and see which ones create a sense of warmth or coolness.

2.3 Mosaic

End of sub strand 2.3 Self-assessment

1. Mosaic art is created using small pieces of colorful materials, such as glass, stone, ceramic, or other objects, arranged and assembled to form a larger image or pattern
2. Some famous ancient mosaics include the Bayeux Tapestry, the Mosaics of Antioch, and the Villa de Romani in Italy
3. Creating a mosaic involves selecting and arranging individual pieces of material (tesserae) into a harmonious whole, often depicting scenes, patterns, or representations of both actual and abstract subjects
4. Byzantine mosaics are known for their intricate designs, use of gold and silver tiles, and depiction of religious scenes and figures
5. Color contrasts can be subtle or extreme, and the choice of colors can greatly influence the mood and feeling evoked by the mosaic

End of strand 2.0 Assessment Task

1. Contemporary mosaic art can be found in various forms, such as floor designs, wall murals, and sculptures, with artists using a wide range of materials and techniques to create their works

2. Mosaics serve various functions in contemporary society, including as art pieces, decorative elements, and even as a form of storytelling or communication
3. Tips for creating a successful mosaic include planning the design, selecting appropriate materials, and paying attention to color contrasts and the overall aesthetic appeal of the piece
4. Mosaics often reflect the culture and environment of their creation, with themes, styles, and materials influenced by the specific context in which they were created.
5. Indoor mosaics are typically created using different materials and techniques than outdoor mosaics, with outdoor mosaics often needing to be more durable and resistant to weather conditions.
6. Four colours
7. Mosaic art can be used to add vibrancy and intricacy to spaces. Its durability and customization options make it a versatile medium used in various architectural and artistic applications. Mosaic art can be used to create stunning facades, interior walls, and backsplashes
8. An excellent mosaic art piece is one that is well-crafted, visually captivating, and tells a story. Mosaic art has the unique ability to convey narratives, capture emotions, and reflect the events of its time. The concept must take priority over the medium, and the design should be tailored to the desired aesthetic and purpose.
9. One-point perspective drawing is a technique that simulates the view of an object or scene from a single vantage point. It involves using vanishing points to create the illusion of depth and distance on a two-dimensional surface
10. To draw a cuboid in perspective, you need to understand the concept of vanishing points. Place a cube on a table and draw it from life in various viewpoints, such as one- and two-point perspective. Depict ovals inscribed on the cube's sides and use constructive drawing principles, such as drawing the cube as if it were totally transparent and keeping in mind the horizon level
11. The color wheel is a circular representation of colors arranged in a specific order, used to understand color relationships and combinations. It helps artists and designers choose complementary, analogous, and other color schemes for their work.
12. Primary colors are red, blue, and yellow. Secondary colors are created by mixing two primary colors: orange (red + yellow), green (blue + yellow), and purple (red + blue). Tertiary colors are created by mixing a primary color with a secondary color.
13. To create a color wheel quiz, you can use online tools like Google Forms or Canva to design a multiple-choice quiz with questions on color theory, color schemes, and color wheel-related concepts. You can include questions on primary, secondary, and tertiary colors, as well as analogous, complementary, and split complementary color schemes.
14. Pavements, verandas, fences, gates
15. (a) To improve your painting skills, you can:
 - (b) Learn the basics of perspective and shading.
 - (c) Practice drawing from life, especially from a live model or still-life setup.
 - (d) Study the works of famous artists to understand their techniques and styles.
 - (e) Experiment with different painting materials, such as canvas, paper, or board.
 - (f) Learn about color theory and how to create various color

3

MULTIMEDIA ARTS

3.1 Traditional 2 Dimensional Animation

End of sub strand 3.1 Self-assessment

1. A flip book is a series of still images, typically drawn or painted, arranged in a sequential order. When rapidly flipped, these images create the illusion of motion, making it a foundational technique in traditional 2D animation.
 1. Incorporating shading, varying line weights, and employing perspective techniques can create the illusion of depth in characters. Experimenting with these elements enhances the visual appeal and realism of the flip book animation.
 2. Keyframes serve as pivotal moments in animation. In flip books, each page represents a keyframe, demonstrating the progression and fluidity of motion when flipped sequentially.
 3. Creating flip books provides hands-on experience, allowing learners to grasp fundamental animation principles, frame sequencing, and timing crucial for multimedia arts.

4. Colour theory influences mood and visual appeal. In flip books, learners should strategically use colours to convey emotions, establish hierarchy, and create emphasis despite the constraints of a limited color palette.

3.2 Graphic design

End of Sub Strand 3.2.1 Self-assessment

1. A logo serves as a visual representation of a brand, conveying its identity and values to create instant recognition and establish a memorable connection with the audience.
2. Color theory is crucial in logo design as it influences emotions and perceptions. Choosing appropriate colors can evoke specific feelings, enhance brand personality, and ensure visual harmony, contributing to effective communication.
3. Typography in logo design involves selecting fonts that align with the brand's personality and message. The right typography enhances readability, reinforces the brand identity, and contributes to overall visual appeal.
4. Simplicity is key in logo design as it aids in quick recognition and versatility across various platforms. In multimedia arts, a simple logo ensures that intricate details are conveyed effectively, even in smaller sizes or different media.
5. Balancing elements and incorporating symmetry in a logo design create a sense of visual stability. This ensures that the various components harmonize, making the logo visually appealing and memorable for the audience.

End of Sub Strand 3.2.1 Self-assessment

1. In multimedia arts, simplicity is key to ensuring quick recognition. A simple and clean trademark design is more likely to be memorable and versatile across different multimedia applications, fostering a stronger connection with the audience.
2. Typography is a powerful tool for expressing brand personality. The choice of fonts, spacing, and arrangement in a trademark contributes to the overall message and helps establish a visual identity that resonates with the brand's values.

3. Negative space, when strategically utilized, can create a more memorable and distinctive trademark. It allows for subtle symbolism and can help the trademark stand out, especially in multimedia applications where visual clutter is common.
4. Scalability ensures that a trademark remains visually appealing and recognizable across various platforms and sizes. A well-designed trademark should maintain its integrity whether displayed on a small mobile screen or a large multimedia platform.
5. Color psychology plays a crucial role in trademark design by evoking specific emotions. For instance, warm tones like red can convey energy and passion, while cool tones like blue may suggest trust and reliability.

3.3 Ornamentation of objects

End of sub strand 3.3 Self-assessment

1. Symmetry in paper craft ornaments adds balance and harmony, enhancing the overall aesthetic. Whether using folding, cutting, or layering techniques, maintaining symmetry contributes to a pleasing and well-coordinated design.
2. Layering in paper craft involves stacking different elements to create depth. This technique adds visual interest to ornaments, making them more dynamic. Consider experimenting with various paper weights and textures for added dimension.
3. Color coordination is vital in paper craft as it influences the overall mood and cohesiveness of the ornament. Harmonizing colors enhances the visual appeal, while contrasting colors can be used strategically to draw attention to specific details.
4. Origami techniques provide a unique approach to paper craft ornamentation, offering precision and intricate detailing. The method allows for a wide range of designs and encourages learners to explore diverse shapes and forms, fostering creativity and adaptability.
5. Repetitive patterns in paper craft create a sense of unity and cohesion in ornaments. Whether through repeated folding, cutting, or layering, this technique adds rhythm and consistency, resulting in visually captivating and harmonious design.

End of strand 3.0 Assessment Task

1. Crafting a flip book allowed me to grasp the importance of pacing and visual continuity in conveying a narrative through simple, sequential images.
2. Color psychology, simplicity, and scalability to ensure my logo communicates the brand's essence effectively across various mediums.
3. A distinctive trademark helps distinguish a brand. I ensured uniqueness through research, avoiding common symbols, and consulting legal resources.
4. The yarn type affects texture, color vibrancy, and durability, while the stitching technique influences the visual pattern and structural integrity.
5. Paper choice impacts texture, foldability, and visual appeal. Selecting the right paper enhances the overall aesthetics and durability of the crafted ornament.
6. Precision in folding and intricate cuts posed challenges, but careful planning, practice, and attention to detail helped overcome these obstacles.
7. Coordinating the sequential images to create smooth animation is a bit challenging, requiring careful planning and attention to detail.
8. Making sure each element in the logo conveyed a specific aspect of the brand's identity, creating a cohesive and meaningful representation.
9. Understanding the role of trademarks inspired me to create distinctive and original elements, ensuring legal protection and brand recognition.
10. Exploring different yarn textures and colors allowed me to add depth and richness to my ornamentation, enhancing the overall aesthetic appeal.
11. Selecting various papers enabled me to experiment with texture and weight, creating a diverse and visually interesting ornamentation.
12. Achieving precision demanded patience and careful execution. Breakdown of complex designs into manageable steps helped me master intricate details.
13. Focus on maintaining a logical sequence and ensuring each frame connected seamlessly, fostering a captivating and coherent narrative.
14. Constructive feedback allows one to reconsider design elements, leading to improvements in clarity and overall visual impact.

15. Ethical considerations are navigated by ensuring that designs are not misleading, respecting the values and authenticity of the brands being represented.

4

INDIGENOUS CRAFTS

4.1 Sculpture

4.1.1 Assemblage and construction

End of sub strand Self-assessment

1. Assemblage and construction
2. This is the art or assembling disparate elements to make an object.
3. Additive sculpture is adding layers or materials together to build a desired form. Subtractive sculpture is subtracting layers or materials to build a desired form.
4. This is the building up and reshaping of soft material like clay, wax or plaster to create a form.
5. Wangeci Mutu, Jomo Kenyatta sculpture, Tom Mboya Sculpture among others
6. Assemblage and construction
7. This is the basic object sculpted by wires to be used to make real sculpture object.
8. It creates a sense of meaning and value on sculpture assemblage.
9. Wire gauges, colours, metals and bolts.
10. Free-standing sculpture stands independently while a construction sculpture is attached to something during construction.

4.1.2 Modelling technique and casting

Sub strand 4.1.2 and 3 Self-assessment

1. The armature in 3D clay modeling provides form on which clay holds firmly.
2. Additive sculpting in 3D is adding clay to build a desired form. Subtractive sculpting in 3D is subtracting clay to build a desired form.
3. Painting (Assess.)
4. Drying is to be carried out under shade to prevent cracking.
5. This is a scale model or rough draft of an unfinished sculpture.
6. This is a technique used for casting. It does not waste materials.
7. Paper, mould rubber, plasticine clay and hot melt glue

8. Releasing agents in one-piece mould casting forms a layer of fibres or particles that makes the mould easy to remove.
9. This creates parts with complex shapes and forms which helps in removing the form.
10. The ventilation channels in a one-piece mold help to release gasses and air.

4.2 Pottery

End of sub strand 4.2 Self-assessment

1. Slab technique in pottery is modelling method where flat sheets of clay are cut into shape and joined to create a functional vessel or item.
 2. By using uniform geometrical tools and flat surfaces.
 3. The decorating techniques for pottery are such as impressing, piercing, rouletting, incising, stamping, making marks made on the wheel and burnishing.
 4. Do not light fire near dried grass, ensure even heat distribution, control the temperature, ensure there is ventilation, the kiln must have a chimney at the top, open the kiln when it cools
 5. Scoring is scratching pellets that are to be joined together. Slipping is joining together of the clay pieces in pottery using clay. These techniques are very essential as they ensure firm joints in pellet technique in pottery.
3. Undercuts are depressions while overhangs protrusions in modeling.
 4. The use of different sculpting tools are for different functions and details hence affecting final product of modeling.
 5. Assess the response of the learner concentrating on safety when dealing with fire and hot objects.
 6. They are the foundation on which mould is cast.
 7. This determines the conditions under which the mould materials were prepared and how they were prepared.
 8. The material for one-piece mould casting should be strong to withstand pouring of the mould material.
 9. The sculptural materials should be assembled and constructed before pouring the mould.
 10. How can an artist ensure consistency in multiple casts using a one-piece mould?
 11. How does scoring and slipping play a role in the assembly of slab-built pottery?
 12. Why is it important to allow the pottery sculpture to dry gradually before firing?
 13. Describe the process of bisque firing in the context of pottery made using the slab technique.
 14. How can an artist achieve interesting textures on the surface of slab-built sculptures?
 15. Explain the role of underglazes and glazes in pottery decoration, specifically for slab-built sculptures.
 16. Embedding
 17. This is a technique in pottery which involves creating small rounded clay balls called pellets which are then joined together to build a vessel.
 18. The pellet technique is economical in terms of material used and it produces an already decorated product.
 19. Assess the learner's description.
 20. Firing hardens the clay products.
 21. Bisque or biscuit firing the temperatures are kept below water boiling point temperatures while glaze firing in pottery the temperature are kept above 1200 Degrees Celsius.
 22. Higher firing temperature causes the clay to fuse and becomes strong and impervious to water.
 23. The temperature rise should be gradual and let the sculptures cool before removing them.

4.3 Weaving

End of sub strand 4.3 Self-assessment

1. Pile weave structure is a weaving construction that has a base for weaving.
2. Frame loom mitre joints in weaving is used for joining the frames.
3. These is where two ends of a pile yarn appear on the surface.
4. They are easy to use, affordable and portable.
5. The pile height enables the pile weave structure to either be soft or rough. The tall ones are soft while the short ones are rough.

End of strand 4.0 Self-assessment Task

1. The soft clay with less impurities takes short time to prepare hence economical.
2. Proportional sculptures give real life experience in terms of 3D sculpting.

24. By choosing strong wood, using correct measures and correct mitre joint.
25. Two coloured yarn of thin sizes create a unique and visually appealing finish.
26. Knotting, tasseling and trimming
27. Twining and fringe
28. Maintain even tension while weaving with a pile weave structure to avoid loose weave for easy tearing.
29. For decoration.
30. To secure the edges of the fabric.

MODEL TEST PAPER 1

1. In-depth research allows understanding market trends, preventing unintentional similarities and ensuring that trademarks are distinct and legally sound.
2. Pricing strategy directly influences perceived value, impacts sales, and helps artists cover production costs while maintaining a competitive edge in the art market.
3. The color wheel is a tool that artists use to organize and understand the relationships between colors. It consists of primary, secondary, and tertiary colors and helps artists mix and match colors effectively
4. Colors hold different symbolic meanings in various cultures. For example, in some cultures, white represents purity and in others, it can symbolize death. Understanding these cultural differences can help artists communicate more effectively through their artwork
5. The elements of a 3D modelled sculpture include form, space, and texture. Form gives the sculpture volume, space defines its boundaries, and texture adds tactile qualities, enhancing the viewer's experience.
6. The sizes and thickness of the walls in sculpting depend on the artist's preference and the intended purpose of the sculpture
7. Sculpting tools like loop tools, wire tools, and modeling tools are fundamental for shaping and refining clay sculptures.
8. Common finishing techniques include smoothing with a sponge, carving details, and applying different textures using various tools.
9. Proper wall thickness ensures structural integrity and prevents cracking during the drying and firing processes.
10. Wear protective gloves, be mindful of hot surfaces, and use a heat-resistant mat to avoid accidental burns.
11. Experiment with various yarn thicknesses and different paper textures to add depth and variety to your ornamentation projects.
12. Creating a 3D modelled sculpture involves manipulating materials to build up the form. Challenges may include achieving balance and proportion while working in three dimensions.
13. The ghiordes knot involves tying individual knots with two contrasting colors, creating a distinct pattern in the pile weave. Alternate colors to achieve a visually appealing design.
14. Materials such as wool, cotton, and synthetic fibers are common for pile weaving. The choice of material affects the texture, durability, and appearance of the finished piece.
15. Use techniques like hemstitching, overhand knots, or braiding to secure the warp threads and create a neat finish for your woven project.
16. Experiment with different pile heights, varying the length of loops or tufts, to create a dynamic and textured surface in your pile weave.
17. Even beat ensures uniformity in the weave, preventing irregularities or gaps. Use a beater to pack the weft threads consistently.
18. Assemble the frame loom by connecting 1m sections securely, ensuring a stable structure. Attach the warp threads tightly across the loom for a strong foundation.
19. Proper tension in the warp threads ensures an even and well-defined weave. Adjust the tension as needed to prevent sagging or distortion in the final piece.
20. Artists can seek funding from various sources, such as grants, scholarships, sponsorships, and crowdfunding platforms. They can also consider working part-time jobs, teaching art, or offering workshops to supplement their income
21. Pile weave involves creating a textured surface by adding loops or tufts to the fabric. It differs from flat weaves by its raised, three-dimensional appearance.

22. Common pelleting aids used in pottery production include binders such as clays, which help to improve the cohesiveness and plasticity of the clay mixture. These aids contribute to the formation of durable and well-structured pellets, ensuring consistency and quality in the pottery making process.
23. Alternative firing methods, like wood firing, can significantly influence the final appearance of pottery by creating unique surface effects, such as natural ash glazes, flashing, and distinctive color variations. These methods offer potters the opportunity to achieve visually striking and individualized results
24. Negative space is the empty space around and within the sculpture. It plays a crucial role in defining the sculpture's form, creating balance, and emphasizing the positive elements.
25. Understanding color combinations and contrasts can help you choose harmonious shades, enhancing the overall aesthetic of your creations.
26. Can be used to create functional items like bookmarks, pencil holders, or coasters using yarn and paper to combine beauty with usefulness.
27. When selecting a pottery firing kiln, it's essential to consider factors such as the kiln's size, temperature range, firing method (electric, gas, wood, etc.), energy efficiency, and the specific requirements of the pottery pieces being produced.
28. Wood pellet fired pottery kilns are utilized in the firing process to achieve the high temperatures required for vitrifying the clay. These kilns use wood pellets as a sustainable and efficient fuel source, providing the heat necessary for transforming the clay into finished ceramic pieces.
29. The pellet technique in pottery involves the use of compacted clay pellets as a material for creating ceramic objects. This method offers advantages in terms of uniformity, consistency, and control over the clay material, allowing for precise shaping and forming of pottery pieces.

30. The primary kiln firing methods in pottery include bisque firing and glaze firing. Bisque firing, also known as the first firing, is done at a lower temperature to harden the clay and prepare it for glazing. Glaze firing, on the other hand, involves firing the bisque-fired pottery at a higher temperature to melt and fuse the glaze, creating a smooth, glassy surface.

MODEL TEST PAPER 2

1. Cultural sensitivity informed my design choices, ensuring that symbols and colors had positive connotations across various cultural contexts.
2. The target audience for marketing artwork can vary depending on the artist's style, the medium used, and the intended message. It can include individuals who appreciate art, collectors, galleries, and potential buyers.
3. Scoring and slipping involve roughening the surfaces to be joined and applying a liquid clay mixture to enhance adhesion, ensuring a strong bond between slabs.
4. Principles like balance, unity, and rhythm guide artists in achieving harmony in their sculptures. Balance ensures stability, unity brings coherence, and rhythm adds visual interest.
5. A slab vessel is created using flat, thin sheets of clay that are cut, assembled, and joined to form the final structure. It typically has clean, angular lines.
6. Use guide sticks or rolling pin rings to maintain consistent thickness while rolling out the clay slabs.
7. Pinching is a commonly used modelling technique where the potter uses their fingers to pinch and shape the clay slabs, creating organic and textured forms.
8. To avoid warping, cover the project loosely with plastic to slow down drying, or place it between drywall or other flat surfaces to maintain shape.
9. Texture can be added by impressing objects, carving, or using tools to create patterns on the surface of the clay before assembling the slabs.

10. Warm colors are often associated with energy and happiness, while cool colors can evoke a sense of calm and tranquility. By understanding this, artists can use warm and cool colors to convey specific emotions in their artwork.
11. Consider the intended purpose and location of the sculpture, keeping in mind proportions and scale for a balanced visual impact.
12. Wear appropriate protective gear, such as gloves and a mask, and ensure proper ventilation to minimize exposure to dust and fumes
13. Texture in sculpture is both visual and tactile. Artists can use it to convey emotions by choosing textures that resonate with the intended theme, creating a more immersive experience for the viewer.
14. Mixing clays with similar firing temperatures is possible, but it's crucial to consider compatibility to avoid issues during firing.
15. Artists can market their artwork through various channels, such as social media, websites, email newsletters, and art fairs. They can also collaborate with galleries, museums, and other artists to increase their visibility and reach potential buyers
16. Begin by wedging the clay to remove air bubbles and ensure a uniform consistency.
17. Clay sculptors often use water-based clay, oil-based clay, or polymer clay depending on their preferences and project requirements.
18. Paper can be used to make paper ball ornaments, paper snowflakes, and paper garlands. It can also be used for activities like paper tube knitting and resist art
19. High school learners can engage in activities such as finger knitting, yarn painting, and creating yarn-wrapped decorations. These activities not only promote creativity but also provide educational opportunities, such as non-standard measuring exercises
20. Attaching slabs with similar moisture levels reduces the risk of cracking during drying and firing, ensuring a more successful project.
21. Bisque firing is the initial firing that transforms raw clay into a more durable, porous form. It prepares the pottery for glazing by removing chemically bound water.
22. Carefully clean and dry the surface, use appropriate brushes for even application, and consider glaze compatibility to achieve desired colors and effects.
23. The creation of a paper mosaic landscape can help develop drawing techniques such as line drawing, tone or value drawing, mark making, and drawing with hatching and cross-hatching, as the process involves cutting and arranging paper to create the desired image
24. Glazes contribute to the aesthetics of a slab vessel by providing color, texture, and sometimes a glossy or matte finish, enhancing the overall visual appeal.
25. Wax resist is applied before glazing to create areas where the glaze won't adhere, allowing for intentional patterns or leaving parts of the pottery unglazed.
26. Gradually increase the kiln temperature during the initial stages of firing to allow moisture to escape, reducing the risk of rapid expansion and cracking.
27. Sgraffito involves scratching through a layer of colored slip to reveal the contrasting clay beneath, creating intricate designs and patterns.
28. Indigenous sculpture contributes to sustainable art practices by using accessible and natural materials, upcycling, and raising awareness of environmental issues through artistic expression
29. Scale and proportion determine the size relationship between different elements in a sculpture. Artists decide on these aspects based on the intended message, whether aiming for realism or abstraction.
30. Flip books have various applications in multimedia arts, including creating storyboards for film and animation, designing visual aids for presentations, and illustrating comic books or graphic novels. Flip books can be used to showcase portfolios of work, demonstrate technical skills, and explore new ideas and concepts

MODEL TEST PAPER 3

1. Strategic colour choices plays a crucial role in conveying moods and themes, allowing creations that are visually compelling and emotionally based ornamentation.
2. The main focus of two-point linear perspective is to create the illusion of depth using two vanishing points, which are points in space where objects seem to disappear
3. The three types of linear perspective are one-point perspective, two-point perspective, and three-point perspective
4. The horizon line is a line that divides the sky from the ground and represents the eye level of the viewer
5. Vanishing points are points in space where lines of perspective converge, creating the illusion of depth on a two-dimensional surface
6. In two-point perspective, there are two vanishing points, while in three-point perspective, there are three vanishing points.
7. Artists can negotiate their prices effectively by researching the market, setting competitive prices, and being confident in their work. They should also be open to negotiation and be prepared to justify their prices
8. A worm's-eye view is a view from the point of view of a worm looking up at the subject, making the object appear tall, strong, and mighty
9. To create a two-point perspective drawing, start by defining the horizon line and placing vanishing points on it. Then, draw the corner of the object and use the vanishing points to create the illusion of depth.
10. Warm colors include reds, yellows, and oranges, while cool colors include blues, greens, and violets
11. When pricing artwork for commercial use, artists should consider factors such as the market, the enterprise to which they are selling, the medium, and the type of art. Additionally, artists should research the prices of comparable artworks and consider their experience, skills, and time spent on the project
12. Low-fire clay is suitable for decorative pieces, while high-fire clay is preferred for functional items due to its increased durability and resistance to water absorption.
13. Ensure a slow and controlled drying environment to prevent uneven drying, which can lead to warping or cracking in the slabs.
14. Indigenous sculpture reflects history and spirituality by incorporating cultural symbols, traditional materials, and narratives that are passed down through generations
15. Yarn and paper can be combined to make various decorations such as yarn-wrapped ornaments, yarn-wrapped paper balls, and paper garlands adorned with yarn. These combinations offer a wide range of creative possibilities for ornamentation
16. Traditional materials include stone, wood, metal, clay, and plaster, each with its own cultural and symbolic significance
17. Indigenous artists often prioritize sustainability by using natural and renewable materials, as well as incorporating upcycled or reclaimed objects into their work
18. Kiln shelves support the pottery during firing and prevent pieces from sticking together. Proper stacking on shelves ensures even heat distribution.
19. Rotate the vessel during glazing to ensure all surfaces are covered evenly. Consider using multiple layers for intricate designs.
20. High school learners can use upcycled materials such as scrap paper, old yarn, and cardboard tubes to create environmentally friendly ornaments. This promotes sustainability and creativity in ornamentation
21. A paper mosaic is a picture or pattern made by arranging small colorful pieces of paper to create a larger image. It can be created using different scraps of colored paper, magazines, tissue paper, or wrapping paper, along with a glue stick or craft glue
22. Marbling involves mixing different-colored slips and swirling them together to create a marbled effect on the surface of the pottery.
23. The firing cone acts as a visual indicator of the kiln's temperature. Choose the appropriate cone for your clay type to ensure the correct firing temperature for slab projects.
24. Use a strong adhesive like craft glue or double-sided tape to secure yarn tightly, ensuring durability in your designs.

25. Recycled paper and organic cotton yarn to create sustainable and environmentally friendly decorations.
26. Firing in a kiln is a crucial stage in pottery making as it transforms the malleable clay into a durable, permanent material. The high temperatures during firing cause chemical and physical changes in the clay, resulting in the hardening and vitrification of the pottery, making it suitable for functional use and long-term preservation.
27. Pottery can be decorated using various techniques, including glazing, carving, sgraffito, underglaze painting, and slip trailing. These methods allow potters to add texture, color, and intricate designs to their creations, enhancing the aesthetic appeal of the finished pieces.
28. Modelling in pottery involves shaping and sculpting clay by hand to create three-dimensional forms. This can be done using techniques such as pinching, coiling, and slab building, allowing for the creation of diverse shapes and structures.
29. A slab vessel in pottery is typically characterized by its flat, broad shape, which is constructed using flat, rolled-out pieces of clay. This technique allows for the creation of angular and geometric forms, making it a versatile method for crafting various functional and decorative vessels.
30. By strategically placing warm and cool colors, artists can direct the viewer's attention to specific areas of the artwork. Warm colors tend to stand out, while cool colors can create a sense of distance, and this knowledge can be used to create a focal point in a painting

MODEL TEST PAPER 4

1. Prioritizing sustainable paper options aligns with commitment to eco-friendly practices which adds an ethical dimension to paper craft projects.
2. Some techniques for creating a paper mosaic landscape include cutting out patterns from colored paper and sticking them to give a 3D effect, using different scraps of colored paper to create a colorful pattern, and arranging the paper pieces to form a recognizable landscape pictorial.
3. When using yarn and paper for ornamentation, it's important to consider safety measures such as keeping decorations away from open flames, choosing flame-resistant materials, and avoiding decorations that are sharp or breakable.
4. Yarn can be used to create various decorative items such as yarn-wrapped ornaments, yarn-wrapped resist art, and yarn-wrapped pumpkins. It can also be used for activities like finger knitting and non-standard measuring exercises.
5. Indigenous materials often carry cultural meanings, connecting the artwork to the community's heritage and promoting sustainability.
6. Yes, traditional ornamentation techniques such as yarn-wrapped resist art and paper ball ornaments are still popular today. These techniques have been passed down through generations and continue to be enjoyed by people of all ages
7. Indigenous artists often infuse their cultural heritage into sculptures through symbolic forms, motifs, and materials, preserving traditions and expressing identity.
8. The cost of materials for artwork can be calculated by multiplying the cost of each material used by the amount needed for the project. For example, if an artist uses canvas worth KSH 2000 and needs 10 canvases, the total cost of materials would be KSH 20000
9. Creating a traditional 2D flip book involves several steps. First, you need to gather materials such as paper, scissors, and a binder clip. Then, you need to draw or print images on the paper and cut them out. Finally, you assemble the flip book by lining up the pages and fastening them with a binder clip. This process allows you to create a simple, handmade flip book that can be used to tell a story or showcase your artistic skills
10. The study of indigenous sculpture can connect to various subjects such as history, language arts, and science, providing a holistic understanding of the cultural and artistic significance of the craft
11. Armatures provide internal support to the sculpture, preventing collapse and helping maintain the intended form during the casting process.

12. Size depends on the type of casting method; smaller sculptures are often more manageable for beginners using techniques like plaster casting.
13. Choosing sustainable materials and proper disposal methods, like recycling clay scraps, promotes environmentally friendly sculpting practices.
14. High school learners can ensure the safety of their holiday decorations by choosing flame-resistant materials, keeping decorations away from heat sources, and avoiding sharp or breakable items. It's also important to follow safety tips for holiday decorating, such as keeping cords and decorations in low-traffic areas to prevent tripping
15. A normal view is a view from the point of view of a human at eye level, also known as street view
16. A bird's-eye view is a view from the point of view of a bird looking down on the subject
17. A worm's-eye view is a view from the point of view of a worm looking up at the subject, making the object appear tall, strong, and mighty
18. A logomark is the icon, pictogram, or graphical element of a logo design, which is generally the most recognizable part of a logo, meant to encapsulate the entirety of the brand in a singular image
19. The four fundamental components of logo design are the logo brand, style, colors, and typeface
20. You can weave vibrant yarn patterns around everyday items like vases or create paper flowers to enhance their appearance.
21. Always use child-safe scissors, work in a well-ventilated area, and be cautious with hot glue guns to prevent burns.
22. Clay preparation ensures proper consistency for molding and facilitates the casting process.
23. Armature provides support to the sculpture's structure. Materials like wire, wood, or even aluminum foil can be used for creating a sturdy armature.
24. Firing alters the clay's color, with variations depending on the type of clay and firing temperature. Oxidation or reduction firing can also influence the final color.
25. The finishing techniques used in sculpting include sanding, polishing, and painting
26. Safety measures include using appropriate tools, protective gear, and ensuring proper ventilation to minimize risks during the creative process
27. For instance, a painting of a sunset might use warm colors like reds and oranges to create a sense of warmth and coziness, while cool colors like blues and purples can be used to depict a moonlit night, evoking a feeling of calm and serenity
28. By understanding how colors appear to change based on their position in space, artists can create the illusion of depth in their artwork. For example, warm colors tend to advance, while cool colors recede, and this knowledge can be used to create a sense of perspective in a painting
29. The purpose of wedging clay is to remove any air bubbles that may occasionally be trapped in the clay
30. Sustainability involves responsibly sourcing materials, minimizing waste, and respecting traditional practices to ensure the longevity of cultural and environmental resources.

MODEL TEST PAPER 5

1. Assess. This improved the aesthetic value of the ornament.
2. It is a 3D and has geometrical shapes.
3. Safety measures include wearing appropriate protective gear, following faculty instructions, and being aware of emergency equipment locations
4. Hourly wage \times hours spent + cost of materials
 $\text{Square inch} \times \text{shiking amount}$
 $(\text{Height} + \text{Width}) \times \text{multiplier}$
 Cost of materials + labor cost
5. This ensures a minimal ecological footprint and promotes a harmonious relationship with the environment.
6. Indigenous artisans often use materials like wood, clay, and natural fibers. Wood symbolizes connection to nature, clay allows for intricate details, and natural fibers represent sustainability and eco-friendliness.
7. The stages of clay are plastic, leather hard, bone dry, bisqueware, and glazeware
8. Some safety measures to take when working with clay include wearing gloves, using a dust mask, and keeping the workspace clean

9. The materials used in sculpting include clay, stone, metal, wood, and plaster
10. Materials required for making a paper mosaic landscape include different scraps of colored paper, magazines, tissue paper, or wrapping paper, a glue stick or craft glue, and a picture or pattern to use as a reference for the mosaic landscape
11. The tools used in sculpting include chisels, hammers, rasps, files, and drills
12. Artists should approach indigenous themes with cultural sensitivity, seeking permission and collaboration when incorporating specific elements. Respectful representation and acknowledgment of the cultural context are crucial.
13. Consider items like picture frames, lampshades, and storage boxes – these can be transformed with colorful yarn and paper accents.
14. Quilling – rolling and shaping strips of paper to create intricate designs like coils and spirals.
15. Assemblage sculpture involves bonding shapes or objects by gluing, soldering, pasting, or nailing, typically using found objects
16. Indigenous assemblage and construction sculpture often incorporate traditional or culturally significant materials, reflecting the artist's heritage and connection to their community.
17. To create a sculpture that engages with the environment and interacts with viewers, consider using elements such as light, color, and texture to create visual interest and encourage viewers to interact with the piece
18. Carving is a subtractive technique in which pieces of the material are removed, while casting is an additive technique in which the material is poured into a mold
19. The slab building technique involves rolling out clay to an even thickness, then folding, bending, manipulating, and joining it together to form a finished object
20. For example, in Western cultures, red is often associated with passion and love, while in some Eastern cultures, it can symbolize good luck and prosperity. Understanding these cultural associations can help artists communicate more effectively with a diverse audience
21. The basic elements and principles of 3D modeling in sculpture include point, line, shape, plane, form, mass, occupancy or unoccupancy space, texture, color, value or gradation, and opacity or transparency or layer
22. To create a sculpture that demonstrates balance and harmony, consider the principles of symmetrical, asymmetrical, and radial balance, and use elements such as line, shape, pattern, texture, and movement to create a visually pleasing and well-structured piece
23. A trademark logo is a visual representation of a business's values, message, and personality, setting it apart from the competition and making its brand recognizable
24. The components of a logo design include the logomark, typography, color, and imagery
25. Assemblage involves combining found objects, while construction entails creating a sculpture from raw materials. For instance, a totem pole is an example of construction, while a dreamcatcher represents assemblage.
26. High school learners can use yarn and paper ornamentation to create unique displays for school or community events, such as yarn-wrapped art installations, paper ball ornament exhibitions, and collaborative paper and yarn crafting projects. These activities can foster creativity and community engagement
27. Unlike 2D art, 3D modeling involves manipulating materials in space, allowing artists to explore depth, volume, and physicality.
28. Light and shadow define the sculpture's contours and give it depth. Artists strategically use these elements to highlight features, creating a dynamic interplay that enhances the visual impact.
29. High school learners can use yarn and paper ornamentation to create safety-themed decorations, such as flame-resistant paper ornaments and yarn-wrapped safety symbols. They can also use these materials to create inclusive decorations that promote diversity and awareness during the holiday season
30. A worm's-eye view is a view from the point of view of a worm looking up at the subject, making the object appear tall, strong, and mighty

HOMESCIENCE ANSWERS

1.1: A KITCHEN GARDEN

Test Yourself

1. A kitchen garden is an area or a garden where vegetables, fruits, legumes, roots and tubers are grown for domestic use or income generation.
2. Kales, pineapple, coriander, sweet potatoes
3.
 - a) Use of discarded tyres – Using old discarded tyres to form your garden.
 - b) Container gardening – this is growing crops in containers which have drainage holes at the bottom.
 - c) Simple drip garden – prepared using plastic containers and a wall or a pole. The containers are cut and fixed vertically on the wall or pole one above the other. A container with a hole at the bottom is then fixed at the top of the containers so that when it is filled with water, the water drips onto the plants.
 - d) Wick garden – established using jerrycans and improvised wick, for example a shoelace, measuring 30cm long and 2cm width. A jerry can is sliced in such a way that the lower half holds water in which the wick is dipped and the upper half holds the soil. The wick draws water up to the soil where the crop is growing.
 - e) Multi-storey gardens – are established using sacks and nets. Holes with diameters measuring about 3cm are cut on the sack then soil mixed with manure is placed in. Ballast or medium-sized stones are stacked at the centre of the sack to form a midrib through which watering will be done. The sack is then pulled up until it is full and upright.
4.
 - i) Identify the available space for establishing the garden behind the school kitchen.
 - ii) Choose the containers and planters to use; they should fit in the space.
 - iii) Choose the crops to grow; ensure to use certified seeds or seedlings.
 - iv) Choose a suitable type of soil for the crops.
 - v) Prepare the organic manure.
 - vi) Plant, water and weed the crops regularly.

- vii) Prepare and record a step-by-step preparation, planting and maintenance of the kitchen garden.
 - viii) Keep record of the garden such as weekly garden reports, garden notes and garden portfolio.
5.
 - i) Help you remember what worked and what did not.
 - ii) To know how many plants were planted and how many survived.
 - iii) To keep track of when the plants were planted and how they are progressing.
 - iv) To know when the plants are ready for care like weeding and top dressing.
 - v) So as to tell when the plants are ready for harvesting

1.2:

COOKING STARCHY CARBOHYDRATE FOODS

Test Yourself

1. Gelatinisation is the process through which solid starchy foods thicken and soften when added to liquid foods. Dextrinisation is the browning of starchy foods when subjected to dry heat.
2. Simple sugars (monosaccharides) are composed of one or two sugar units. Examples include glucose, fructose (found in fruits) and sucrose (table sugar). Double sugars (disaccharides) are composed of two sugar molecules chemically linked together. Examples include lactose (from milk and dairy products), sucrose (cane sugar) and maltose (malt sugar).
3. Answer will depend on the learner's choice starchy food.
4.
 - i) Taste – Heat enhances the natural sweetness of starches. When starches are heated, a richer and more pronounced taste is realized.
 - ii) Aroma – Cooking starchy foods releases aromatic compounds which are pleasant to smell.
 - iii) Texture – Starchy carbohydrates absorb water during boiling or heat when being toasted. This leads to a softer and easy to eat texture.
 - iv) Colour – depending on the starch at hand, dry heat (dextrinisation) influences the browning effect in some carbohydrates,

for example toast bread. This results in a golden or brown colour on the food.

- v) Consistency – Subjecting liquid starchy carbohydrates like porridge to moist heat can lead to gelatinization of starch molecules. This creates a smoother and thicker consistency.
- e) i) Only use enough water to cover – Steaming or boiling with minimal water helps retain water-soluble vitamins like Vitamin C or certain Vitamin B.
- ii) Cook at lower temperatures – This will help preserve heat-sensitive nutrients.
- iii) Aim at golden brown when using dry heat.
- iv) Blend starchy flour with cold water before cooking.
- v) Cook starchy carbohydrate foods thoroughly and continuously over low heat.
- f) i) Check for aflatoxins in cereals or grains before cooking.
- ii) Do not prepare nor cook root tubers when they have any green, damaged or sprouting bits.
- iii) Avoid wearing loose clothes as they can catch fire.
- iv) Handle knives and other sharp objects with care.
- v) Keep safe distance between sources of fire and yourself.
- vi) Wipe spilt liquids to avoid accidents.
- vii) Do not allow children in the cooking area.
- viii) Do not hold hot cooking utensils and equipment with bare hands.

1.3: MEAL PRESENTATION

Test Yourself

1. Table setting refers to the way one sets a table with tableware such as eating utensils and for serving and eating while meal presentation is the art of modifying, processing, arranging or decorating meals to enhance its beauty or appearance.
 2. i) Occasion – Whether it's a family meal, a formal dinner party or a special celebration should guide you on how to set the table.
 - ii) The number of guests – This will determine the quantity of the requirements and how the place will be organized for seating.
 - iii) Table cloth and napkins – Choose appropriate ones that complement the theme and occasion.
- iv) Glassware – Consider the type of drinks to be served and choose appropriate glasses for each.
 - v) Centerpiece – One can use flowers, candles or other decorative items; but it should not obstruct guests' view.
 - vi) Overall appeal – The table setting should be inviting and harmonious.
3. The requirements for a table setting include a table, table clothes, napkins, placemats, cutlery, water glass, centerpiece, dinner plates and side plates. Table clothes are used to cover the table while table mats are used by individuals to cover the area they are using when eating. Table napkins are for protecting clothing and wiping the mouth while eating.

1.4: MEALS FOR SPECIAL GROUPS

Test Yourself

1. i) Dietary restrictions or allergies, especially for the sick, expectant mothers or children.
 - ii) A mix of each of the nutritional requirements.
 - iii) Texture modifications especially for those with difficulty chewing or swallowing.
 - iv) Portion sizes should be adjusted based on age, activity level and dietary requirements.
 - v) Offer a variety of options to accommodate different tastes and preferences within the group.
2. a) Expectant and lactating mothers
Feeding habits – There is increased focus on nutrient rich foods. These include fruits, vegetables and sources of iron and folic acid.
Food taboos – Some cultures tend to have certain food taboos for expectant and lactating mothers. They vary from culture to culture.
 - b) Adolescents
Feeding habits – They should be fed on a variety in diet that contains more carbohydrates because they tend to be more active.
Food taboos – They may develop body image concerns that influence their food choices. They may also be influenced by dietary trends of foods that their peers prefer.
 - c) Infants and older children
Feeding habits – Since their bodies are developing they should be fed with body building foods to build and develop their muscles.
Food taboos – Avoidance of foods that could choke them is recommended.

- d) Older persons
Feeding habits – There is emphasis on highly nutritious foods to support overall health. There is adequate intake of calcium and proteins.
Food taboos – They may avoid certain foods due to dental issues, difficulty in chewing or digestive sensitivities.
 - e) Individuals with medical conditions
Feeding habits – There is emphasis on foods rich in specific nutrients which they may lack.
Food taboos – They avoid foods that may interfere with the management of their conditions.
 - f) Vegetarians
Feeding habits – There is emphasis on plant-based foods like fruits, vegetables, legumes, nuts and whole grains.
Food taboos – They tend to avoid foods that are not plant-based.
3.
 - i) Helps in decide in advance what a family will be eating
 - ii) Helps procure ingredients and cook a nutritious and healthy meal.
 - iii) It helps ensure that you're eating a variety of foods
 - iv) It ensures that the needs of all the people are met.
 - v) A healthy meal plan ensures you are eating the right foods in the right portions.
 4. Adolescence is a time for rapid growth and girls in this stage need additional iron to replace what they lose monthly when menstruating and during pregnancy, the volume of blood in the mother's body increases and so does the amount of iron they need. The body uses iron to make more blood to supply oxygen to the growing fetus and placenta.

1.5:

MEALS FOR SPECIAL OCCASIONS

1. Some occasions are considered special because they hold a particular significance. They are often characterized by celebrations, ceremonies or noteworthy occurrence.
2. Cakes, hamburger, chapatti, soda, pizza
They are considered special because they are unique and high-value food items made in small quantities from high-quality ingredients. Consumers pay higher prices for special foods and may perceive them as having various benefits.
3.
 - i) The number of people to attend the occasion.

- ii) The preferences and dietary restrictions of the guests.
- iii) The particular occasion, whether a formal dinner or a casual gathering.
- iv) The budget that is available.
- v) Cultural sensitivity of the attendees.

4. Successes

- i) Meeting and satisfying the needs of all the guests.
- ii) Preparing enough food for all the guests.
- iii) Contributing to an overall more nutritionally balanced diet
- iv) Everything is ready on time – no last minute rush
- v) When you save money and time

Mistakes

- i) Not preparing the correct amount of food.
 - ii) Using too many ingredients
 - iii) Cooking too many meals that you can actually store
 - iv) Not considering the nutritional needs of the guests
 - v) Underestimating the event size
5. Religious factors can have a major influence on what foods we buy and cook. For example, Muslims will not eat meat such as beef and lamb that has not been slaughtered by the halal method.

End of Strand Assessment

1.
 - i) Help you remember what worked and what did not
 - ii) To know how many plants were planted and how many survived.
 - iii) To keep track of when the plants were planted and how they are progressing.
 - iv) To know when the plants are ready for care like weeding and top dressing.
 - v) So as to tell when the plants are ready for harvesting.
2.
 - a) Container gardening
 - b) Multi-storey gardens
3.
 - i) It provides people with fresh farm produce.
 - ii) It ensures year-round production of food and a wide range of other products such as spices and medicines.
 - iii) It provides food for the family at low cost.
 - iv) It prevents environmental deterioration commonly associated with non-cultural production systems.
 - v) It provides a wider ecological service such as landscape protection and health water cycle and quality fresh air.
 - vi) It adds dietary variety to a family.

- vii) It improves record keeping skills.
4. i. Container gardening – this is growing crops in containers which have drainage holes at the bottom.
 - ii. Use of discarded tyres – this involves the use of old discarded tyres to form a garden,
 - iii. Simple drip garden – prepared using plastic containers and a wall or a pole. The containers are cut and fixed vertically on the wall or pole one above the other. A container with a hole at the bottom is then fixed at the top of the containers so that when it is filled with water, the water drips onto the plants.
 - iv. Wick garden – established using jerrycans and improvised wick, for example a shoelace, measuring 30cm long and 2cm width. A jerrycan is sliced in such a way that the lower half holds water in which the wick is dipped and the upper half holds the soil. The wick draws water up to the soil where the crop is growing.
 - v. Multi-storey gardens – are established using sacks and nets. Holes with diameters measuring about 3cm are cut on the sack then soil mixed with manure is placed in. Ballast or medium-sized stones are stacked at the centre of the sack to form a midrib through which watering will be done. The sack is then pulled up until it is full and upright.
5. Gelatinisation is the process through which solid starchy foods thicken and soften when added to a liquid while dextrinisation is the browning of starchy foods when subjected to dry heat.
6. Simple sugars (monosaccharides) are composed of one or two sugar units. Examples include glucose, fructose (found in fruits) and sucrose (table sugar) while double sugars (disaccharides) are composed of two sugar molecules chemically linked together. Examples include lactose (from milk and dairy products), sucrose (cane sugar) and maltose (malt sugar).
7. i) Check for aflatoxins in cereals or grains before cooking.
 - ii) Do not prepare nor cook root tubers when they have any green, damaged or sprouting bits.
 - iii) Avoid wearing loose clothes as they can catch fire.
 - iv) Handle knives and other sharp objects with care.
 - v) Keep safe distance between sources of fire and yourself.
 - vi) Wipe spilt liquids to avoid accidents.
 - vii) Do not allow children in the cooking area.
 - viii) Do not hold hot cooking utensils and equipment with bare hands.
8. i) Occasion – Whether it is a family meal, a formal dinner party or a special celebration should guide you on how to set the table.
 - ii) The number of guests – This will determine the quantity of the requirements and how the place will be organized for seating.
 - iii) Table cloth and napkins – Choose appropriate ones that complement the theme and occasion.
 - iv) Glassware – Consider the type of drinks to be served and choose appropriate glasses for each.
 - v) Centerpiece – One can use flowers, candles or other decorative items; but it should not obstruct guests' view.
 - vi) Overall appeal – The table setting should be inviting and harmonious
9. Age is a factor to consider when planning meals for different people because people at different development stages have different body needs and feeding habits. For example, infants and older children should be fed with body building foods to build and develop their muscles since their bodies are developing, Adolescents should be fed with a variety in diet that contains more carbohydrates because they tend to be more active while older persons need highly nutritious foods to support overall health; there is adequate intake of calcium and proteins.
10. Adolescence is a time for rapid growth and girls in this stage need additional iron to replace what they lose monthly when menstruating and during pregnancy, the volume of blood in the mother's body increases and so does the amount of iron they need. The body uses iron to make more blood to supply oxygen to the growing fetus and placenta.
11. i) The number of people to attend the occasion.
 - ii) The preferences and dietary restrictions of the guests.
 - iii) The particular occasion, whether a formal dinner or a casual gathering.
 - iv) The budget that is available.
 - v) Cultural sensitivity of the attendees.

2.1: CONSUMER AWARENESS

Test Yourself

1.
 - a) Informed decision making – This involves understanding the choices available in the market and avoiding any deceptive practices by businesses.
 - b) Protection of consumer rights – By knowing their rights and challenging unfair consumer practices, consumers remain empowered in the market place.
 - c) Financial literacy – Through consumer awareness, consumers are better equipped to understand issues related to budgeting, spending, hidden fees, interest rates and long-term financial implications.
 - d) Product safety and quality – Being aware of potential risks and safety standards helps consumers to make choices that prioritise their health and well-being. It also enables them to assess the quality and reliability of products. This reduces the likelihood of purchasing substandard or unsafe goods.
2.
 - a) Complex buying behavior – These are consumers who conduct extensive research, gather information and evaluate alternatives before purchasing a product.
 - b) Dissonance-reducing buying behavior – These are consumers who can make expensive or risky purchases then feel uncomfortable afterwards.
 - c) Habitual buying behavior – These are consumers who make purchases minimal research on the product or service.
 - d) Variety seeking buying behavior – These are consumers who compare the prices and quality of goods and services before they make a purchase.
3.
 - a) Identification of needs and wants – Consumers tend to purchase needs rather than wants. This is because needs are essential, while wants can be satisfied.
 - b) Budgeting and financial challenges – Household budgets and income levels play a significant role in determining the extent to which needs and wants can be satisfied.
 - c) Brand loyalty and trust - Familiarity with certain brands may lead to trust and preference in meeting both needs and wants. Positive or negative experiences with a brand can influence future buying decisions within a household.
4.
 - a) Technological impact – Online shopping and information accessibility about certain brands may influence consumer decisions during purchases.
 - a) Loyal consumers – These are consumers who choose to always make purchases from a specific brand, company or business. They often develop a sense of trust, satisfaction and connection with the brand.
 - b) Impulse shoppers – They are individuals who make unplanned and spontaneous purchasing decisions. Businesses can get their attention by concentrating on eye-catching displays, strategic product placement, limited-time offers, among other strategies.
 - c) Wandering consumers – These are individuals who engage in leisurely and exploratory shopping without a specific intention. Unlike other shoppers, they enjoy the shopping experience itself, by just moving from one store to another exploring various products without any agenda.
 - d) Need based consumers – These are individuals who make purchasing decisions primarily driven by their specific and immediate needs.
 - e) Discount customers – These are individuals who prioritise obtaining products at discounted prices. They are always on the lookout for promotions, sales and discounts to maximize the value of their purchases.
5.
 - i) To enable them be open to alternatives.
 - ii) So as to avoid impulse purchases.
 - iii) So as to get the best deal on the items that they purchase and have peace with their decisions.
 - iv) They get to understand their budget and know what they can or cannot afford.
 - v) Knowledgeable choices about what goods and services to buy improves their physical well-being.

Test Yourself

1. Market competition is the rivalry between companies that sell similar products or services with the goal of making more profit and gaining a larger market share while a competitor is person or company that try to sell similar goods or services to the same people.
2.
 - a) Encourages innovation by fostering an environment where businesses have no choice but to innovate for them to differentiate themselves from the rest.
 - b) It also leads to diverse product offerings.
This provides consumers with variety in terms of quality, features and pricing.
 - c) Competition also influences business to improve the quality of their products in order to attract and retain customers.
 - d) Competition in the marketplace empowers consumers by providing them with choices. It gives them the freedom to compare products prices and features.
 - e) Competitive markets generally lead to affordable prices for the consumers.
 - f) Businesses in a competitive market are more responsive to the ever changing consumer demands.
 - g) It acts to prevent monopoly and encourages entry of new businesses.
3.
 - i) It will lead to monopoly.
 - ii) Customers will lack variety in the market and traders will exploit consumers.
 - iii) Businesses will no strive to improve the quality of their products to attract customers as there will be no competitors.
 - iv) Consumers will not be empowered as they will lack choices since they will lack the freedom to compare products, prices and features.
 - v) Lack of market competition will lead to unfair prices. Sellers will exploit consumers.
4.
 - a) Barriers to entry into the marketplace – The ease or difficulty for businesses to enter a market significantly influences competition. For example, when startup costs are high or when regulations are unfavourable, businesses will shy away.
 - b) The structure of the market, including the number and size of firms, can influence the level of competition in that particular industry.
- c) Consumer preferences, which are ever changing, impact the demand for products or services. Businesses are often forced to align with these preferences, leading to shifts in competition, as some products become more popular while others decline.
 - d) Advancement in technology can also influence competition in the market. Businesses that adopt technology often gain a competitive advantage in the market.
 - e) Government regulations can either promote or hinder competitions. Excessive and restrictive regulations discourage competition while those that create a level playing field encourage it.
 - f) Market demand – Fluctuations in demand of goods and services can also influence competition in the market. High demand attracts more businesses while low demands lead to more competition among existing companies.
5. Practices that show fair competition
 - i) Ethical conduct
 - ii) Transparency
 - iii) Diverse participants
 - iv) Innovation and quality
 - v) Legal compliance
 Practices that show unfair competition
 - i) Deceptive practices
 - ii) Monopolistic behavior
 - iii) Anti-competitive agreements
 - iv) Predatory pricing
 - v) Legal violations
6. Benefits of fair competition
 - i) Affordable prices
 - ii) Quality products
 Benefits of unfair competition
 - i) Monopolistic controls
 - ii) Consumer exploitation

End of Strand Assessment

1. Consumer awareness refers to the level of understanding and knowledge that individuals possess about their rights, responsibilities and the information necessary to make informed choices when making purchases.
2.
 - a) Definition of consumer awareness
 - b) Importance of consumer awareness
 - c) Differences between needs and wants
 - d) Types of consumer behavior
 - e) Factors that influence consumer behavior
 - f) Different types of consumers
3. a) Loyal consumers – These are consumers

- who choose to always make purchases from a specific brand, company or business. They often develop a sense of trust, satisfaction and connection with the brand.
- b) Impulse shoppers – They are individuals who make unplanned and spontaneous purchasing decisions. Businesses can get their attention by concentrating on eye-catching displays, strategic product placement, limited-time offers, among other strategies.
 - c) Wandering consumers – These are individuals who engage in leisurely and exploratory shopping without a specific intention. Unlike other shoppers, they enjoy the shopping experience itself, by just moving from one store to another exploring various products without any agenda.
 - d) Need based consumers – These are individuals who make purchasing decisions primarily driven by their specific and immediate needs.
 - e) Discount customers – These are individuals who prioritise obtaining products at discounted prices. They are always on the lookout for promotions, sales and discounts to maximize the value of their purchases.
4. High market competition contributes to low price commodities because it builds or creates rivalry between companies that sell similar products thus leading to diverse product offering. This provides consumers with variety and therefore companies lower or sell their products at a fair price to attract consumers and be able to sell their products.
 5. a) Barriers to entry into the marketplace – The ease or difficulty for businesses to enter a market significantly influences competition. For example, when startup costs are high or when regulations are unfavourable, businesses will shy away.
 - b) The structure of the market, including the number and size of firms, can influence the level of competition in that particular industry.
 - c) Consumer preferences, which are ever changing, impact the demand for products or services. Businesses are often forced to align with these preferences, leading to shifts in competition, as some products become more popular while others decline.
 - d) Advancement in technology can also influence competition in the market.
- Businesses that adopt technology often gain a competitive advantage in the market.
- e) Government regulations can either promote or hinder competitions. Excessive and restrictive regulations discourage competition while those that create a level playing field encourage it.
 - f) Market demand – Fluctuations in demand of goods and services can also influence competition in the market. High demand attracts more businesses while low demands lead to more competition among existing companies.
6. Fair market competition refers to a situation in which businesses compare on a level playing field, adhering to ethical practices, legal standards and transparent conduct while unfair market competition refers to a situation where businesses engage in practices that undermine what is considered to be fair play. This can include deceptive advertising, price manipulation and monopolistic practices.
 7.
 - i) Deceptive practices
 - ii) Monopolistic behavior
 - iii) Anti-competitive agreements
 - iv) Predatory pricing
 - v) Legal violations
 8.
 - i) Affordable prices
 - ii) Quality products
 - iii) Good sales
 - iv) Good relationships between buyers and sellers
 - v) Consumers are able to get goods on time.

3.0

TEXTILE AND CLOTHING

3.1: ARTIFICIAL TEXTILE FIBRE

Activity 1

1. Textile fibers are small hair like materials that are spun into yarn and then woven or knitted into fabric.
2. Cotton, wool, silk, linen, hemp
3. Natural fibers are sourced from plants, animals or minerals and have inherent properties specific to their origin, while artificial fibers are man-made from synthetic polymers and can be engineered to exhibit desired properties.
4. Rugs-natural fibers like wool
Clothing's-natural/artificial fibers
5. They are derived from petrochemical and natural fibers(e.g rayon)

Activity 2

1. Synthetic fibers
Nylon, acrylic
2. Regenerated fibers
 - a.Viscose rayon
 - b.Acetate rayon

Activity 3

Properties of synthetic fibers (nylon, polyester and acrylic)	Properties of regenerated fibers(viscose rayon and acetate rayon)
They are durable	Soft feel
Low maintenance and easy to care for	Allow air circulation
Produce wide range of colors	Used for various application

Activity 4

1. a. Jacket b. Sport shoes c. Bed sheets
d. Socks e. Dresses f. Ribbon
2. a. Polyester
 - used in fashion world for apparel, footwear and accessories.
 - used to make stylish swimwear and active wear like shirts, blouses, dresses, jackets and coats.
 - used to make home furnishings for beds like sheets, mattresses, pillows, cushions, carpets and blankets.

- used to make plastic packaging like containers, bottles, films as well as fitters.
 - used in making ropes, fabrics, belts and cushions.
- b. Nylons
 - woven into fabrics to make fleece, circular knits, coats, sweaters, sportswear, swimwear, shoes, underwear and accessories.
 - used to make umbrellas, household textiles, rugs and carpets
 - c. Acrylic used
 - to make fleece, circular knits, coats, sweaters, sportswear, boots, hats and socks.
 - used to make household textiles, outdoor furniture and industrial materials
 - d. Viscose rayon and acetate rayon
 - in fashion industry, cellulose fibers make knitwear, sportswear, hats, suits blouses dresses
Shirts, coats, sweaters and undergarments.
 - can be used to make furniture, upholstery, carpets, bathrobes, towels, drapes, bed sheets, curtains and home décor.
 - used to make bedding, household textiles and upholstered furniture

Activity 5

1. Burning test
2. Feeling test
3. Microscopic identification
4. Chemical test

Activity 6

Feel test
Burning test

Activity 7

Acrylic fibers- cool to touch, warm and have a smooth surface
Polyester –not cool, warmer, and have a smooth surface
Nylon –cooler, not warm, and smooth
Rayon – cool, not warmer and smooth

Activity 8

1. A microscopic test is a technical test that involves identifying the fabrics with the help of a microscope.

- When identifying the fabrics using a microscope, emphasis is laid on the longitudinal view and the cross section view.

Activity 9

- Stain test, also called double barrel fiber identification (DBFI), is based on the theory that each fiber has its own distinct two-color reaction when treated with stain. A fiber will turn to a particular color in the presence of dilute acetic acid and to some other specific color when the stain is treated in the presence of a mild alkali.
- Solvent test involves treating the fibers in certain solvents for the purpose of identification.
- For nylon, when the fiber is immersed in a boiling solution of sodium, it does not dissolve (insoluble).
- Polyester is soluble in hot metal cresol and not soluble in both acetone and concentrated formic acid.
- Acrylic dissolves in 72 percent solution of ammonium thiocyanate at 130 degrees Celsius.

Test Yourself

- Artificial textile fibers, also known as synthetic fibers, are textile materials that are produced through chemical processes using various raw materials. Synthetic fibers include polyester, nylon and acrylic. Regenerated fibers include viscose rayon and acetate rayon.
- Visual inspection; structure, weight, texture, color, transparency, stretch, and feel
Burning test; odor, appearance, ash residue
- Nylon is made from polyamide, created as a liquid and then mechanically spun and dried into individual fibers while polyesters are spun into thread from a chemical solution
Nylons have low moisture absorbency while polyesters are quick dry
Nylons are exceptionally strong and abrasion resistance while polyesters are strong resistance to stretch and shrinking
Nylons melt and burn rapidly while polyesters melt and burn at the same time
- Highly durable and can withstand wear and tear
Repel water
Stronger than natural fibers
Can stretch out without losing their shape
Do not wrinkle

- Polyester

- used in fashion world for apparel, footwear and accessories.
 - used to make stylish swimwear and active wear like shirts, blouses, dresses, jackets and coats.
 - used to make home furnishings for beds like sheets, mattresses, pillows, cushions, carpets and blankets.
 - used to make plastic packaging like containers, bottles, films as well as fitters.
 - used in making ropes, fabrics, belts and cushions.
- Nylons
 - woven into fabrics to make fleece, circular knits, coats, sweaters, sportswear, swimwear, shoes, underwear and accessories.
 - used to make umbrellas, household textiles, rugs and carpets
- Acrylic used
 - to make fleece, circular knits, coats, sweaters, sportswear, boots, hats and socks.
 - used to make household textiles, outdoor furniture and industrial materials
- Viscose rayon and acetate rayon
 - in fashion industry, cellulose fibers make knitwear, sportswear, hats, suits, blouses, dresses, shirts, coats, sweaters and undergarments.
 - can be used to make furniture, upholstery, carpets, bathrobes, towels, drapes, bed sheets, curtains and home décor.
 - used to make bedding, household textiles and upholstered furniture

3.2: SEAMS

Activity 1

- Open seam: created by sewing fabric pieces with wrong sides together using a standard seam allowance
 - Plain seam: involves joining two fabric pieces with right side together and stitching along the seam allowance.
 - Overlaid seam: one fabric edge is folded over the other creating an overlapping effect
 - French seam: double stitched and fully enclosed
 - Machine-fell seam: variation of flat felled seam

3.
 - a) Has perfect fabric joints.
 - b) No missed or uneven stitches.
 - c) Fabrics are not damaged during sewing.
 - d) Has the correct strength, elasticity, durability, security and comfort.
 - e) Smooth and even appearance on the inside and outside.
 - f) Neatly stitched to enhance appearance.
4.
 - a. plain seam
 - b. open seam
 - c. French seam
5. Seams give the garments structure and shape.

3.3:

METHODS OF CONTROLLING FULLNESS

Activity 1

1. Provision of extra allowance in the garment.
2.
 - a) Lack of style
 - b) Uncomfortable
3.
 - a) To give good fit.
 - b) To give the garment a desirable shape.
 - c) To provide the desired style features.
 - d) To allow ease of movement.
4. **CONTROLLING FULLNESS**
Darts are used to shape fabric and provide fullness to body curves.
Eased fullness creates soft folds and maintain smoother silhouette.
UNGATHERED FULLNESS
Gathering creates more fullness, creates a voluminous effect
Pleats create an elegant look
5. Proper fit and shape
Ease of movement and comfort
Aesthetic appeal

Activity 2

1.

a. pleats	b. darts
c. gathers	d. easing
2.
 - a) Budget
 - b) Fabric type
 - c) The style of the garment
 - d) The position where the fullness is to be controlled
 - e) The purpose of the garment
 - f) The desired appearance

Activity 3

1.
 - a) Darts (single and double darts): fabric folds used to shape a garment and fit to the body contours.
 - b) Pleats (inverted and box pleats): parallel folds lifted from the fabric surface and

secured with stitches.

- c) Tucks (plain and decorative tucks): stitched folds of fabrics for decorative purposes and to add shape and structure to the garment.
 - d) Gathers: pull excess fabric together, creating soft folds and add volume and movement.
 - e) Easing: draws small amounts of fullness into shorter piece of fabric.
2. Darts
 - a) Identify the location where you want to add a dart.
 - b) Mark dart legs on the fabric. These are sides of a triangle that meet at the apex.
 - c) Stitch along the dart legs, tapering towards the apex.
 - d) Press the stitched darts to one side for a neat finish.

Pleats

- a) Cut your fabric pattern.
- b) Mark the bottom of the pleat on the wrong side of the fabric.
- c) Create small snips at the top of the pleat.
- d) Connect the top and bottom marking with straight line using a ruler.
- e) Fold the fabric along the marked line to form the pleat, securing it with stitches.

Tucks

- a) Decide where you want to add tucks.
- b) Stitch the darts legs partially leaving an open point before reaching the apex.
- c) The tapered seam of the dart tuck differentiate it from a pleat.
- d) Press the tuck for billowing effect while maintaining contour.

Gathers

- a) Determine the area where you want to create gathers.
- b) Stitch two parallel rows of long basting stitches within the seam allowance.
- c) Gently pull the bobbin threads to gather the fabric.
- d) Distribute the gathers evenly and secure them in place by stitching over the basting stitches.

Easing

- a) Identify the area you need to ease fullness.
 - b) Stitch the fabric allowing slight gathers or folds.
 - c) Maintain a smoother silhouette while ensuring comfort and movement.
 - d) Press the eased area for a polished finish.
3.
 - a) Taper darts smoothly to avoid puckers.
 - b) Double stitch pleats for a neat finish in sheer fabrics.

c) Stitch tucks on the outside of the garment.

Test Yourself

1. Fullness in clothing construction means provision of extra allowance in the garment.
2. - To give good fit.
- To give the garment a desirable shape.
- To provide the desired style features.
- To allow ease of movement.
3. a) Budget
b) Fabric type
c) The style of the garment
d) The position where the fullness is to be controlled
e) The purpose of the garment
f) The desired appearance
4. Darts are folded and stitched areas that shape fabric to fit the body
Pleats are unstitched, folded areas that control fullness
Tucks are narrow folds in a fabric used to shape the garment
Gathers involve drawing fabric together to create fullness
5. Properly fit and comfort
Enhance overall appearance of the garment
Freedom of movement without constriction
Improve airflow and comfort
Add volume and maintaining modest

End of Strand Assessment

1. Natural fibers are sourced from plants, animals, or minerals and have inherent properties specific to their origin, while artificial fibers are man-made from synthetic polymers and can be engineered to exhibit desired properties.
2. NYLON
Strong, elastic and light weight, lustrous appearance
ACRYLIC
Very durable, cheaper, melt when exposed to heat,
POLYESTERS
Easy to wash and remain crisp and wrinkle free
RAYON
Most absorbent, loose strength when wet
3. Burning test
Feeling test
Microscopic identification
Chemical test
4. Wear splash goggles and gloves, keep a fire extinguisher nearby, clear the area and ensure

- no flammable material nearby
5. Approaching, stationary and withdrawing to flame, odor, reduce
 6. Acetone test: acetate fibers dissolve in acetone while nylon does not
 7. a. overlaid seam
b. French seam
c. open seam
 8. fullness ensures that garment fits well and is not too light
Well distributed fullness allows freedom of movement enhance current style of the garment
 9. type of garment, position of seam, shape of seam, desired seam properties
 10. Seam should be tidy and free from loose threads
Stitches should securely hold the fabric together without risk of unraveling
Seam should have consistent stitching
The width of the seam allowance should be appropriate for the fabric and intended use of the garment
 11. Gather materials
Prepare your pattern
Mark dart placement
Pin or baste
Sew the dart
Press the dart
Finish the seam
Check fit
 12. a. Darts b. easing c. gathers

4.1: CHILDCARE

Activity 1

1. Conception refers to the moment when a sperm cell from a male fertilizes an egg cell from a female, leading to the formation of a zygote
2. After conception, the zygote rapidly divides into a ball of cells and becomes an embryo. The tiny structure then implants itself into the uterus lining. Over a period of several weeks, the embryo transforms into a fetus. The organs and body structure develop as the fetus grows in size. The developing fetus is influenced by genetic factors, maternal health and environmental conditions during pregnancy. Around the 40th week, labor begins. Contractions lead to the birth of the baby. The baby adapts to the new environment and begins to grow and develop
3. POSITIVE
 - Missed periods,
 - Nausea and vomiting, often called morning sickness,
 - Breasts become tender and sensitive
 - Fatigue,
 - Frequent urination,
 - Food cravings.
 NEGATIVE
 - Vaginal bleeding,
 - Convulsion or fits,
 - Severe headache with blurred vision,
 - Fever and weakness,
 - Severe abdominal pains,
 - Fast or difficult breathing
4. Eat a balanced and nutritious diet
 Drink plenty of water
 Attend prenatal check ups
 Steering clear alcohol
 Managing stress through relaxation
 Getting sufficient sleep and rest
 Engaging a light exercise
5. DURING PREGNANCY
 - Being understanding and empathetic towards the mother.
 - Accompanying mother for prenatal appointments.

- Learning about pregnancy, childbirth and newborn care.
- Taking extra responsibility at home like cooking.

DURING CHILD BIRTH

- Remain calm and supportive during labor and delivery.

- Providing physical support.

AFTER CHILD BIRTH

- Assisting with new born care.
- Spending quality time with newborn.
- Engaging actively in parenting.

Activity 2

1. a. Eat healthy foods
 b. Get support
 c. Have enough rest
 d. Exercise regularly
 e. Wear comfortable clothing
 f. Do regular check ups
2. Need understanding and empathy from their partner
 Included in pregnancy journey
 Share their thoughts and concerns
 Prioritise self-care like resting

Activity 3

- a. Nursery setup, baby supplies,
- b. Physical preparation like setting up a nursery
 Emotional readiness
 Bonding and connection
 Health and well being
 Logistic arrangements
- c. Clothes, diapers, baby formula, bottles, breastfeeding supplies, car seat transportation.
- d. They should discuss their expectations and fears. They can also talk about the joys and challenges that accompany parenthood

Activity 4

2. a) Avoiding certain foods
 b) Naming – Some cultures wait until the baby is born to officially name the child, believing that naming before birth might bring bad luck.
 c) Rituals and ceremonies – Some cultures have rituals or ceremonies associated with pregnancy. Some of them are meant to

bless the pregnancy while others to protect the unborn from negative influences.

- d) Avoiding certain activities like attending funerals or going near cemeteries.
- e) Restrictions on travel – Some traditional beliefs discourage pregnant women from travelling as a way of ensuring her safety.



Activity 5

1. Baby clothes
2. a) Climate and season – It is important to select clothing appropriate for the weather and climate.
- b) Size and growth – It is important to include a range of sizes in the layette since babies grow fairly quickly.
- c) Ease of dressing
- d) Functionality – Consider clothes that are easy to clean and durable.



Activity 6

CLEANING AND LAUNDRY PROCEDURES

- Separate baby clothes based on fabric type.
- Check for stain and pre-treat them.
- Use a mild baby friendly detergent.
- Wash baby clothes separately from the adults' ones.
- Air dry.
- Wash new items before use.

STORAGE

- Arrange the baby clothes by size in closets for easy access.
- Avoid storing in plastic bags for extended periods as it can attract moisture.
- Regularly clean the storage area.

Test Yourself

1. After conception, the zygote rapidly divides into a ball of cells and becomes an embryo. The tiny structure then implants itself into the uterus lining. Over a period of several weeks, the embryo transforms into a fetus. The organs and body structure develops as the fetus grows in size. The developing fetus is influenced by genetic factors, maternal health and environmental conditions during pregnancy. Around the 40th week, labor begins. Contractions lead to the birth of the baby. The baby adapts to the new environment and begins to grow and develop
2. a) Rich and balanced diet – An expectant mother should be fed on a variety in diet enriched with vitamins and minerals.
- b) Dressing – She should be in free and comfortable clothing.
- c) Physical exercise – This is important as it improves the health and the mood of the mother. The expectant mother should consult with a medical practitioner on the safe exercises during pregnancy.
- d) Family and societal support
- e) Rest – Rest improves the health of the mother and that of the unborn baby.
- f) Personal hygiene – Observing good hygiene is important as it prevents the mother from contracting common illnesses that may put her health and that of the baby at risk
3. a) Nursery setup – The parents need to prepare a safe and comfortable space for the baby. This can include a crib, a changing table and essential baby supplies.
- b) Baby supplies – The parents should acquire clothes, diapers, baby formula, bottles, breastfeeding supplies, car seat transportation and so on.
- c) Financial planning – The expectant parents should budget for upcoming expenses, including medical costs and baby supplies.
- d) Emotional preparation – They should discuss their expectations and fears. They can also talk about the joys and challenges that accompany parenthood.
4. a) Avoiding certain foods
- b) Naming – Some cultures wait until the baby is born to officially name the child, believing that naming before birth might bring bad luck.
- c) Rituals and ceremonies – Some cultures have rituals or ceremonies associated with pregnancy. Some of them are meant to bless the pregnancy while others to protect the unborn from negative influences.
- d) Avoiding certain activities like attending funerals or going near cemeteries.
- e) Restrictions on travel – Some traditional beliefs discourage pregnant women from travelling as a way of ensuring her safety.
5. DURING PREGNANCY
 - Being understanding and empathetic towards the mother.
 - Accompanying mother for prenatal appointments.
 - Learning about pregnancy, childbirth and newborn care.
 - Taking extra responsibility at home like cooking.

DURING CHILD BIRTH

- Remain calm and supportive during labor and delivery.
- Providing physical support.

AFTER CHILD BIRTH

- Assisting with new born care.
- Spending quality time with newborn.
- Engaging actively in parenting.

4.2: PROVIDING FAMILY SHELTER

Activity 1

1. A family shelter refers to the place where the family lives. A family may choose to buy, build or rent a family shelter.
2.
 - a) Cost – The family should consider the resources available to them. They can decide whether to build, rent or buy the shelter.
 - b) Family composition – The number of people available should determine the size of the house to build, buy or rent.
 - c) Family interests – The interests of the family should be put into consideration. The family should consider the amenities that will help them enjoy their hobbies and entertainment interests.
 - d) Social amenities – The availability of schools and hospitals within the neighborhood should be a factor when choosing different methods of providing family shelter.
 - e) Neighborhood security – The security of the area should be a consideration when deciding whether to buy, build or rent.

Activity 2

1. Inadequate maintenance and repair, overcrowding, lack of basic amenities, poor ventilation and indoor air quality, unsafe structures.
- 2.

Method of providing a family shelter	Advantages	Disadvantages
Buying	The house is available immediately. No need to Wait.	May not be able to meet the buyer's requirements.

	It can be aid for installments.	If paid in installments, the house does not become the owner's until after completion of the payment.
	The price can be less than the cost of constructing a new one.	Materials used to build might be of low quality thus needing repairs regularly.
Renting	One is able to rent a house that fits their family income.	One has no security of ownership.
	One is free from paying insurance premium on the house.	The house may not be repaired on time and if done, may not be to the tenant's taste.
	One is not involved in keeping the house in good state or repair.	Rent may be increased anytime and may be more than the tenant can afford.
	One can leave the house anytime on giving required notice.	One may be evicted from the house on the event they fail to pay rent in time.
Building	House is built to one's taste and specifications.	Costs sometimes end up going beyond estimates because of inflation, bad weather and changes in labour cost.
	Owner develops a feeling of permanence and suitability.	Lack of building materials may delay construction and increase final cost.
	Alteration and renovation can be done at will.	One is forced to live where the house is located even when one is not interested in the future.

Activity 3

1. a. Hut b. manyatta
c. bungalow d. apartments
2. a and b are traditional houses while c and d are modern houses.

3. Wood houses, flats, mansionettes
4. Wood houses are traditional houses while flats and mansionettes are modern houses
5. Wooden poles, mud, roofing materials like grass, reeds or palm leaves.

Activity 4

Types of houses	Advantages	Disadvantages
Traditional houses	The materials are cheap	Not durable
	Integrate with nature	Lack modern amenities
	Unique and visually appealing	Costly when renovated
	Architectural styles and cultural heritage	Older houses pose risks
Modern houses	They are durable.	Expensive to build.
	Incorporate energy efficient features	Open floor and large windows compromise security
	Low maintained	Construction materials have a larger environmental footprint
	Advanced security features	Heavily reliant on technology

Activity 5

1. Practical work
2. Ensure foundation is strong and suitable to withstand movements.
Use a non-slip material.
Design adequate ventilation.
Ensure accessibility.

Test Yourself

1. A family shelter refers to the place where the family lives. A family may choose to buy, build or rent a family shelter.
2. a) Cost – The family should consider the resources available to them. They can decide whether to build, rent or buy the shelter.
b) Family composition – The number of people available should determine the size of the house to build, buy or rent.

- c) Family interests – The interests of the family should be put into consideration. The family should consider the amenities that will help them enjoy their hobbies and entertainment interests.
- d) Social amenities – The availability of schools and hospitals within the neighborhood should be a factor when choosing different methods of providing family shelter.
- e) Neighborhood security – The security of the area should be a consideration when deciding whether to buy, build or rent.

3.

Types of houses	Advantages	Disadvantages
Traditional houses	The materials are cheap.	Not durable.
	Integrate with nature.	Lack modern amenities.
	Unique and visually appealing.	Costly when renovated.
	Architectural styles and cultural heritage.	Older houses pose risks.
Modern houses	They are durable.	Expensive to build.
	Incorporate energy efficient features.	Open floor and large windows compromise security.
	Low maintained.	Construction materials have a larger environmental footprint.
	Advanced security features.	Heavily reliant on technology.

4. Inadequate maintenance and repair, overcrowding, lack of basic amenities, poor ventilation and indoor air quality, unsafe structures.
5. • Traditional houses like huts, manyattas or wood houses.
• Modern houses such as bungalows, flats, mansionettes or apartments.

6.

TYPE	ADVANTAGES	DISADVANTAGES
Huts and manyattas	Low cost	Limited durability
	Natural insulation	Limited amenities
	Cultural significance	Vulnerable to weather
Wood houses	Aesthetic appeal	Fire risk
	Natural insulation	Require regular maintenance
	Used in various styles	Can be expensive
Flats	Affordable	Limited privacy
	Shared amenities	Additional monthly fee
	Low maintenance	Space constraints
Mansionettes	Offer more privacy	More expensive
	Larger in space	Limited community features
	Shared amenities	Homeowner responsible for maintenance

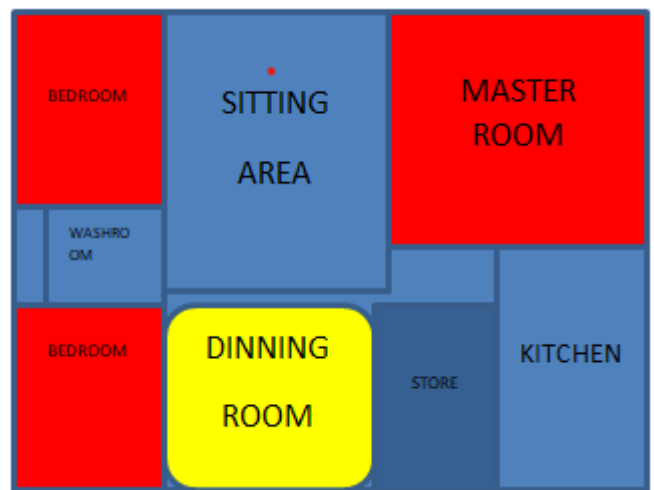
4.3:

ROOM OR AREA INTERRELATIONSHIP

Activity 1

- Living room, dining room, kitchen, bedroom, sanitation area, storage area.
- The sitting or living room – Used for relaxation, entertaining guests and watching television. It has seats, tables and other furniture.
 - The dining room – It is used during meal times. It has furniture for seating during eating and others for storing dining materials.
 - The kitchen – Is used for preparing meals.
 - The bedroom – Is used for relaxation and sleeping after the day's work. The main furniture in the room is the bed. Other furniture, like wardrobes or dressing tables, can also be found in the bedroom.
 - The sanitation area – Used to attend to nature calls and for bathing.
 - The storage area – Is used for storage of different essentials.
- Living room
 - Toilet
 - Kitchen
 - Dining room
 - Bedroom
 - Bathroom

4.



- Kitchen – Is used for preparing meals.

Dining room – It is used during meal times

Sitting or living room – Used for relaxation, entertaining guests and watching television.

Bedroom – Is used for relaxation and sleeping after the day's work.

Bathroom - For bathing.

Activity 2

- The kitchen is close to the dining area for efficient meal service. It can also be connected to the living room to allow parents to supervise children while preparing meals.
 - Living room and dining area, bedrooms, bedrooms near sanitation area.
 - The living room can be connected to the dining area so that the family can enjoy entertainment while in either rooms. It is also adjacent to the kitchen for easy access and communication.
- The dining area is located near the kitchen for convenient serving of meals. It can also have an open layout with the living room to encourage social interaction during meals. The bedrooms may be close enough for the parents to monitor young children. Bathrooms are always near bedrooms for easy access at night

Activity 3

- The family size – Larger families require more bedrooms and communal spaces. This influences the overall layout and size of the home.
- Cultural and regional influences can shape the design and organization of rooms.
- Safety and security
- Budget
- Personal preferences

Test Yourself

1.
 - a) The sitting or living room – Used for relaxation, entertaining guests and watching television. It has seats, tables and other furniture.
 - b) The dining room – It is used during meal times. It has furniture for seating during eating and others for storing dining materials.
 - c) The kitchen – Is used for preparing meals.
 - d) The bedroom – Is used for relaxation and sleeping after the day's work. The main furniture in the room is the bed. Other furniture, like wardrobes or dressing tables, can also be found in the bedroom.
 - e) The sanitation area – Used to attend to nature calls and for bathing.
 - f) The storage area – Is used for storage of different essential
2. Living room and dining area, bedrooms, bedrooms near sanitation area
3.
 - a) The family size – Larger families require more bedrooms and communal spaces. This influences the overall layout and size of the home.
 - b) Cultural and regional influences can shape the design and organization of rooms.
 - c) Safety and security
 - d) Budget
 - e) Personal preferences
4. Designers can optimize space utilization
Designing well connected spaces help facilitate easy navigation between room and promote sense of openness
Allow designers to strategically position rooms based on their function and usage pattern
Helps achieve an optical balance between shared and private space
Designers can strategically position rooms to maximize daylight exposure

4.4: THE KITCHEN

Activity 1

1. Storage and preparation areas.
2. Cabinets, sink and cooking area.
3. Work centers are areas within the kitchen plan where you can readily do a particular task because you have arranged together the necessary equipment or appliances. Work triangle refers to a kitchen's three main work areas which form a triangle depending on their

positions. That is, the sink, the refrigerator and the cooking area.

4. Work zone, storage area, food preparation area, dining space, appliance placement and waste space.

Activity 2

- a. One wall plan
- b. U-shaped plan
- c. L-shaped plan
- d. Kitchen island
- e. L-shaped plan
- f. Corridor plan

Activity 3

Kitchen plan	advantages	disadvantages
One wall kitchen plan	Space saving	Limited storage space
	Simple and efficient	Limited space for multiple cooks
	Open feel	Few opportunities for custom layouts
U- Shaped kitchen	Efficient layout	Potential for crowding
	Defined work zone	May not be accessible as other layouts
	Suitable for both small and large kitchens	Require additional lighting
Corridor kitchen plan	Efficient use of space	Limited space
	Ideal for small kitchens	May not accommodate multiple cooks
	Defined work zone	Potential for clutter
L- Shaped kitchen plan	Integrate with adjacent dining or living area	Require corner space
	Efficient work flow	Traffic flow
	Suitable for various kitchen sizes	Less storage counter space

Kitchen island	Additional work space	Requires adequate floor space
	Additional storage	Traffic flow
	Can serve as a focal point, gathering or secondary work zone	Costly



Activity 4

1. a) Space available – The kitchen layout depends mostly on the available space especially for the placement of the three basic kitchen equipment; the sink, range and refrigerator.
 b) Interrelationship between the working areas – Closely related centers are placed next to each other to minimize movement in terms of distance.
 c) Workflow and efficiency – Consider the natural flow of activities in the kitchen. Working areas should be placed in a sequence that minimizes unnecessary movement during food preparation.
 d) Safety – Safety considerations should be prioritized. Heavy items and frequently used utensils should be within reach to minimize strain.
 e) Natural light and ventilation – Work areas should be near windows to enhance visibility and create an inviting atmosphere.
 f) Traffic flow – Avoid placing working areas in high-traffic zones to prevent congestion during meal preparation.
2. Allows for efficient use of available space.
 Budgeting and cost control.
 Avoiding construction delays.
 Incorporating design elements.
 Considering electrical and plumbing needs.
 Maximizing storage solutions.
 Accommodating appliances and fixtures.

Test Yourself

1. a) The one-wall plan – In this plan, food storage area, work area and cooking area are arranged in a row against a wall.
 b) The U-shaped plan – In this plan, the equipment is placed on three walls, thus forming a U-shape.
 c) The corridor plan – This is where the equipment in the kitchen is arranged on two opposite walls forming a corridor.

- d) L-shaped plan – This is where the equipment is arranged on two adjoining walls forming an L-shape.
- e) A kitchen island – Is a plan where there are kitchen stools for seating. It can include basic storage drawers or cabinets that can be used to store different appliances.
2. A kitchen area is a room or designated area in a house that is used for storage and preparation of food and drinks
- 3.

Kitchen plan	Advantages	Disadvantages
One wall kitchen plan	Space saving	Limited storage space
	Simple and efficient	Limited space for multiple cooks
	Open feel	Few opportunities for custom layouts
U- Shaped kitchen	Efficient layout	Potential for crowding
	Defined work zone	May not be accessible as other layouts
	Suitable for both small and large kitchens	Require additional lighting
Corridor kitchen plan	Efficient use of space	Limited space
	Ideal for small kitchens	May not accommodate multiple cooks
	Defined work zone	Potential for clutter
L- Shaped kitchen plan	Integrate with adjacent dining or living area	Require corner space
	Efficient work flow	Traffic flow
	Suitable for various kitchen sizes	Less storage counter space

2. Spray and wipe the countertops and range top, not forgetting to clean the vent hood.
Sweep the floor and wipe up spills.
Scrub the sink with a general purpose cleaner and wipe it dry
Deal with dishes; unload clean dishes from the dishwasher and take care of hand wash dishes as soon as possible
Tidy up and put things in order
3. Mopping the floor, Wiping exterior of appliances and Washing of towels and dishcloth

4.

Procedure for daily cleaning of kitchen surfaces	Procedure for weekly cleaning of kitchen surfaces	Procedure for special cleaning of kitchen surfaces
Spray and wipe the countertops and range top, not forgetting to clean the vent hood.	Mop the floor; you might need to do it more often if you have young children and pets	Wipe down cabinet doors and drawers.
Sweep the floor and wipe up spills.	Clean the exteriors of the appliances such as coffee pots and toasters	Clean the oven
Scrub the sink with a general purpose cleaner and wipe it dry.	Wipe the refrigerator's door. Clean up any smudges in the interior too	Clean the refrigerator and sanitize its drip pan
Deal with dishes; unload clean dishes from the dishwasher and take care of hand wash dishes as soon as possible	Toss the leftovers or refrigerated items that are past their prime.	Rinse any Drawer dividers or organizers.
Tidy up and put things in order	Scour and polish the sink. Give a little extra attention to fixed dirt	Give a little extra attention to the toe-kick area beneath your cabinets. Dirt tends to migrate and hide here during daily sweeping and weekly mopping.

	Spot clean cabinets. Pay close attention to doors and drawers you use frequently plus the interiors	Dust the tops of the cabinets and refrigerator
	Wash towels and dishcloths.	Clean and Sanitize trash and recycling receptacles
		Clean your dishwasher. Take a look inside your dishwasher, especially around the seal and filter, and wipe away any grime or water.



Activity 4

Practical work

Test Yourself

1. Loose dirt refers to dirt that is not firmly attached to a surface and can easily be removed with minimal effort. Fixed dirt refers to dirt that is firmly attached or stuck to a surface. They require more effort or specific cleaning methods for removal
2. a) Sweeping
 - Is done using a hand broom.
 - Start by sweeping along the baseboard and collecting dirt in piles as you sweep along.
 - Keep a trash bin nearby to easily dispose of the trash.
 - Close the door and windows to prevent the dirt from being blown back by wind.
 - Note that earthen floor should be sprinkled with water before sweeping to avoid raising a lot of dust while sweeping.
- b) Dusting
 - Is primarily aimed at removing loose particles such as dirt, dust or small debris from surfaces.
 - The common tools used include feather dusters or rugs.
 - It involves gently sweeping or brushing the surface to lift and collect loose particles without necessarily wetting the surface.
 - It is suitable for surfaces that accumulate fine particles like shelves or table tops.

c) Wiping

- It involves removing both loose particles and fixed dirt.
- It involves the use of damp or wet clothes, sponges or cleaning wipes.
- A cleaning solution or water is applied to the surface then a cloth or sponge is used to scrub and remove both loose and fixed dirt.
- It is suitable for surfaces that accumulate both loose and fixed dirt that require more effort to clean such as kitchen countertops.

d) Mopping

- Is intended to remove dirt, spills, stains and other contaminants from the surfaces of a floor.
- A mop is used for mopping.
- It involves wetting the mop in water or a cleaning solution, wringing out the excess liquid and then moving the mop over the floor to pick up dirt and stains.

e) Scrubbing

- It is intended to remove stubborn or fixed dirt on surfaces that cannot be easily removed through a regular wiping or mopping.
- Various tools can be used including scrub brushes, abrasive pads or some sponges.
- It involves applying pressure and friction while using the scrubbing tool to remove and lift dust or stains. Circular or back and-forth motions are commonly used.

f) Vacuum cleaning

- It is designed to effectively and efficiently remove loose particles, dust and debris from floors, carpets and other surfaces.
- A vacuum cleaner is used.
- The vacuum cleaner uses suction to lift dust and particles from surfaces. The cleaner is moved back and forth in a specific pattern over the area being cleaned

3.

Procedure for daily cleaning of kitchen surfaces	Procedure for weekly cleaning of kitchen surfaces	Procedure for special cleaning of kitchen surfaces
Spray and wipe the countertops and range top, not forgetting to clean the vent hood.	Mop the floor; you might need to do it more often if you have young children and pets	Wipe down cabinet doors and drawers.

Sweep the floor and wipe up spills.	Clean the exteriors of the appliances such as coffee pots and toasters	Clean the oven
Scrub the sink with a general purpose cleaner and wipe it dry.	Wipe the refrigerator's door. Clean up any smudges in the interior too	Clean the refrigerator and sanitize its drip pan
Deal with dishes; unload clean dishes from the dishwasher and take care of hand wash dishes as soon as possible	Toss the leftovers or refrigerated items that are past their prime.	Rinse any Drawer dividers or organizers.
Tidy up and put things in order	Scour and polish the sink. Give a little extra attention to fixed dirt	Give a little extra attention to the toe-kick area beneath your cabinets. Dirt tends to migrate and hide here during daily sweeping and weekly mopping.
	Spot clean cabinets. Pay close attention to doors and drawers you use frequently plus the interiors	Dust the tops of the cabinets and refrigerator
	Wash towels and dishcloths.	Clean and Sanitize trash and recycling receptacles
		Clean your dishwasher. Take a look inside your dishwasher, especially around the seal and filter, and wipe away any grime or water.

DAILY CLEANING

Prevent food contamination, maintain hygiene, managing odor, promoting safety

WEEKLY CLEANING

Deep cleaning appliances, sanitizing surfaces, cleaning storage areas and refreshes kitchen line

SPECIAL CLEANING

Deep cleaning hard to reach area, maintaining kitchen fixtures, seasonal cleaning

4.6: COLOUR IN THE HOME

Activity 1

1. Primary, secondary and tertiary colors
2. a) Hue refers to the pure color of an object. For example, the primary colors such as yellow, orange, red, violet, blue and green are considered hues.
 - b) Tint refers to a hue (pure color) with a mixture of white. It lightens and softens the original color. For example, adding white to red creates a pink tint.
 - c) Shade refers to a hue with the addition of black. It darkens and deepens the original colour. For example, adding black to blue creates a navy shade.
 - d) Tone describes a hue with the addition of equal amounts of black and white.
 - e) Value describes how light or dark a color is. A gray scale can be used to determine value, where white is the lightest value and black is the darkest.
 - f) Intensity is the brightness or dullness of a color. A color at full intensity is considered vibrant.
3. Aesthetic appeal, emotional impact, communication and symbolism, brand identity and recognition, functional purpose, personal expression and identity, visual comfort and harmony

Activity 2

- a) Personal preference – Consider your own taste and preferences. Choose colors that make you comfortable.
- b) Room function – Consider the purpose of every room. For example, calm and soothing tones might be suitable for bedrooms while vibrant and energetic colors may work well in social rooms like the living room.
- c) Natural light – Lights affect how color appears. It is therefore important to consider the amount of natural light that a room receives.

- d) Color harmony – Explore color harmonies such as complementary, analogous or monochromatic schemes. They help create a beautiful room.
- e) Durability – Choose colors that are easy to clean and maintain.
- f) Existing furniture – Consider the colors of your existing furniture, décor or fixtures. Choose a color scheme that complements or contrasts with these elements in order to realize a harmonious look.

Activity 3

1. Practical work
2. Monochromatic color scheme – This utilizes the use of only one color with varying levels of saturation, value and lightness. This creates a harmonious and cohesive look without introducing other colors. For example, a monochromatic room might feature different shades and tones of blue, ranging from sky light blue to deep navy blue.
Analogous color scheme – This uses colors next to each other on the color wheel. For example, blue and green or orange and yellow. There is no much hue contrast between analogous colors.
Complementary color scheme – These are colors opposite each other on the color wheel. When complimentary colors are placed next to each other, there is an extremely strong contrast and a vibrant effect. For example, red and green, blue and orange or yellow and purple.
3. a. Monochromatic color
b. Analogous color
c. Complementary

Activity 4

Practical work

Test Yourself

1. a) Hue refers to the pure color of an object. For example, the primary colors such as yellow, orange, red, violet, blue and green are considered hues.
 - b) Tint refers to a hue (pure color) with a mixture of white. It lightens and softens the original color. For example, adding white to red creates a pink tint.
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- d) Tone describes a hue with the addition of equal amounts of black and white.
- e) Value describes how light or dark a color is. A gray scale can be used to determine value, where white is the lightest value and black is the darkest.
- f) Intensity is the brightness or dullness of a color. A color at full intensity is considered vibrant
2. a) Personal preference – Consider your own taste and preferences. Choose colors that make you comfortable.
 - b) Room function – Consider the purpose of every room. For example, calm and soothing tones might be suitable for bedrooms while vibrant and energetic colors may work well in social rooms like the living room.
 - c) Natural light – Lights affect how color appears. It is therefore important to consider the amount of natural light that a room receives.
 - d) Color harmony – Explore color harmonies such as complementary, analogous or monochromatic schemes. They help create a beautiful room.
 - e) Durability – Choose colors that are easy to clean and maintain.
 - f) Existing furniture – Consider the colors of your existing furniture, décor or fixtures. Choose a color scheme that complements or contrasts with these elements in order to realize a harmonious look.
3. Monochromatic color scheme – This utilizes the use of only one color with varying levels of saturation, value and lightness. This creates a harmonious and cohesive look without introducing other colors. For example, a monochromatic room might feature different shades and tones of blue, ranging from sky light blue to deep navy blue.
Analogous color scheme – This uses colors next to each other on the color wheel. For example, blue and green or orange and yellow. There is no much hue contrast between analogous colors.
Complementary color scheme – These are colors opposite each other on the color wheel. When complimentary colors are placed next to each other, there is an extremely strong contrast and a vibrant effect. For example, red and green, blue and orange or yellow and purple.
 4. Creates a unified design concept, enhances

visual appeal, balance emotions and mood, highlight architectural features, promote flow and continuity, avoid visual clutter and distractions, creates welcoming atmosphere

4.7:

SOFT FURNISHINGS IN THE HOUSE

Activity 1

1. a. Throw pillows b. Back throws pillows
c. Curtains d. Table mat
e. Wall hangings f. Sculpture
g. Carpet h. Drapes i. Beddings
2. Soft furnishings are items made of cloth or fabric that are used to beautify, decorate or enhance comfort of a room.
3. Curtains, drapes, throw pillows, decorative sofa back throws, fabric wall hangings

Activity 2

- a) Color scheme – Consider the room's color scheme. Soft furnishings can add pops of color or pattern to a room, but it is vital to ensure they complement the already existing colors.
- b) The function of the room – One can use durable and easy-to-clean furnishings in high-traffic areas, and focus on comfort and luxury in relaxation places.
- c) Comfort – Soft furnishings should be comfortable.
- d) Size and space – The furnishings should be proportionate to the size of the room; not too much, and also not too little.
- e) Budget – The furnishings should be within a reasonable budget.
- f) Durability – They should be of high quality and durability

Activity 3

- a) Curtains provide privacy and shade.
- b) Bedding and linens provide comfort and warmth.
- c) Mattresses and bedding provide support and improve quality of sleep and overall health.
- d) Rugs and carpets can help to insulate floors and reduce noise.
- e) Soft furnishings help to express one's personal style and taste.

Activity 4

1. VACUUM CLEANING
Vacuum the carpet at least once a week
Use a vacuum cleaner with adjustable height setting and strong suction power

Move the vacuum slowly over the carpet in overlapping passes to ensure thorough cleaning

Pay attention to edges and corners

2. Curtains

3. Check label care

Start by removing loose dust from it

Treat any stain on the curtain before washing

Hand wash and hung to dry



Activity 5

Practical work

Test Yourself

1. Soft furnishings are items made of cloth or fabric that are used to beautify, decorate or enhance comfort of a room. They include curtains, drapes, throw pillows, decorative sofa back throws, fabric wall hangings
2.
 - a) Color scheme – Consider the room’s color scheme. Soft furnishings can add pops of color or pattern to a room, but it is vital to ensure they complement the already existing colors.
 - b) The function of the room – One can use durable and easy-to-clean furnishings in high-traffic areas, and focus on comfort and luxury in relaxation places.
 - c) Comfort – Soft furnishings should be comfortable.
 - d) Size and space – The furnishings should be proportionate to the size of the room; not too much, and also not too little.
 - e) Budget – The furnishings should be within a reasonable budget.
 - f) Durability – They should be of high quality and durability
3.
 - a) Curtains provide privacy and shade.
 - b) Bedding and linens provide comfort and warmth.
 - c) Mattresses and bedding provide support and improve quality of sleep and overall health.
 - d) Rugs and carpets can help to insulate floors and reduce noise.
 - e) Soft furnishings help to express one’s personal style and taste.

2. Artificial textile fibres are textile materials that are produced through chemical processes using various raw materials while natural textile fibres are those produced from nature such as plants, animals or minerals.

3. i. Sweeping – uses a hand broom.

Close the door and windows to prevent wind from spreading the dirt.

Start sweeping from the furthest corner towards the door along the baseboard as you collect dirt in piles.

Collect the dirt on a dust pan as you dispose it off in the trash can.

ii. Dusting – we can use feathers, dusters or rugs.

Gently sweep or brush the surface with any of the tool above.

Collect loose particles and dispose them in the trash can.

iii. Wiping – use a damp or wet clothes, sponges or cleaning wipes.

Mix water with a cleaning solution in a basin or bucket.

Wet the surface with the mixture above.

Use a sponge or cleaning wipes to scrub and remove both loose and fixed dirt.

Dry using a clean piece of cloth.

4. i. Open seam

ii. Overlaid seam

iii. Plain seam

iv. French seam

v. Run and fell seam

vi. Machine fell seam

5.

Acrylic	-Good heat and oil resistant -Soft and tough -Resistance to breakage -tends to loose strength when wet
Nylon	-Dries quickly -Lustrous -Very strong -Does not absorb water Resistant to oil and chemicals
Polyester	-Dries quickly - Resistant to molds and mildew -Strong, resilient and durable -Resistant to shrinking and stretching -Can retain heat -Wrinkle resistant
Rayon	-Soft and smooth -Shiny -Drapery -Moisture absorbent -Breathable

MODEL TEST PAPER ONE

1.
 - i. Provides people with fresh farm produce.
 - ii. Ensures year-round production of food and a wide range of other products such as spices and medicinal herbs.
 - iii. Provides food for the family at a low cost.

6.
 - i. Acrylic
 - Used to make fleece, circular knits, coats, sweaters, sportswear, boots, hats and socks.
 - Used to make household textiles, outdoor furniture and industrial materials.
 - ii. Nylon
 - Used to make umbrellas, household textiles, rugs and carpets.
 - Woven into fabrics to make fleece, circular knits, coats, sweaters, sportswear, swimwear, shoes, underwear and accessories.
 - iii. Polyester
 - Used in fashion world for apparel, footwear and accessories.
 - Used to make stylish swimwear and active wear like shirts, blouses, dresses, jackets and coats.
 - Used to make home furnishings for beds like sheets, mattresses, pillows, cushions, carpets and blankets.
 - Used to make plastic packaging like containers, bottles, films as well as fitters.
 - Used to make ropes, fabrics and belts.
 - iv. Rayon
 - In fashion world, used to make knitwear, sportswear, hats, suits, blouses, dresses, shirts, coats, sweaters and undergarments.
 - Use to make furniture, upholstery, carpets, bathrobes, towels, drapes, bedsheets, curtains and home décor.
7. Burning test involves identifying artificial textile fibres based on their reaction when brought close to an open flame. The indicators include the colour of the flame, smell produced, the smoke the fibre gives off and the effect of heat on the fibre when it approaches the flame and when withdrawn from the flame.
8.
 - i. They do not need a lot of space to grow them.
 - ii. They mature faster.
 - iii. Vegetables can be harvested continuously thus allowing steady supply over an extended period.
 - iv. They do not require a lot of attention, time and caring.
9.
 - i. The U-shaped plan – here, the equipment is placed on three walls, forming letter U-shape.
 - ii. The corridor plan – the equipment is arranged on two opposite walls forming a corridor.
 - iii. L-shaped plan – the equipment is arranged on two adjoining walls forming an L-shape.
 - iv. The one-wall plan – the equipment is arranged in a row against a wall.

- v. the kitchen island – a table and stools for seating are placed at the centre of the kitchen, it can include storage drawers or cabinets that can be used to store different appliances.

10. Artificial Fibres

Synthetic fibres	Regenerated fibres
- Polyester	- Viscose rayon
- Nylon	- Acetate rayon
- Acrylic	

11.
 - a) French seam
 - b) overlaid seam
 - c) Open seam
12.
 - i. Design and use of the garment
 - ii. Type of fabric
 - iii. Ease of construction
 - iv. Cost and time constraints
 - v. Fashion trends
13.
 - i. To kill and prevent spread of germs and bacteria that cause diseases.
 - ii. To minimize the risk of food poisoning.
 - iii. To prevent pests like insects and rodents from infesting the kitchen.
 - iv. To care for kitchen tools and equipment and make last long.
 - v. Help us stay healthy.
 - vi. Make the kitchen more pleasant and good.
14.
 - i. No missed or uneven stitches or neatly stitched.
 - ii. Has perfect fabric joints.
 - iii. Has correct strength, durability, security and comfort.
 - iv. Has even length on the inside and the outside.
 - v. Neatly stitched to enhance appearance.
 - vi. Fabrics are not damaged during sewing.
 - vii. Should be well pressed and flat.
15.
 - i. Work in an open space with free circulation of air.
 - ii. Wear face masks so as not to inhale the smoke.
 - iii. The fabric should not be too small to keep yourself from burning.
 - iv. The surface should be clear from pieces of paper.
 - v. Put out the fire when not in use.
16.
 - i. Taste – heat enhances the natural sweetness of starches; a richer and more pronounced taste is realised.
 - ii. Aroma – during cooking of starchy foods aromatic compounds are released which are pleasant to smell.

- iii. Texture – starchy carbohydrates absorb water during cooking. This leads to a softer and easy to eat texture.
 - iv. Colour – dry heat influences the browning effect in some carbohydrates resulting in a golden brown colour on the food, for example, toasted bread.
 - v. Consistency – when liquid starchy foods like porridge are heat, it leads to gelatinisation of starch molecules. This creates a smoother and thicker consistency.
17. i. To give a good fit
 ii. To give the garment a desirable shape
 iii. To provide the desired style features
 iv. To allow ease of movement
18. a) Overcasting – this is the neatening of the seam edges using overcast stitches to enclose the raw unfinished seam.
 b) Edge stitching – this a straight line of stitches made on the edge of the fabric
 c) Pinking – this when we use the pinking shears that leave a zig zag pattern on the fabric. It neatens the seam allowance without sewing.
19. Seam allowance is the distance between the seam line and the cutting line. It is usually 1.5cm while seam line is also called the stitching line, construction line or fitting line; the line where permanent stitches are worked.
20. a) Darts – identify and trace the dart on the fabric.
- Pin the dart so that the edge line is up. Do not pin directly on the stitching line.
 - Sew along the stitching lines you traced on the fabric
 - Remove the pins, snip the excess thread on the ends and press your dart flat.
- b) Box pleats – mark the left-hand side seam allowance.
- Draw pairs of markings on the right side of the prepared fabric.
 - Connect the markings and create vertical lines.
 - Fold the marked line in the direction of the markings and pin the fold in place.
 - Baste and press the box pleats.
 - Sew the top of the box pleats and then remove then basting stitches.
- c) Gathers – on the right side of the fabric, sew a straight stitch right above and below the seam line, leaving longer portions of the stitch threads on both ends.
- At one end of the stitching, place a pin horizontally and wrap the loose threads around the pin
 - On the opposite end, gently pull the threads until the gathering is of the desired length as you use the other hand to spread the gathers evenly across the fabric.
 - Sew permanent stitches along the seam line to hold the gathers.
 - Remove the gathering lines above and below the seam line. Press the gathers.
21. Simple sugars(monosaccharides) are composed of one or two sugar units. Examples include glucose and fructose while double sugars(disaccharides) are composed of two sugar molecules chemically linked together. Examples include lactose, sucrose and maltose.
22. a) Tint –refers to a hue with a mixture of white. It lightens and softens the original colour.
 b) Shade – refers to a hue with the addition of black. It darkens and deepens the original colour
 c) Hue – refers to the pure colour of an object, for example, blue or green
23. i. Daily cleaning – spray and wipe the counter tops and range top, not forgetting to clean the vent hood.
 ii. Weekly cleaning – clean the exterior of the appliances such as coffee pots and toasters.
 iii. Special cleaning – clean the refrigerator and sanitize its drip pan
24. i. Rest - an expectant mother needs adequate rest to improve the health of the mother and the baby.
 ii. Personal hygiene – an expectant mother should observe good hygiene so as to prevent her from contracting common illnesses that may put her health and that of the baby in danger.
 iii. Rich and a balanced diet – an expectant mother should be fed on a variety in diet enriched with vitamins and minerals
 iv. Physical exercises – an expectant mother should practice safe exercises as this improves the health and the mood of the mother.
 v. Clinical attendance – an expectant mother should have a clinical routine check to monitor her health and that of the unborn baby.
25. lettuce, kales, spinach, onions, cowpeas, pumpkins, pepper, beans, tomatoes
26. i. Buying – this where you buy an already built house ready for settlement.
 ii. Building – here, you build the house from scratch.
 iii. Renting - here you lease a house where you pay rent every end month to the landlord/lady.

27.
 - i. Safety and security
 - ii. Family size
 - iii. Budget
 - iv. Personal preferences
 - v. Cultural and regional influences
28.
 - i. Living room or sitting room – for relaxation. Entertaining guests and watching television
 - ii. Kitchen – for preparing and cooking meals
 - iii. Bedrooms – for relaxation and sleeping
 - iv. Dining room – used when taking meals
 - v. Bathroom – for bathing
 - vi. Toilet - attending to nature calls
 - vii. Store – for storage of different essentials.
29. Curtains, drapes, throw pillows, sofa back throws, wall hangings, carpets, door mats, table mats.
30.
 - i. Container gardening – this is growing crops in containers which have drainage holes at the bottom.
 - ii. Use of discarded tyres – this involves the use of old discarded tyres to form a garden.
 - iii. Simple drip garden – prepared using plastic containers and a wall or a pole. The containers are cut and fixed vertically on the wall or pole one above the other. A container with a hole at the bottom is then fixed at the top of the containers so that when it is filled with water, the water drips onto the plants.
 - iv. Wick garden – established using jerrycans and improvised wick, for example a shoelace, measuring 30cm long and 2cm width. A jerry can is sliced in such a way that the lower half holds water in which the wick is dipped and the upper half holds the soil. The wick draws water up to the soil where the crop is growing.
 - v. Multi-storey gardens – are established using sacks and nets. Holes with diameters measuring about 3cm are cut on the sack then soil mixed with manure is placed in. Ballast or medium-sized stones are stacked at the centre of the sack to form a midrib through which watering will be done. The sack is then pulled up until it is full and upright.

MODEL TEST PAPER TWO

1. Lettuce, tomatoes, kales, spinach, pepper
2.
 - i. **Nursery setup** – The parents need to prepare a safe and comfortable space for the baby. This can include a crib, a changing table and essential baby supplies.

- ii. **Baby supplies** – The parents should acquire clothes, diapers, baby formula, bottles, breastfeeding supplies, car seat transportation and so on.
 - iii. **Financial planning** – The expectant parents should budget for upcoming expenses, including medical costs and baby supplies.
 - iv. **Emotional preparation** – They should discuss their expectations and fears. They can also talk about the joys and challenges that accompany parenthood.
3. a. Convection b. Conduction c. Radiation
4.
 - a. **Convection**-involves the circulation of hot air or liquid around the food
 - b. **Conduction**-involves direct heat transfer through physical contact with a hot surface.
 - c. **Radiation**-involves the emission of heat energy in the form of electromagnetic waves
5.
 - a. **Convection:** Root vegetable(yams, sweetpotatoes, cassava)fish, cereals (maize, rice, wheat)
 - b. **Conduction:** eggs, pancakes, chapati
 - c. **Radiation:** cakes, tender meats, bread, biscuits
6. For:-financial management
 - Learning and improvement.
 - Harvest planning and yield assessment.
 - Soil health management.
 - Variety performance evaluation.
 - Pest and disease management.
 - Succession planting.
 - Crop rotation and planting.
7. How it burns when approaching the fire, while it is still stationary, withdrawing from the fire, the odour and residue.
8.
 - a) **Use of discarded tyres** – using old discarded tyres to form your garden.
 - b) **A simple drip garden** – is established using plastic containers and a wall or a pole. The containers are cut then fixed vertically on a wall or a pole, one above another. At the top of the containers, another container with a hole at the bottom is placed. When the container is filled with water, it drips onto the plants.
 - c) **Container gardening** – this means growing crops on containers which have drainage holes at the bottom.
 - d) **Multi storey gardens** – are established using sacks and nets. Holes with diameters measuring about 3cm are cut out on the sack then soil mixed with manure is placed

in. Ballast or medium-sized stones are stacked at the centre of the sack to form a midrib through which watering will be done. The sack is then pulled up until it is full and upright.

- e) **Wick garden** – the garden is established using jerrycans and an improvised wick, for example a shoelace, measuring 30cm long and 2cm width. A jerrycan is sliced in such a way that the lower half holds water in which the wick is dipped and the upper half holds the soil. The wick draws water up to the soil where the crop is growing
9. a) Expectant and lactating mothers
- Feeding habits – there is increased focus on nutrient rich foods. These include fruits, vegetables and sources of iron and folic acid.
 - Food taboos – some cultures tend to have certain food taboos for expectant and lactating mothers. The food taboos vary from one culture to the next.
- b) Adolescents
- Feeding habits – they should be fed with a variety in diet that contains more carbohydrates because they tend to be more active.
 - Food taboos – they may develop body image concerns that influence their food choices. They may also be influenced by dietary trends or foods that their peers prefer.
- c) Infants and older children
- Feeding habits – since their bodies are developing, they should be fed with body building foods to build and develop their muscles.
 - Food taboos – avoidance of foods that could choke them is recommended.
- d) Older persons
- Feeding habits – there is emphasis on highly nutritious foods to support overall health. There is adequate intake of calcium and proteins.
 - Food taboos – they may avoid certain foods due to dental issues, difficulty chewing or digestive sensitivities.
- e) Individuals with medical conditions
- Feeding habits – there is emphasis on foods rich in specific nutrients which they may lack.
 - Food taboos – they avoid foods that may interfere with the management of their conditions.
- f) Vegetarians
- Feeding habits – there is emphasis on plant-based foods like fruits, vegetables, legumes, nuts and whole grains.
 - Food taboos – they tend to avoid foods that are not plant-based.
10. a) Barriers to entry into the marketplace– The ease or difficulty for businesses to enter a market significantly influence competition. For example, when startup costs are high or when regulations are unfavorable, businesses will shy away.
- b) The structure of the market, including the number and size of firms, can influence the level of competition in that particular industry.
- c) Consumer preferences, which are ever changing, impact the demand for products or services. Businesses are often forced to align with these preferences, leading to shifts in competition, as some products become more popular while others decline.
- d) Advancements in technology can also influence competition in the market. Businesses that adopt technology often gain a competitive advantage in the market.
- e) Government regulations can either promote or hinder competition. Excessive and restrictive regulations discourage competition while those that create a level playing field encourage it.
- f) Market demand – fluctuations in demand of goods and services can also influence competition in the market. High demand attracts more businesses while low demands lead to more competition among the existing companies.
11. a) Encourages innovation by fostering an environment where businesses have no choice but to innovate for them to differentiate themselves from the rest.
- b) It also leads to diverse product offerings. This provides consumers with variety in terms of quality, features and pricing.
- c) Competition also influences business to improve the quality of their products in order to attract and retain customers.
- d) Competition in the marketplace empowers consumers by providing them with choices. It gives them the freedom to compare products, prices and features.
- e) Competitive markets generally lead to affordable prices for the consumers.

- f) Businesses in a competitive market are more responsive to the ever changing consumer demands.
- g) It acts to prevent monopoly and encourages entry of new businesses
12. Infants and young children require diets rich in nutrient, proteins, and vitamins for support and growth, adolescence require food rich in energy due to growth spurts while adults require specific nutrients for support, daily activities and maintain good health.
13. Simple drip garden
14. Menstruation leads to regular loss of blood in women and this leads to a significant decrease in iron over time. Therefore, adequate dietary iron intake is crucial to replenish iron and prevent iron deficiency.
15. • Occasion – whether the occasion is a family meal, a formal dinner party or a special celebration should guide you on how to set the table.
- The number of guests – this will determine the quantity of the requirements and how the place will be organized for seating.
 - Tablecloth and napkins – choose appropriate ones that complement the theme and formality of the occasion.
 - Dinnerware – select suitable plates, bowls and serving dishes. Ensure they match in style and are clean and polished.
 - Glassware – consider the types of drinks being served, whether water, wine or other beverages. Choose appropriate glasses for each.
 - Centerpiece – you can use flowers, candles or other decorative items. The centerpiece should not obstruct guests' view.
 - Overall appeal – the table setting should be inviting and harmonious
16. a) The requirements for a table setting include a table, table clothes, napkins, placemats, cutlery (table forks, spoons and knives), water glass, centerpiece, dinner plates and side plates.
- b) Table clothes are used to cover the table while table mats or placemats are by individuals to cover the area they are using when eating.
- c) Table napkins are used for protection of clothing and wiping the mouth while eating
17. • Informed decision making – this involves understanding the choices available in the market and avoiding any deceptive practices by businesses.
- Protection of consumer rights – by knowing their rights and challenging unfair consumer practices, consumers remain empowered in the marketplace.
 - Financial literacy – through consumer awareness, consumers are better equipped to understand issues related to budgeting, spending, hidden fees, interest rates and long-term financial implications.
 - Product safety and quality – being aware of potential risks and safety standards helps consumers to make choices that prioritize their health and well-being. It also enables them to assess the quality and reliability of products. This reduces the likelihood of purchasing substandard or unsafe goods.
18. a. One wall plan b. U-Shaped plan
c. L-Shaped plan d. Corridor plan
e. Kitchen island f. L-Shaped plan
19. a) Barriers to entry into the marketplace– The ease or difficulty for businesses to enter a market significantly influence competition. For example, when startup costs are high or when regulations are unfavorable, businesses will shy away.
- b) The structure of the market, including the number and size of firms, can influence the level of competition in that particular industry.
- c) Consumer preferences, which are ever changing, impact the demand for products or services. Businesses are often forced to align with these preferences, leading to shifts in competition, as some products become more popular while others decline.
- d) Advancements in technology can also influence competition in the market. Businesses that adopt technology often gain a competitive advantage in the market.
- e) Government regulations can either promote or hinder competition. Excessive and restrictive regulations discourage competition while those that create a level playing field encourage it.
- f) Market demand – Fluctuations in demand of goods and services can also influence competition in the market. High demand attracts more businesses while low demands lead to more competition among the existing companies
20. - To produce safe, fresh food that is accessible to the family.
- It is a reliable source of green leafy vegetables, herbs, fruits, legumes and cereals for home consumption.

- Growing of both seasonal and off-season crops that ensures steady supply of nutritious food.
 - Help family to meet their nutritional needs and promotes healthier lifestyles.
 - Generates income from sale of surplus (excess) produce.
 - Helps to save family income direct towards purchase of vegetables, fruits and others.
 - Provide alternative when staple foods are not in stock.
 - Helps to increase food production.
 - Some form of kitchen gardening use recycled materials like plastics hence contributes to environmental conservation.
21. – how it burns when approaching the fire, while it is still stationary, withdrawing from the fire, the odour and residue.
22. – Do not prepare nor cook root tubers when they have any green, damaged or sprouting bits.
- Check for aflatoxins in cereals or grains before cooking.
 - Avoid wearing loose clothes as they can catch fire.
 - Handle knives and other sharp objects with care.
 - Wipe spilt liquids to avoid accidents.
 - Keep safe distance between the source of fire and yourself.
 - Do not allow children in the cooking area.
 - Do not hold hot cooking utensils and equipment with bare hands.
23. -Special occasions are events or moments that hold a particular significance.They are often characterised by celebrations,ceremonies or a noteworthy occurrence.
24. -birthdays, weddings, graduations, initiation, funerals
25. They are often characterised by celebrations, ceremonies or a noteworthy occurrence.
26. • The number of people to attend the occasion.
• The preferences and dietary restrictions of the guests.
• The particular occasion, whether a formal dinner or a casual gathering.
• The budget that is available.
• Cultural sensitivity of the attendees.
27. a) Polyester - used in fashion world for apparel, footwear and accessories.
- used to make stylish swimwear and activewear like shirts, blouses, dresses, jackets and coats.
 - used to make home furnishings for beds like sheets, mattresses, pillows, cushions, carpets and blankets.
- used to make plastic packaging like containers, bottles, films as well as fitters.
 - used in making ropes, fabrics, belts and cushions.
- b) Nylons - woven into fabrics to make fleece, circular knits, coats, sweaters, sportswear, swimwear, shoes, underwear and accessories.
- used to make umbrellas, household textiles, rugs and carpets.
- c) Acrylic - used to make fleece, circular knits, coats, sweaters, sportswear, boots, hat and socks.
- used to make household textiles, outdoor furniture and industrial materials
- d) Viscose rayon and acetate rayon
- in fashion industry, cellulose fibres make knitwear, sportswear, hats, suits, blouses, dresses, shirts, coats, sweaters and undergarments.
 - can be used to make furniture, upholstery, carpets, bathrobes,towels, drapes, bedsheets, curtains and home décor.
 - used to make bedding, household textiles and upholstered furniture
28. a) Primary color: colors that cannot be created by mixing other colors together
b) Secondary color: colors created by mixing equal parts of two primary colors together
c) Tertiary color: colors formed by mixing equal parts of primary colors and neighboring colors
29. a) Monochromatic:This utilises the use of only one colour with varying levels of saturation, value and lightness.
b) Analogous:This uses colours next to each other on the colour wheel
c) Complementary:These are colours opposite each other on the colour wheel.
30. a) Has perfect fabric joints.
b) No missed or uneven stitches.
c) Fabrics are not damaged during sewing.
d) Has the correct strength, elasticity, durability, security and comfort.
e) Smooth and even appearance on the inside and outside.
f) Neatly stitched to enhance appearance.

MODEL TEST PAPER THREE

1. Conception refers to the moment when a sperm cell from a male fertilizes an egg cell from a female, leading to the formation of a

- zygote. After conception, the zygote rapidly divides into a ball of cells and becomes an embryo. It then implants itself into the uterus lining. Over a period of weeks, the embryo transforms into a fetus. The organs and body structure develops as the fetus grows in size. The developing fetus is influenced by genetic factors, maternal health and environmental conditions during pregnancy. Around the fortieth week, labour begins. Contractions lead to the birth of the baby. The baby adapts to the new environment and begins to grow and develop.
2. a) Ovulation – This is a phase of the female menstrual cycle that involves the release of an egg (ovum) from one of the ovaries.
 - b) Fertilization – This is the process by which the sperm cell meets the released ovum, the two fuse to become a zygote, which develops into a fetus.
 - c) Implantation – This is the stage where the embryo attaches itself to the uterine wall and the pregnancy begins.
3. i) Vaginal bleeding
 - ii) Convulsions or fits
 - iii) Severe headache with blurred vision
 - iv) Fever and weaknesses
 - v) Severe abdominal pains
 - vi) Fast or difficulty in breathing
4. i. Rest - an expectant mother needs adequate rest to improve the health of the mother and the baby.
 - ii. Personal hygiene - an expectant mother should observe good hygiene so as to prevent her from contracting common illnesses that may put her health and that of the baby in danger.
 - iii. Rich and a balanced diet - an expectant mother should be fed on a variety in diet enriched with vitamins and minerals
 - iv. Physical exercises - an expectant mother should practice safe exercises as this improves the health and the mood of the mother.
 - v. Clinical attendance – an expectant mother should have a clinical routine check to monitor her health and that of the unborn baby.
5. a bathroom and a toilet should be constructed next to each other for strategic plumbing purposes. It's easier for the plumber as the two share a wall.
 6. i) Cook at lower temperatures to help preserve heat-sensitive nutrients
 - ii) Only use enough water – boiling or steaming with minimal water helps retain water-soluble vitamins like Vitamin C or B.
 - iii) Aim at golden brown when using dry heat
 - iv) Blend starchy flour with cold water before cooking
 - v) Cook starchy carbohydrate food only as long as necessary
 - vi) Stir starchy carbohydrate foods thoroughly and continuously over low heat.
7. i) Conduction – involves direct heat transfer through physical contact with a hot surface.
 - ii) Convection – involves the circulation of hot air or liquid around the food.
 - iii) – involves the emission of heat energy in the form of electromagnetic waves, for example, when warming food in a microwave or when baking using an oven.
8. Baby's layette is a collection of clothing and accessories for a new born baby.
9. i) Climate and season
 - ii) size and growth
 - iii) Ease of dressing
 - iv) Functionality
10. i) Cost
 - ii) Family size
 - iii) Family composition
 - iv) Social amenities
 - v) Neighborhood security
11. **Advantages**
 - i) one is able to rent a house that fits their family income
 - ii) one is free from paying insurance premium on the house
 - iii) one is not involved in keeping the house in good state or repair
 - iv) one can leave the house anytime on giving required notice
11. **Disadvantages**
 - i) One has no security of ownership
 - v) the house may not be repaired on time and if done may not be to the taste of the tenant
 - vi) Rent may be increased anytime and may be more than the tenant can afford
 - vii) One may be evicted from the house on the event they fail to pay rent on time
12. i) Buying
 - ii) Renting
 - iii) Building
13. i. Living room/sitting room – for relaxation. Entertaining guests and watching television
 - ii. Kitchen – for preparing and cooking meals
 - iii. Bedrooms – for relaxation and sleeping

- iv. Dining room – used when taking meals
 - v. Bathroom – for bathing
 - vi. Toilet - attending to nature calls
 - vii. Store – for storage of different essentials.
14. i) Safety and security
- ii. Family size – larger families require more bedrooms and communal spaces. This influences the overall layout and size of the home.
 - iii. Budget
 - iv. Personal preferences
 - v. Cultural and regional influences can shape the design and organization of rooms.
15. The bathroom is built next to the toilet for privacy and for ease during plumbing simply because the two require water and will share a wall so plumbing will be way much easier and convenient.
16. i) Peel thinly or cook in their skins – this is because many nutrients are concentrated in or just before the skin.
- ii) Cut vegetables into larger pieces to reduce the surface area exposed to heat
 - iii) Cook at lower temperatures to help preserve heat-sensitive nutrients
 - iv) Only use enough water – boiling or steaming with minimal water helps retain water-soluble vitamins like Vitamin C or B.
 - v) Aim at golden brown when using dry heat
 - vi) Blend starchy flour with cold water before cooking
 - vii) Cook starchy carbohydrate food only as long as necessary
 - viii) Stir starchy carbohydrate foods thoroughly and continuously over low heat.
17. i. Taste – heat enhances the natural sweetness of starches; a richer and more pronounced taste is realized.
- ii. Aroma – during cooking of starchy foods aromatic compounds are released which are pleasant to smell.
 - iii. Texture – starchy carbohydrates absorb water during cooking. This leads to a softer and easy to eat texture.
 - iv. Colour – dry heat influences the browning effect in some carbohydrates resulting in a golden brown colour on the food, for example, toasted bread.
- v. Consistency – when liquid starchy foods like porridge are heated, it leads to gelatinization of starch molecules. This creates a smoother and thicker consistency
18. i) space available – the layout depends on the available space especially for the

- placement of the three basic kitchen equipment; the sink, range and refrigerator.
 - ii) interrelationship between the working areas – closely related centers are placed next to each other to minimize movement in terms of distance.
 - iii) Workflow and efficiency – Consider the natural flow of activities in the kitchen. Working areas should be placed in a sequence that minimizes unnecessary movement during food preparation.
 - iv) Safety – Safety considerations should be prioritised. Heavy items and frequently used utensils should be within reach to minimize strain.
 - v) Natural light and ventilation – Work areas should be near windows to enhance visibility and create an inviting atmosphere.
 - vi) Traffic flow – avoid placing working areas in high-traffic zones to prevent congestion during meal preparation.
19. Loose dirt refers to dirt that has not firmly attached to a surface and can easily be removed with minimal effort while fixed dirt refers to dirt that has firmly attached or stuck to a surface. They require more effort or specific cleaning methods for removal.
20. soft furnishings are items made of cloth or fabric that are used to beautify, decorate or enhance comfort of a room. They include curtains, drapes, throw pillows, decorative sofa back throws, fabric wall hangings, carpets, door mats among others.
21. a) Wiping
Involves removing both loose and fixed dirt. We use damp or wet clothes, sponges or cleaning wipes. A cleaning solution or water is applied to the surface then a cloth or sponge is used to scrub and remove both loose and fixed dirt.
- b) Sweeping
Is done using a hand broom. We start by sweeping along the baseboard and collecting dirt in piles as you sweep along. Collect the trash on a dust pan and dispose it in the trash bin. Close the door and windows to prevent wind from blowing back the dirt.
22. first, spray and wipe the countertops and range top, not forgetting to clean the vent hood.
- Sweep the floor and wipe up spills.
 - Scrub the sink with a general purpose cleaner and wipe it dry.
 - Deal with the dishes; unload clean dishes from the dishwasher and take care of hand

- wash dishes as soon as possible
- Tidy up and put things in order.
23. – Do not prepare nor cook root tubers when they have any green, damaged or sprouting bits.
-Check for aflatoxins in cereals or grains before cooking.
-Avoid wearing loose clothes as they can catch fire.
-Handle knives and other sharp objects with care.
-Wipe spilt liquids to avoid accidents.
-Keep safe distance between the source of fire and yourself.
-Do not allow children in the cooking area.
-Do not hold hot cooking utensils and equipment with bare hands.
24. i) personal preference – consider your own taste and preferences. Choose colours that make you comfortable.
ii) Room function – consider the purpose of every room. For example, calm and soothing tones might be suitable for bedrooms while vibrant and energetic colours may work well in social rooms like the living room.
iii) Natural light – Lights affect how colour appears. It is therefore important to consider the amount of natural light that enters a room.
iv) Colour harmony – explore colour harmonies such as complementary, analogous or monochromatic schemes. They help create a beautiful room.
v) Durability – Choose colours that are easy to clean and maintain.
vi) Existing furniture – consider colours of your existing furniture, décor or fixtures. Choose a colour scheme that complements or contrasts with these elements in order to realise a harmonious look.
25. Expectant and lactating mothers, adolescents, infants, older persons, individuals with medical conditions and vegetarians.
26. i) So as to meet all their body nutrients needs
ii) To enable each member to grow healthy
iii) To prevent nutritional diseases
iv) So as to meet each group's feeding habits
27. i) Not planning for enough food
ii) Leaving everything for the last minute
iii) Having a disorganized shopping list
iv) Selecting overly ambitious recipes
28. i) Curtains provide privacy and shade
ii) Bedding and linen provides comfort and warmth.
- iii) Mattresses and bedding provide support and improve quality of sleep and overall health.
iv) Rugs and carpets can help to insulate floors and reduce noise.
v) soft furnishings help to express one's personal style and taste.
29. i) apply the solvent to a clean piece of cloth
ii) Gently scrub in circular motions on the couch.
iii) allow it time to dry up
30. a) Loyal consumers – These are consumers who choose to always make purchases from a specific brand, company or business. They often develop a sense of trust, satisfaction and connection with the brand.
b) Impulse shoppers – These are individuals who make unplanned purchasing decisions. Businesses can get their attention by concentrating on eye-catching displays, strategic product placement, limited time offers, among other strategies.
c) Wandering consumers – These are individuals who engage in leisurely and exploratory shopping without a specific intention. Unlike other shoppers, they enjoy the shopping experience itself, by just moving from one store to another exploring various products without any agenda.
d) Need-based consumers – These are individuals who make decisions primarily driven by their specific and immediate needs.
e) Discount customers – These are individuals who prioritise obtaining products at discounted prices. They are always on the lookout for promotions, sales and discounts to maximize the value of their products.

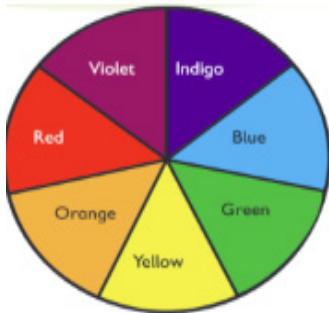
MODEL TEST PAPER FOUR

- polyester, nylon and acrylic
- Consumer creates demand by expressing their preference and needs through purchasing decisions
-Consumer provides valuable feedback to businesses based on their experiences with goods and services
-Consumer drives competition among businesses
-Consumer influences production decisions through purchase and behavior
-Consumer influences quality standards by

demanding products that meet certain criteria for safety and performance.

-Consumer preference drives trends and innovation in the market

3.



4.a) Shade; refers to a hue with the addition of black. It darkens and deepens the original colour.

b) Hue; refers to the pure colour of an object.

c) Tint; refers to a hue (pure colour) with a mixture of white. It lightens and softens the original colour.

d) Value; describes how light or dark a colour is.

e) Intensity; is the brightness or dullness of a colour.

f) Tone; describes a hue with the addition of equal amounts of black and white.

5.a) One wall plan b) Corridor plan

6. a) The family size – Larger families require more bedrooms and communal spaces. This influences the overall layout and size of the home.

b) Cultural and regional influences can shape the design and organization of rooms.

c) Safety and security

d) Budget

e) Personal preferences

7.–Appropriate fabric

-Desired seam allowance

-Type of seam finishing

-Appropriate stitch type

-Press fabric before sewing

-Pin fabric pieces together along seam line

-Basting before sewing

-Appropriate thread and color

-Use a suitable needle

8. a) Expectant and lactating mothers

- Feeding habits – There is increased focus on nutrient rich foods. These include fruits, vegetables and sources of iron and folic acid.

- Food taboos – Some cultures tend to have certain food taboos for expectant and

lactating mothers. The food taboos vary from one culture to the next.

b) Adolescents

- Feeding habits – They should be fed with a variety in diet that contains more carbohydrates because they tend to be more active.

- Food taboos – They may develop body image concerns that influence their food choices. They may also be influenced by dietary trends or foods that their peers prefer.

c) Infants and older children

- Feeding habits – Since their bodies are developing, they should be fed with body building foods to build and develop their muscles.

- Food taboos – Avoidance of foods that could choke them is recommended.

d) Older persons

- Feeding habits – There is emphasis on highly nutritious foods to support overall health. There is adequate intake of calcium and proteins.

- Food taboos – They may avoid certain foods due to dental issues, difficulty chewing or digestive sensitivities.

e) Individuals with medical conditions

- Feeding habits – There is emphasis on foods rich in specific nutrients which they may lack.

- Food taboos – They avoid foods that may interfere with the management of their conditions.

f) Vegetarians

- Feeding habits – There is emphasis on plant-based foods like fruits, vegetables, legumes, nuts and whole grains.

- Food taboos – They tend to avoid foods that are not plant-based.

9.a) Barriers to entry into the marketplace– The ease or difficulty for businesses to enter a market significantly influence competition. For example, when startup costs are high or when regulations are unfavorable, businesses will shy away.

b) The structure of the market, including the number and size of firms, can influence the level of competition in that particular industry.

c) Consumer preferences, which are ever changing, impact the demand for products or services. Businesses are often forced to align with these preferences, leading to shifts in competition, as some products become more popular while others decline.

- d) Advancements in technology can also influence competition in the market. Businesses that adopt technology often gain a competitive advantage in the market.
- e) Government regulations can either promote or hinder competition. Excessive and restrictive regulations discourage competition while those that create a level playing field encourage it.
- f) Market demand – Fluctuations in demand of goods and services can also influence competition in the market. High demand attracts more businesses while low demands lead to more competition among the existing companies

10. Acrylic is lightweight, warm and soft to touch, polyester is rough to touch, nylon is soft and smooth to touch while rayon has a smooth and cool texture when touched.

11.

Fair market competition practices	Unfair market competition practices
i. Ethical conduct	a) Deceptive practices
ii. Transparency	b) Monopolistic behaviour
iii. Diverse participants	c) Anti-competitive agreements
iv. Innovation and quality	d) Predatory pricing
v. Legal compliance	e) Legal violations

12. **TRADERS** **CONSUMERS**

- a) Encourage businesses to innovate new products. Lower prices
 - b) Compete in a fair market environment. Wide range of choices
 - c) Market expansion. Receive better overall experiences
- 13.–Utilizing existing land or unused areas minimize need for additional space
- Choose plants that thrive in local climate and soil
 - Implementing water efficient irrigation methods
 - Recycling and reusing old containers, pots etc
14. a) Avoiding certain foods
- b) Naming – Some cultures wait until the baby is born to officially name the child, believing that naming before birth might bring bad luck.
 - c) Rituals and ceremonies – Some cultures have rituals or ceremonies associated with pregnancy. Some of them are meant to bless the pregnancy while others to protect

the unborn from negative influences.

- d) Avoiding certain activities like attending funerals or going near cemeteries.
 - e) Restrictions on travel – Some traditional beliefs discourage pregnant women from travelling as a way of ensuring her safety.
15. Synthetic fibres; are derived from petrochemicals or other synthetic materials. They are produced through chemical processes in manufacturing facilities.
Regenerated fibres; are derived from natural materials, especially plant cellulose like wood pulp, bamboo or other plant-based materials. They are produced through the chemical processes that transform natural raw materials into fibres.
16. To produce safe, fresh food that is accessible to the family.
It is a reliable source of green leafy vegetables, herbs, fruits, legumes and cereals for home consumption.
Growing of both seasonal and off-season crops that ensures steady supply of nutritious food. Help family to meet their nutritional needs and promotes healthier lifestyles.
Generates income from sale of surplus (excess) produce.
Helps to save family income direct towards purchase of vegetables, fruits and others. Provide alternative when staple foods are not in stock.
Helps to increase food production.
Some form of kitchen gardening use recycled materials like plastics hence contributes to environmental conservation.
17. a) Use of discarded tyres – Using old discarded tyres to form your garden.
b) A simple drip garden – Is established using plastic containers and a wall or a pole. The containers are cut then fixed vertically on a wall or a pole, one above another. At the top of the containers, another container with a hole at the bottom is placed. When the container is filled with water, it drips onto the plants.
c) Container gardening – This means growing crops on containers which have drainage holes at the bottom.
d) Multi storey gardens – Are established using sacks and nets. Holes with diameters measuring about 3cm are cut out on the sack then soil mixed with manure is placed in. Ballast or medium-sized stones are stacked at the center of the sack to form

a midrib through which watering will be done. The sack is then pulled up until it is full and upright.

- e) Wick garden – The garden is established using jerry cans and an improvised wick, for example a shoelace, measuring 30cm long and 2cm width. A jerry can is sliced in such a way that the lower half holds water in which the wick is dipped and the upper half holds the soil. The wick draws water up to the soil where the crop is growing
18. Conspicuous seam; are intentionally visible and become a feature of a garment while inconspicuous seams are designed to be hidden or less noticeable on both finished garments, creating a clean and polished appearance.
- 19.a) Design and use of the garment – Sportswear require stretch seams while work wear may require strong and durable seams.
- b) Fabric type – This is because different fabrics have unique characteristics like texture, stretch or weight.
- c) Ease of construction – Beginners may start with basic seams like plain seams, while experienced sewers may opt for more complex options like French seams.
- d) Cost and time constraints – One can consider the budget and time available for garment production.
- e) Fashion trends – When choosing a seam to use in cloth construction, it is important to consider what the cloth is used for. The trend present at the time should be considered.
20. • The number of people to attend the occasion.
• The preferences and dietary restrictions of the guests.
• The particular occasion, whether a formal dinner or a casual gathering.
• The budget that is available.
• Cultural sensitivity of the attendees.
21. starchy foods (polysaccharides) – Are made up of multiple sugar units. They are found in foods like grains, legumes and vegetables.
22. – Do not prepare nor cook root tubers when they have any green, damaged or sprouting bits.
- Check for aflatoxins in cereals or grains before cooking.
 - Avoid wearing loose clothes as they can catch fire.
 - Handle knives and other sharp objects with care.
 - Wipe spilt liquids to avoid accidents.

- Keep safe distance between the source of fire and yourself.
 - Do not allow children in the cooking area.
 - Do not hold hot cooking utensils and equipment with bare hands.
- 23.a) Complex buying behaviour – These are consumers who conduct extensive research, gather information and evaluate alternatives before purchasing a product.
- b) Dissonance-reducing buying behaviour – These are consumers who can make expensive or risky purchases then feel uncomfortable afterwards.
- c) Habitual buying behaviour – These are consumers who make purchases with minimal research on the product or service.
- d) Variety seeking buying behaviour – These are consumers who compare the prices and quality of goods and services before they make a purchase.
- 24.i. Darts
- Fold the fabric along the dart's stitching line
 - Taper to a point or both ends
 - Sew the dart from the wider part towards the point
 - Press flat
- ii. Pleats
- Fold and stitch to secure the pleats
- iii. Tucks
- Fold and stitch to secure tucks providing a structured appearance and controlling excess fabric
- iv. Gathers
- Sew loose, even stitch along a designated line
 - Pull the thread to gather the fabric
- v. Easing
- Sew a slightly stretched fabric into a shorter piece.
25. – Clear the kitchen area below the ceiling
- Start by removing loose dust and cobwebs from the ceiling surface
 - Fill a bucket with warm water and add a small amount of dish soap or mild detergent
 - Dip a soft sponge or cloth into the soapy water wring out excess water to avoid drips.
 - Start from the corner of the ceiling gently wipe the surface in smooth overlapping strokes paying attention to areas near light fixture or vents
 - Allow the ceiling to dry naturally
 - Inspect for missed spots and spot clean
26. Gelatinisation is the process through which solid starchy foods thicken and soften when

added to liquid foods while caramelisation is the process through which solid starchy food are heated, resulting in the browning and development of complex flavors and aromas.

27. Meal presentation is the art of modifying, processing, arranging or decorating meals to enhance its beauty or appearance while table setting is the arrangement of dishes, utensils, glassware and other items on a dining table for a meal

28.



29. a) The living room can be connected to the dining area so that the family can enjoy entertainment while in either rooms. It is also adjacent to the kitchen for easy access and communication.
- b) The dining area is located near the kitchen for convenient serving of meals. It can also have an open layout with the living room to encourage social interaction during meals.
- c) The kitchen is close to the dining area for efficient meal service. It can also be connected to the living room to allow parents to supervise children while preparing meals.
- d) The bedrooms may be close enough for the parents to monitor young children.
- e) Bathrooms are always near bedrooms for easy access at night.
30. a) Space available – The kitchen layout depends mostly on the available space especially for the placement of the three basic kitchen equipment; the sink, range and refrigerator.
- b) Interrelationship between the working areas – Closely related centres are placed next to each other to minimise movement in terms of distance.
- c) Workflow and efficiency – Consider the natural flow of activities in the kitchen.

Working areas should be placed in a sequence that minimises unnecessary movement during food preparation.

- d) Safety – Safety considerations should be prioritized. Heavy items and frequently used utensils should be within reach to minimize strain.
- e) Natural light and ventilation – Work areas should be near windows to enhance visibility and create an inviting atmosphere.
- f) Traffic flow – Avoid placing working areas in high-traffic zones to prevent congestion during meal preparation.

MODEL TEST PAPER FIVE

1. Burnt test and Microscopic test

2.

Fibre	approaching	stationery	withdrawing	odour	reduce
Nylon	Draw away And melts	Melts, burns, drips	Burns with difficult	Celery	Hard beads Cream colour or dark
polyeste	Melts before contact	Melts for a while. It is self-extinguis hing	Stops burning	Sweet fruit chemical smell	Hard beads cream colour or dark

3. –Offer reassurance, encouragement and empathy especially during moments of stress or uncertainty
- Accompany mother to prenatal visits
 - Stay with mother during labour
 - Take photos or videos to capture special moments during childbirth if desired by the mother
4. Items in a home that are made from fabric and textile used for decorative and functional purposes to enhance comfort, aesthetic and ambience
5. a) Curtains provide privacy and shade.
- b) Bedding and linens provide comfort and warmth.
- c) Mattresses and bedding provide support and improve quality of sleep and overall health.
- d) Rugs and carpets can help to insulate floors and reduce noise.
- e) Soft furnishings help to express one's personal style and taste.
6. a) Throw pillows
- b) decorative sofa backthrows
- c) Curtains
- d) Table mat
- e) Curtains
- f) Sculpture
7. The sitting/living room – Used for relaxation,

- entertaining guests and watching television. It has seats, tables and other furniture.
- b) The dining room – It is used during meal times. It has furniture for seating during eating and others for storing dining materials.
- c) The kitchen – Is used for preparing meals.
- d) The bedroom – Is used for relaxation and sleeping after the day's work. The main furniture in the room is the bed. Other furniture, like wardrobes or dressing tables, can also be found in the bedroom.
- e) The sanitation area – Used to attend to nature calls and for bathing.
- f) The storage area – Is used for storage of different essentials
8. a) Sweeping b) Dusting c) Wiping
d) Mopping e) Scrubbing
f) Vacuum cleaning
9. a. Sweeping-handbroom
b. Dusting -feather, dusters or rugs.
c. Wiping -damp or wet clothes, sponges or cleaning wipes.
d. Mopping -A mop
e. Scrubbing -scrub, brushes, abrasive pads or some sponges
f. Vacuum cleaning -vacuum cleaner
- 10.a) Sweeping
- Is done using a hand broom.
 - Start by sweeping along the baseboard and collecting dirt in piles as you sweep along.
 - Keep a trash bin nearby to easily dispose of the trash.
 - Close the door and windows to prevent the dirt from being blown back by wind.
 - Note that earthen floor should be sprinkled with water before sweeping to avoid raising a lot of dust while sweeping.
- b) Dusting
- Is primarily aimed at removing loose particles such as dirt, dust or small debris from surfaces.
 - The common tools used include feather dusters or rugs.
 - It involves gently sweeping or brushing the surface to lift and collect loose particles without necessarily wetting the surface.
 - It is suitable for surfaces that accumulate fine particles like shelves or table tops.
- c) Wiping
- It involves removing both loose particles and fixed dirt.
 - It involves the use of damp or wet clothes, sponges or cleaning wipes.
- A cleaning solution or water is applied to the surface then a cloth or sponge is used to scrub and remove both loose and fixed dirt.
 - It is suitable for surfaces that accumulate both loose and fixed dirt that require more effort to clean such as kitchen countertops.
- d) Mopping
- Is intended to remove dirt, spills, stains and other contaminants from the surfaces of a floor.
 - A mop is used for mopping.
 - It involves wetting the mop in water or a cleaning solution, wringing out the excess liquid and then moving the mop over the floor to pick up dirt and stains.
- e) Scrubbing
- It is intended to remove stubborn or fixed dirt on surfaces that cannot be easily removed through a regular wiping or mopping.
 - Various tools can be used including scrub brushes, abrasive pads or some sponges.
 - It involves applying pressure and friction while using the scrubbing tool to remove and lift dust or stains. Circular or back-and-forth motions are commonly used.
- f) Vacuum cleaning
- It is designed to effectively and efficiently remove loose particles, dust and debris from floors, carpets and other surfaces.
 - A vacuum cleaner is used.
 - The vacuum cleaner uses suction to lift dust and particles from surfaces. The cleaner is moved back and forth in a specific pattern over the area being cleaned
- 11.-Traditional Houses The materials are cheap
-Traditional methods reflect local customs, building technique are deeply rooted in cultural heritage
-Designed to suit local climate and environments
12. Tint refers to a hue (pure color) with a mixture of white. It lightens and softens the original color while Shade refers to a hue with the addition of black. It darkens and deepens the original color
- 13.a) Personal preference – Consider your own taste and preferences. Choose colours that make you comfortable.
b) Room function – Consider the purpose of every room. For example, calm and soothing tones might be suitable for bedrooms while vibrant and energetic colours may work well in social rooms like

the living room.

- c) Natural light – Lights affect how colour appears. It is therefore important to consider the amount of natural light that a room receives.
 - d) Colour harmony – Explore colour harmonies such as complementary, analogous or monochromatic schemes. They help create a beautiful room.
 - e) Durability – Choose colours that are easy to clean and maintain.
 - f) Existing furniture – Consider the colours of your existing furniture, décor or fixtures. Choose a colour scheme that complements or contrasts with these elements in order to realize a harmonious look
14. Monochromatic colour scheme – This utilises the use of only one colour with varying levels of saturation, value and lightness. This creates a harmonious and cohesive look without introducing other colours.
15. Corridor plan
- i. Advantages
 - Efficient use of space
 - Provide a linear work with work areas arranged along two parallel walls
 - . Disadvantages
 - Limited space can feel cramped
 - Not ideal for open concept living
 - b. L-shaped kitchen
- i. Advantages
- Efficient layout that maximize corner spaces
 - Offer good flow between work zones within a compact area
- ii. Disadvantages
- Limited space for multiple cooks or larger gathering
- c. U-shaped kitchen
- i. Advantages
 - Provide a maximum storage and counter space utilizing three walls of the kitchen
 - Ideal for larger families
 - ii. Disadvantages
 - May lack natural light and ventilation
- d. Island kitchen
- i. Advantages
 - Offer flexibility for various designs styles and configurations
 - Enhance workflow by centralizing key kitchen activities around the island
 - ii. Disadvantages
 - Can be costly
16. i) Safety and security
- ii. Family size – larger families require more

bedrooms and communal spaces. This influences the overall layout and size of the home.

- iii. Budget
 - iv. Personal preferences
 - v. Cultural and regional influences can shape the design and organization of rooms.
17. a) Eating a balanced diet ensures that both the mother and the baby get adequate nutrients for healthy growth and development
- b) Exercising improves the health and the mood of the mother and the baby,
 - c) Visiting ante natal clinic enables the expectant mother to have clinical routine check to monitor her health and that of the unborn baby.
18. i) Climate and season
- ii) Size and growth
 - iii) Ease of dressing
 - iv) Functionality
19. i) sort them according to colour and fabric
- ii) wash them starting with the bright colours. Use mild detergents.
 - iii) put a fabric conditioner in the final rinsing water and hung them to dry.
 - iv) once dry, fold them and store them in a clean place.
20. a) Darts
- b) Pleats
 - c) Easing
 - d) Gathers
 - e) Tucks
21. a) Budget
- b) Fabric type
 - c) The style of the garment
 - d) The position where the fullness is to be controlled
 - e) the purpose of the garment
 - f) The desired appearance
22. making a pillow case using an open seam
- cut two equal pieces of fabric based on the size of the pillow
 - on the wrong side, mark a seam allowance of 2cm all around the two pieces
 - pin the two pieces of fabric, the right sides together
 - stitch along the seam line on three sides of the fabric
 - Open the seams and finish them using any method of neatening the edges. Press the seams open.
23. In an open seam, the seam allowance is pressed open after sewing while a plain seam, the whole seam is pressed to one side after

- sewing.
24. Artificial fibres
Synthetic fibres 1. Polyester 2. _____
Acrylic _____ 3. Nylon
Regenerated fibres 1. _____
Viscose rayon 2. _____ Acetate rayon _____
25. Burning test, Feeling test, Microscopic test,
Chemical test and Stain test
26. a) Encourages innovation
b) Leads to diverse product offering
c) Influences businesses to improve the quality
of their products
d) competition empowers consumers by
providing them with choices
e) Leads to affordable prices for the
consumers
f) Prevents monopoly and encourages entry of
new businesses
27. a) Loyal customer
b) Wandering consumer
c) Impulse shopper
d) Need-based consumer
e) Discount customer
28. i) Dietary restrictions
ii) A mix of each of the nutritional
requirements
iii) Portion size should be enough for both the
mother and the fetus
iv) Should be highly rich in calcium and iron
29. – Do not prepare nor cook root tubers when
they have any green, damaged or sprouting
bits.
-Check for aflatoxins in cereals or grains
before cooking.
-Avoid wearing loose clothes as they can catch
fire.
-Handle knives and other sharp objects with
care.
-Wipe spilt liquids to avoid accidents.
-Keep safe distance between the source of fire
and yourself.
-Do not allow children in the cooking area.
-Do not hold hot cooking utensils and
equipment with bare hands.
30. A table, table clothes, napkins, placemats,
cutlery, water glass, center piece, dinner plates
and side plates

COMPUTER SCIENCE ANSWERS

1.0 FOUNDATION OF COMPUTER SCIENCE

1.1 Computer Case

Revision exercise 1.1

1. The procedure for disassembling a computer case
 - a) Shut down the computer correctly.
 - b) Switch off the power supply at the socket. Unplug the connecting cable.
 - c) Place the computer on a clean space. Have a clean container or tablecloth to keep crews safe from getting lost.
 - d) Remove the computer cables from the computer case. Touch an earthed metallic object to discharge any static electricity.
 - e) Unplug all cables from the computer. These cables include those that connect the power supply, the mouse, the keyboard, the printer, the monitor and any other devices connected to the ports.
 - f) Unscrew the computer case cover.
 - g) Detach the CPU, the fan and the heat sink.
 - h) Remove the power supply.
 - i) Remove the CD and DVD.
 - j) Remove the hard drive.
 - k) Remove the RAM chips.
 - l) Remove the motherboard.
2. Components housed in a computer case
The motherboard, the Central Processing Unit, Random Access Memory, hard drive, Power supply unity, computer cables.
3. A tool required for disassembling and assembling a computer case is a **screwdriver**.
4. Safety precautions to observe when disassembling a computer case
 - a) Shut down the computer correctly.
 - b) Discharge any static electricity by touching an earthed metallic object.
 - c) Disconnect the computer from the power supply.
5. Factors should he consider when choosing a computer case are form factor, power supply,

ease of assembly and maintenance, cooling and the number of drive slots.

6. The best practices for managing computer case waste are recycling and reusing.
7. The items that can be made from computer case waste are a bench, table, book shelf, a house plant display and planting containers.
8. The computer component supplies power to the motherboard and other hardware is Power Supply Unit.
9. Important of managing computer motherboard waste
 - a) It saves natural resources.
 - b) It creates employment.
 - c) Precious metals are recovered for reuse in manufacturing processes.
 - d) It saves landfill space.
 - e) Water sources, plants and the soil are protected from pollution.
 - f) Chemicals and metals that may harm animals and people are kept away.

1.2 Computer motherboard

Revision exercise 1.2

1.
 - a) Motherboard connects all parts of a computer system.
 - b) Motherboard supplies power to all the components of a computer system.
 - c) Motherboard provides expansion slots where devices such as graphic cards, audio cards and video cards are mounted.
2. Importance of managing computer motherboard waste
 - a) New items can be made from recycled motherboard waste.
 - b) Environment is protected from harmful chemicals and metals.
 - c) Reusing saves the landfill space.
3. Products that can be made from motherboard waste
A pen holder, clipboards and a picture frame

4. The components of a computer motherboard
 - Slots for plugging in RAM chips, expansion cards and graphic cards
 - Internal and external connectors
 - Form factor determines the size of a computer.
 - CPU socket for holding CPU chip in place
5. Importance of the following parts of a motherboard
 - a) CPU slots- For holding CPU chip.
 - b) RAM slots- For holding RAM chips.
 - c) Power connectors- For distributing power to the computer system.
 - d) Expansion slots- For holding expansion cards.
6. Musa wants to purchase a computer motherboard. Explain the factors he should consider.

Answers: Form factor, expansion slots, CPU socket and RAM slot.

7. Basic procedure of mounting computer components on a motherboard

Safety tip: Make sure the power is switched off and computer system is unplugged. Use anti-static gloves. This will prevent electrocution.

<p>a) Mounting hard disk</p> <ol style="list-style-type: none"> 1. Locate the hard drive slot. 2. Insert the hard disk. 3. Secure the hard disk and tight the screws. 4. Connect the hard disk to the motherboard using correct cables. 	<p>b) Mounting power supply unit</p> <ol style="list-style-type: none"> 1. Locate the PSU socket. Insert the PSU. 2. Secure the PSU in place. 3. Connect the PSU to the motherboard using correct cables.
<p>c) Mounting CMOS battery</p> <ol style="list-style-type: none"> 1. Locate CMOS battery socket. 2. Slide the CMOS battery into the socket. 3. Press the CMOS battery on top to fit in. 	<p>d) Mounting CPU</p> <ol style="list-style-type: none"> 1. Locate the CPU socket. 2. Plug the CPU into the socket. 3. Align the CPU properly with socket.

<p>e) Mounting RAM</p> <ol style="list-style-type: none"> 1. Locate RAM slots. 2. Slide the RAM chips into the slots. 3. Press the RAM chips to align with slots. 	<p>f) Mounting graphics card</p> <ol style="list-style-type: none"> 1. Locate the graphics card slot. 2. Mount the graphics card. 3. Secure the graphics card in place.
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8. Safety measures you would observe when mounting the computer components on a motherboard
 - a) Follow instructions for handling and mounting computer components on the motherboard.
 - b) Turn off the computer and unplug it from the power source.
 - c) Use ant-static gloves.
9. The chemicals and metals from motherboard waste can harm human beings, soil and the plants. It does not save the landfill space. Precious metals used during manufacturing process are wasted.

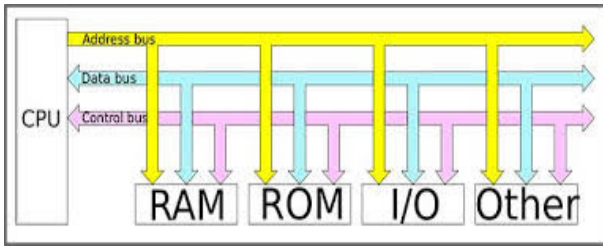
1.3 Computer buses

Revision exercise 1.3

1. Computer buses are pathways of communication that transmit data and information between computer components.
2. Data bus is a bidirectional bus that carries data from the processor and other computer components.

Control bus is a unidirectional bus that carries control signals from the processor to other computer components. Address bus is a unidirectional bus that carries memory addresses from the processor to other computer components.
3. Data bus is a carries data signals from the processor and other computer components. Control bus carries control signals. Address bus carries memory addresses from the processor to other computer components.

4. This is how computer buses connect the CPU to the components.



They allow sharing of data between the computer and the devices connected to it. Control bus carries control signals from the processor to other computer components.

1.4 Visual Display Unit (VDU)

Revision exercise 1.4

- VDU is an output device which enables the computer user to view texts, videos and images on a computing device.
 - ATM screen, laptop screen, mobile phone screen
 - It displays content that is running in a computer.
 - It is used to enter data into a computer and display it on screen.
 - It serves as an input and an output device.
 - Factors she is supposed to consider when selecting a computer VDU with a quality display
 - The cost has to be within the budget.
 - The VDU must be easy to carry (portability).
 - High resolution- The VDU should display visual content clearly.
 - The pictures and videos displays must be in multicolours.
- Factors to consider when purchasing the printer that is best suited for the printing task.
 - The cost should be within the budget.
 - The printer should be very efficient. It should also produce coloured printouts.
 - The size of printer shows where it will be used. It should be portable also.
 - The printer should allow multi-functionality-scanning, printing and connecting to the Internet.
 - The printer brand should guarantee quality.
 - The printer should be environmental friendly.
 - The printer should be easy to access, connect and use. It should be also durable.
 - Key features to look for when selecting a printer
 - Colour is considered whether the printouts are needed in black and white or in full colour.
 - Duplexing ability- To duplex is to print on both sides of paper to minimise paper wastage.
 - Printing capability-The printer should have a good speed, be efficient in handling paper and give quality output.
 - Donate old printers to institutions that can reuse or recycle them.
 - Reuse paper to print other work. Reuse printed paper to make artworks and simple crafts.
 - Technological advancements in printers that improved their efficiency and functionality
 - Ability to print in full colour.
 - Ability to print on both sides of paper to minimise paper wastage.
 - Ability to scan, print, copy files and produce high quality print-outs.
 - Ability to connect to the Internet and print documents.

1.5 Printers

Revision exercise 1.5

- Impact printers and non-impact printers
- Dot matrix printer, inkjet printer, 3D printer, laser printer, daisy wheel printer
- Thermal printer produces black text or pictures by pressing a heated thermal printhead against a medium. They are frequently utilised in the production of labels, receipts, barcodes, ID badges and a variety of other applications.

1.6 Primary Storage Overview

Revision exercise 1.6

- The primary memory is the memory of a computer that is used to store data and instructions.
- Primary memory of a computer is located on the motherboard.

3. How CPU relates to primary memory in a computer
 The primary memory is directly accessible to the Central Processing Unit.
 CPU reads instructions stored in the primary memory. It then executes the instructions as required. High primary memory make the CPU process the tasks at a high speed.
 Data and information are stored in the primary memory. This enables us to work using computer. When the computer user closes the program after saving the work, the content is automatically saved in the primary memory. The primary memory stores data for a short period. That means the user must save the work, to store data permanently in secondary memory. The data stored in the primary memory is determined by the task the computer user is performing. Therefore, when the computer opens a program, the primary memory space for the program is empty waiting for the user to perform a task.
4. Random Access Memory (RAM) and Read Only Memory (ROM)
5. Assess the learner's answers.
6. Primary storage memory stores data and information temporarily.
7. In the modern world, computers have advanced memory to accommodate more data and information. For example, 16BG RAM, 32BG RAM, 64BG RAM, 128BG RAM

1.7 Random Access Memory (RAM)

Revision exercise 1.7

1. The purpose of a RAM in a computer
 - a) It is used as a cache memory for the CPU to store data.
 - b) This type of RAM allows each bit of data to be stored in a separate capacitor within a specific integrated circuit.
2. Static Random Access Memory (SRAM), Dynamic Random Access Memory (DRAM)
3. The different types of RAM affect a computer's performance
 - a) SRAM allows storage of each bit of data in a separate capacitor within a specific integrated circuit.
 - b) DRAM is used as a cache memory for the CPU to store data.
4. The content in RAM is retained as long as the computer is powered. When the computer is turned off or there is power failure, the content is lost.
5. When the computer is turned off or there is power failure, the content is lost.
6. The characteristics of RAM
 - a) RAM is the primary memory of a computer.
 - b) It stores temporary information in a computer. It stores data that is active in use.
 - c) It is an internal memory of the computer.
 - d) RAM is the fastest memory. It faster to read and write than other kind of storage.
 - e) It determines the speed of a computer. It allows data storage and fetching to be done quickly.
7. The advantages and disadvantages of RAM

Advantages	Disadvantages
a) DRAM is used as a cache memory for the CPU to store data.	• SRAM allows storage of each bit of data in a separate capacitor within a specific integrated circuit.
b) DRAM has short data lifetime while SRAM has long life.	• SRAM has long life.
c) DRAM consumes less power.	• SRAM has high power consumption.
d) DRAM is refreshed continuously to keep the data updated.	• SRAM keeps its contents as long as power is available.
e) DRAM is slower as compared to SRAM.	• SRAM is utilised as cache memory and has very rapid access.

8.

Steps for storing and accessing data in RAM

1. User creates and types a new document.
2. RAM temporarily stores the document that the user is typing.
3. The user edits and updates the document.
4. The saved document is accessed from the hard disk and copied onto RAM.
5. Document is saved on the hard disk.

1.8 Read Only Memory (ROM)

Revision exercise 1.8

1. ROM is a non-volatile type of memory that can only be read.
2. Masked, Programmable, Erasable Programmable and Electrically Erasable Programmable ROM
- 3.

RAM	ROM
It is a volatile memory because it stores data as long as electric power is on.	It is a non-volatile memory because it retains data even when power is off.
Data stored in RAM can be retrieved and altered.	Data stored in ROM can only be read.
The CPU can directly access RAM.	The CPU cannot directly access ROM.

4. Functions of ROM in a computer system

- a) PROM: Programmable Read-Only Memory stores data permanently and can only be written to once, usually during the manufacturing process. This can be programmed once but cannot be changed afterwards. It can only be read from.
- b) MROM: Masked Read-Only Memory stores data permanently and cannot be altered or deleted by the user.
- c) EPROM: Erasable Programmable Read Only Memory can be erased and reprogrammed using UV light. It can be erased and reprogrammed using electrical voltage. EPROM erasers and programmers are special devices that use Ultra Violet light to erase

EPROM. This memory is very versatile. It must be removed from the computer in order to be erased.

- d) Flash memory: This allows data to be quickly erased and reprogrammed in blocks. This type of memory can be quickly altered.
 - e) EAROM: Erasable Programmable Read Only Memory can be read, erased and re-written. The ROM chips are not removed from the computer in order to be erased. One can select locations to be erased and programmed and leave others unchanged.
 - f) EEPROM: The Electrically Erasable Programmable Read Only Memory functions the same way as the EAROM. It is erased electrically.
5. ROM chips are used in computers and also in other electronic gadgets such as microwave ovens and washing machines. ROM stores instructions that are required to start and run a computer.
 6. ROM chips are used in electronic gadgets such as microwave ovens and washing machines.
 7. We can model remote-controlled toys such as toy cars and sell to make money. This also protects the environment as locally available materials are used.

1.9 Special Purpose Memory

Revision exercise 1.9

1. Special purpose memory is a type of memory that increases the overall performance of data and instructions moving in and out of the CPU.
2. Special purpose memory is found in CPU, input and output devices.
3. Special purpose memory is found in CPU, input and output devices.

4.

a) Cache Memory	This is a type of high-speed memory that is built into a CPU or located on a separate chip close to the CPU. It is located on the processor itself. It makes the computer faster. It acts a buffer between the RAM and the CPU. Cache memory holds copy of instructions currently being used by CPU.
b) Registers	<p>This is a type of memory that is built into a computer's CPU. Registers include:</p> <ul style="list-style-type: none"> • Control registers that hold one piece of data at a time. • Accumulator register that holds the results of the last processing of the ALU temporarily. • Instruction register holds an instruction just before it is interpreted into a form that the CPU understands temporarily. • Address register temporarily holds the next piece of data that is waiting to be processed. • Storage register temporarily holds one piece that is on its way to and from the CPU and the main memory.
c) Buffers	<p>A buffer is a temporary storage area in computer memory.</p> <ul style="list-style-type: none"> • It is used to hold data that is being transferred between devices or between different parts of a computer program. • It temporarily holds data or instructions between the communicating elements. Buffers can hold more than one piece of data at a time. • Buffers sets free the CPU to perform other duties instead of waiting for data to be output.

5. Buffers are useful when printing documents. The computer system automatically creates a buffer. It fills buffer with the data of the document so that it avoids waiting before processing the next page.

5. Special purpose memory is a type of memory that increases the overall performance of data and instructions moving in and out of the CPU.

1.10 Secondary storage concepts

Revision exercise 1.10

1. a) Fixed secondary storage devices are fixed in the system unit.
 - b) Removable secondary storage devices can be plugged into and out of the computer.
2. Solid state drives- *USB flash drives, memory cards*
Magnetic storage devices- *hard disk drive*
Optical storage devices- *compact disc*
3. a) Data size is the amount of data to be saved in the storage device.
 - b) Security of the data is the safety of the data stored on the device.
 - c) Compatibility is the ability to work harmoniously with the existing computer system.
 - d) Cost-The storage device should be affordable depending on the budget.
 - e) Durability is the lifespan of the storage device.
 - f) Portability is the ability to carry with ease from one location to another.
4. a) Direct access method- The read and write head of the storage device moves directly to any point on the storage device to retrieve a file or record on the storage device.
 - b) Serial access- To read a file or record, the read and write head scans through all the data that comes before the file or record that is being retrieved.
 - c) Sequential access- The files or records are stored on the storage device in a specific order which speeds up access. The files and records are not read at random but in sequence.
5.
 - a) Capacity- The amount of data that a storage device can accommodate.
 - b) Speed- The rate at which the storage device can store data.

- c) Durability is the lifespan of the storage device.
 - d) Cost-The storage device should be affordable depending on the budget.
6. Accept the learner's correct responses.
7. Accept the learner's correct responses.

1.11 Fixed Storage Devices

Revision exercise 1.11

1. A fixed storage device is an internal device found in the system unit.
2. Hard disk, solid state drives and internal flash memory.
3.
 - a) Fixed storage devices are non-volatile because they retain data when power is switched off.
 - b) Fixed storage devices can store a large amount of data depending on their storage.
 - c) Direct access method is used to read data saved in fixed storage devices.
 - d) Data is stored in locations that have unique addresses.
4. Writing data is saving data. Reading data is retrieving data from a fixed storage.
5. Open a file and accessing documents saved in it.
6.
 - a) It is cheaper than a solid-state drive.
 - b) It is readily available in the market.
 - c) It has a large storage capacity.
7.
 - a) Delete the unnecessary content to create space for reusing.
 - b) We can recycle them to make new items.
8. We keep the environment free of digital waste.

1.12 Removable Storage Devices

Revision exercise 1.12

1. A removable storage device is a device that can be plugged into a computer to transfer data and information from one computing device to another.
2. Portable hard disks, memory cards, flash drives
3. Writing data is saving data in a storage media. The data is transferred from the main memory of the computer to the secondary storage device. Writing data on a Compact Disk is

called burning.

The computer user inserts the storage device on the drive or the USB port.

Steps to follow:

- a) Click on Start on the computer once the USB is inserted into the port.
 - b) Double-click on the removable disk that can be seen on the screen.
 - c) Open the folder to copy the file to the USB drive.
 - d) Right-click on the USB interface that has been plugged into the computer.
 - e) Select the location where you want to save the file on the USB drive.
 - f) Select paste to transfer the file to the USB drive to complete the task.
 - g) Eject the USB drive safely from the computer.
4.
 - a) Saving the data once in a while as you type to avoid loss of data in case of power loss.
 - b) Back up data in removable storage devices such as removable hard disk in case computer fails to work.
 5. Handling waste responsibly reduces harmful impact on environment. Electronic waste contains dangerous chemicals and heavy metals that could harm our health.

1.13 Cloud Storage in computing

Revision exercise 1.13

1. Cloud storage is the type of storage that is provided over the Internet.
2.
 - a) Private cloud- Examples of private cloud storage are IBM Cloud Private, VMware iCloud Director and Microsoft Azure Stack.
 - b) Public cloud-Amazon Cloud Drive, Google Drive, Dropbox, OneDrive and Microsoft Azure
 - c) Hybrid cloud- AWS Outposts, Azure Stack Hub and Google Cloud Interconnect.
3. **Steps to follow when saving data in Google Drive**
 - a) Log into your Gmail account. You may create one if you are first time user.
 - b) Go to drive.google.com.

- c) Open or create a folder.
 - d) Choose the command File upload or Folder upload from the menu.
 - e) You may also drag the folders or files into the Google Drive folder.
4. a) Benefits he enjoys by using cloud storage
 1. Customers only pay for the storage they use resulting in cost savings.
 2. It is easy to store and access data in cloud storage.
 - b) Challenges he encounters in using cloud storage
 1. Cost can be high for the companies that require large storage.
 2. Uploading and accessing data requires Internet connectivity.
 - a) Ways in which he can ensure data is secure
 1. Use of strong passwords to verify user's identity during the authentication process makes it more difficult for unauthorised users to gain access.
 2. We can choose trusted providers who adhere to industry security standards, implement robust security measures and often undergo regular security audits. This approach minimises the risk of data exposure. It also provides users with confidence that their data is stored in a secure and reliable environment.
 3. Designing robust access control measures such as user authentication and authorisation can help ensure that only authorised individuals have access to data.
 4. Regularly conducting vulnerability assessments involves systematically scanning and analysing a cloud environment for potential security weaknesses. This process helps identify vulnerabilities that could be exploited by malicious actors.
 5. Technological developments that have been made in cloud storage
 - a) Internet of Things is the connection of computing devices that are embedded in gadgets we use in daily lives enabling us to send and receive data.
 - b) Artificial Intelligence is the ability of a machine

to display human-like capabilities such as reasoning, learning and making decisions.

END OF STRAND 1 ASSESSMENT

1. It is the enclosure that houses the components of a computer.
2. Desktop case is flat and box-shaped and is designed to be placed on top of a desk. Tower case is built to stand tall and is commonly placed on the desk or on the floor. All-in-one case is a computer case in where the monitor and the system unit are designed as a single piece of hardware.
3. A tower, a box, a system unit, a base unit, an enclosure, computer housing, a chassis and a cabinet.
4. It is by touching an earthed metallic object.
5. Power supply unit
6. Form factor which refers to size, type and physical arrangement of the computer case. The number of drive slots he plans to install such as CD drive, the hard drive, the floppy drive and the DVD drive. Power supply should have sufficient capacity to power the computer. Cooling mechanism should allow the fan to be mounted to cool specific parts such as the CPU and the RAM modules.
7. Making planting container, a house plant display, book shelf and a bench.
8. A computer motherboard is the main printed board found inside the system unit of a computer and is regarded as the backbone of a computer.
9. Serial port for keyboard, USB port, power connector, memory slots, CMOS battery, connector for DVD, CD and MP3 players
10. Locate the RAM slots, holding the sides of the RAM chip, insert it into the RAM slot ensuring proper alignment of the chip and the slot.
11. Address bus, data bus, control bus
12. Assess the learner's drawing.
13. Mobile phone, TV, laptop, ATM machine
14. They display the content stored in a computer. Touch screen is used to enter data into a device and display it on a screen.

15. The Cathode Ray Tube is the technology used in traditional computer monitors and television sets. Liquid Crystal Display is a flat panel display technology that is thinner than CRTs. LCD technology is commonly used in television sets and computer monitors.
16. A Dot Matrix printer is an example of an impact printer. An inkjet printer and 4D printer are examples of non-impact printers.
17. A printer t-shirt, a printed poster, a printed mug, a printed billboard.
18. Impact printers are slow while non-impact printers are faster. An example of impact printer is a dot matrix printer while non-impact printer is an inkjet printer.
19. Reuse paper, reuse printed paper, encourage use of soft copy output, donate printer accessories.
20. Inkjet printer since it produces coloured photos.
21. RAM and ROM.
22. Primary memory is located on the motherboard of a computer.
23. Assess the learner's answer.
24. Tablet (16 GB), laptop (8 GB RAM, desktop computers (4GB RAM), mobile phones (2GB RAM)
25. It is volatile meaning that the content in RAM is retained as long as the computer is powered. RAM is user-defined meaning the content is loaded into RAM.
26. Give the types of ROM. Answer: Masked, programmable, Erasable Programmable and Electrically Erasable Programmable ROM.
27. RAM is volatile while ROM is non-volatile.
28. Cache memory is a special type of memory that is made using Static Random Access Memory. Buffers are a type of special purpose memory that are found in input and output devices and they compensate for the speed difference between the processor and input and output devices.
29. Fixed or removable
30. Data size, speed, cost and security.
31. They are no longer in use due to technological advancement that has led to emergence of new storage devices.
32. CDs, DVDs and hard disks.
33. They retain data for future use and are useful for creating backups.
34. Hard disk
35. Internal flash memory, solid-state drive and hard disk drives.
36. It cheaper than SSD.
37. Click on Start>Computer once the USB is inserted into the port. Double-click on the removable disk that can be seen on the next screen. Go to the folder from where you want to copy the file to the USB drive. Return to the USB interface once again and right-click. Select Paste to transfer the file or data to the USB drive to complete the task.
38. Cost-effective, highly scalable, universally accessible, creates automatic data backups.
39. Sign in to dropbox.com. Locate the file you need to access. Click to open the file that you need or you may work on the file while it is in cloud storage. Download the file.
40. Easy to use, economical, better security, global availability.

2.0 COMPUTER AND THE SOCIETY

2.1 Computer system failure

Revision exercise 2.1

1. This is a situation in which computer components fail to function due to various reasons.
2.
 - a) Audio issues'
 - b) Damage to motherboard, hard disk and operating system file due to power failure.
 - c) Computer files, programs and even the hard disk can be attacked by virus.
3.
 - a) Malware or virus: Malicious software can damage system files, steal data or cause the system to behave unpredictably. It also reformats the hard drive.
 - b) Compatibility error: It occurs when there is an incompatibility between hardware, software or data formats that prevent them from functioning together as is expected. This leads to errors, crashes, performance issues or security in the computer system.
 - c) Driver problems: Outdated or incompatible drivers for hardware components can lead to system instability and crashes.
 - d) Power interruption: When a computer is unexpectedly shut down due to power interruption, the OS and the connected storage devices may not be able to save data properly. This may lead to file corruption or physical damage to the storage drives.
 - e) Processor failure: Dysfunctional CPU makes the system cannot operate correctly. CPU failure can result from manufacturing defects, overheating or over locking that is beyond safe limits.

- f) Overheating may occur when there are inadequate cooling solutions, dust build-up inside the system or running demanding tasks that strain the hardware for longer periods.

4.

Type of computer failure	Solution
If keyboard and mouse stops working	Ensure that the cables are plugged into the computer ports properly.
If the computer is unable to boot	Check the power cable to ensure that it is plugged correctly to the power source or to the back of the system unit.
Inability of monitor to display information	Ensure the monitor is properly plugged into the power source. Check if the computer system is turned on.
If the computer system automatically restarts	Scan the computer system for viruses and malware.

5.
 - a) Use surge protector- This is an electrical device that is used to protect the computer system from electrical power surges and voltage spikes.
 - b) Use of antivirus- This software scans, detects and destroys any computer viruses present in a computer system.
 - c) Use of back-ups- These are duplicated copies of the original files or databases.
6.
 - a) Recycling and reusing computer components to make new resources that can be sold or utilised in new ways.
 - b) Donating malfunctioning computer systems which can be repaired to begin functioning.

7. The environment is protected from digital waste.
 - a) It saves landfill.
 - b) It promotes innovativeness as new items are made.
 - c) It creates employment as people make and sell items.
8.
 - a) Software loads fast and smoothly.
 - b) Hardware components operate well without failure.
 - c) The processing speed is good.

2.2 Living with Computer Technology

Revision exercise 2.2

1.
 - a) Internet
 - b) Desktop computers
 - c) Laptops
 - d) Mobile phone apps
 - e) Home theatre
 - f) Audio
2.
 - a) Mental health issues- It results to addiction.
 - b) Lack of privacy- Personal information can be accessed by other people online.
 - c) Decreased communication- Computer users become more isolated due to limited interaction.
3.
 - a) It enables easy access to information through the Internet.
 - b) It facilitates fast and cheaper communication among people.
 - c) Facilitates sharing of information among people.
4. Health services such as downloading videos on physical activities to keep fit.
5.
 - a) Health- computers keep the records of patients as well as monitoring the patients.
 - b) Education- Computers have facilitated access to online learning resources this benefits the learners immensely.
 - c) Entertainment- Playing Internet games using gaming consoles or downloading game applications.

2.3 Computer addiction

Revision exercise 2.3

1. Computer addiction is the excessive use of computing devices.
2. Examples of computer devices that users may get addicted to include mobile phones, televisions and digital watches.
3. The applications that users may get addicted to include music, games, betting and social media applications such as Instagram, Facebook, among others.
4.
 - a) Common symptoms of addiction to computer usage
 1. Academic deterioration.
 2. Personal neglecting.
 3. Isolation, no family bonding.
 - b) Effects of computer addiction did John experience
 1. Difficulties in sleeping.
 2. He was irritable and moody.
 - c) How can John control his computer usage to minimise addiction?
 - a) Limit time spent on computers to promote healthy lifestyle.
 - b) Improve family interaction and bonding through communication and open dialogue.
 - c) Keep a computer usage diary to reduce excessive usage and manage time.
 - d) If you were John's roommate, how could you advise him?
He should be socially active by engaging in social activities. He should purpose to switch off computing devices from time to time. He should disconnect from the Internet and work offline. Write poems and stories to improve his writing skills. Find other ways of spending free time other than using computing devices.

- e) Importance of observing safety measures when using computers.
- 1. Limit time spent on computers because it helps to be disciplined and have more time to spend on other important activities.
- 2. Promote social activities because it helps one to be socially active.
- 3. Encourage recreational activities because it helps one to be physically and mentally fit.

2.4 Cyberbullying

Revision exercise 2.4

1. Cyberbullying is the use of computing devices to send hurtful messages.
2.
 - a) **Harassment:** Perpetrators may send repeated messages, post negative comments on social media or make unwanted contact with their victims.
 - b) **Insulting or demeaning language** such as name-calling, belittling or other forms of verbal abuse are used to humiliate their victims.
 - c) **Threats:** Perpetrators may intimidate their victims using threats that range from physical violence to emotional abuse.
 - d) **Impersonation:** Bullies create fake profiles or accounts using the victim's name or image.
 - e) **Cyberstalking:** Perpetrators send threatening or unwanted messages, post personal information about the victim online or even track their location.
3. The following are some of the impact of cyberbullying on perpetrators and victims.
 - a) Damaging personal reputation due to data breaches and identity theft.
 - b) Legal consequences: The perpetrator may face legal issues and potential lawsuits due to data breaches.

- c) Frustration due to computer malfunctions, data loss or infection by malware and loss of valuable information.
- d) Social isolation due to cyber-attacks or harassment causes victim to withdraw from online interactions.
- e) Guilt and shame.
- f) Poor mental health due to stress, anxiety and feelings of security.
4. The cyberbullying techniques used by perpetrators
 - a) The messaging is continuous whenever the victim accesses phone, tablet or computer throughout the day or night.
 - b) It is permanent on the Internet unless the victim deletes the hurtful content or reports.
 - c) It is difficult to identify and prevent before the victim realises is being bullied.
5. Impact of cyberbullying on perpetrators
 - a) Use of harmful drugs and substances and become aggressive as they find ways to offend their target victims.
 - b) Perpetrators face the law when they are reported.

2.5 Computer Software Piracy

Revision exercise 2.5

1. Software piracy is the act of making illegal copies of software.
2.
 - a) The original software is very expensive which encourages computer users to purchase pirated software that is cheap.
 - b) Weak law enforcement on persons or companies that use pirated software.
 - c) Availability of high-speed Internet to access and download pirated software online.
 - d) Inadequate public awareness and educate on the importance of acquiring genuine software.

3. The following are the types of software piracy.
 - a) Online piracy involves the acquisition of pirated software via the use of the Peer-to-Peer file-sharing protocol, which may be found on websites such as online auction sites and blogs.
 - b) Softlifting means giving a copy of software to someone who is not allowed to use it under the terms of the licensing agreement. It is the practice of acquiring a single licensed copy of software and illegally installing it on several computers.
 - c) Hard-disk loading is type of piracy conducted by hardware vendors by preinstalling pirated software on computers they sell to consumers.
 - d) Renting refers to the practice of lending a copy of a piece of software to another party for a limited time without the original owner's consent.
 - e) Counterfeiting is the unauthorised duplication, distribution or sale of copyright work.
4.
 - a) We can access secure software.
 - b) Our data is safe from loss.
 - c) We are able to uphold the law as we use genuine software.
5.
 - a) Secure software is reliable.
 - b) Secure software improves the performance of computer.
 - c) Use of corrupted software can result to system failure and security breaches.
 - d) Genuine software helps protect against viruses, malware, spyware, among other risks.
6.
 - a) Use of genuine software product keys or installation passwords for software copies.
 - b) Use of watermarks containing logos or company names on the software interface.
- c) Use of certificates and licenses to identify original software.
 - d) Verifying and authenticating software that is hosted online.

END OF STRAND 2 ASSESSMENT

1.
 - a) Surge protector
 - b) UPS
 - c) antivirus
 - d) back-ups
 - e) firewall
2. Text-to-speech
3. Watching educating and entertaining video content through computers.
4. It could be in form of playing computer and video games.
5. Eating disorders, sleep disorder, poor personal hygiene, Repetitive Strain Injury, Backache and neck ache.
6. Doxing
7. Block emails or messages from hurtful source and not respond, save messages or email it to show an adult you trust, log off the site where the cyberbullying is happening, report to relevant authorities.
8. Counterfeiting occurs when fake duplicate copies of legal software are reproduced and sold in a way that makes them look genuine. Others include softlifting, hard-disk loading, renting and online piracy.
9. Assess.

3.0 COMPUTER NETWORKS

3.1 Types of Computer Networks

Revision exercise 3.1

1. Some types of computer networks are LAN, WAN, MAN, PAN and WWAN.
2.
 - a) Performance-This is efficiency in the transfer of data and information within the network.
 - b) Reliability-Data and information can be accessed without failure or delay.
 - c) Communication- The communication provided is efficient and fast.
 - d) Scalability- New devices can be added to the network.
 - e) Resource sharing- Resources, data and information can be shared.
3. The data can be accessible to the unauthorised persons in public.
4. WAN connects computers over a large geographical area such as an entire county, country, continent or globe. LAN connects computers and other network components over a small geographical area such as a home, an office, a building or a school.
5.
 - a) Wired connectivity- This is where devices are connected to a network through cables. Different types of cables such as Ethernet, coaxial, twisted pair and fibre optic cables connect devices to different computer networks.
 - b) Wireless connectivity- Computing devices are connected through electromagnetic waves. The connection is established through wireless technologies which include Bluetooth and Wi-Fi.
6. In modern workplace, we use computer networks to share text, images, audio files or video clips. We can communicate with other people across the world. Organisations conduct their businesses with ease and increased efficiency.
7. Wireless Local Area Network

8. Give one advantage of a Wide Area Network.
Answer: Wide Area Network is used for large-distance connections.

3.2 Elements of Computer Networks

Revision exercise 3.2

1. Switches, hubs, modems, routers, bridges, repeater, servers and Network Interface Card (NIC)
2. Functions of following elements of a computer network
 - a) Modem- It is a device that allows a computer or any other device in the network to connect to the Internet. It converts digital signals into analogue data signals.
 - b) Server- It is a computer equipped with specific programs and hardware that enables it to offer services to other computers known as clients on its network.
 - c) Repeater- It is a communication device that regenerates data signals being transmitted over the same network before they become too weak or corrupted.
3. The elements of a computer network enable computing devices to communicate and exchange data and information.
4. When selecting computer networks, Martin can consider the following:
 - a) Network elements should be able to provide the desired level of reliability and performance to meet the needs of the network.
 - b) Network elements should be easy to manage, configure and monitor to reduce the complexity of network operations and lower the overall operational costs.
 - c) Network elements should be able to support the current network requirements, as well as accommodate potential future expansion in terms of increased user count.

- d) Network requirements such as the desired network topology, the expected number of users and the network's intended purpose are necessary.
- e) Budget and cost considerations associated with purchase of computer networks, installation, configuration, maintenance and operational expenses.

3.3 Web Browser Concepts

Revision exercise 3.3

1.
 - a) Hyperlink-It is a link from a document in a web location which is activated by clicking on a highlighted word or image. Hyperlinks are used to navigate between web pages and websites.They enable the users to access resources on the web for downloading and reading.
 - b) Website- It is a collection of online pages and associated material that share a similar domain name and are hosted on at least one web server.
 - c) Server- It is an application or device that offers a service to another computer program and its user, referred to collectively as the client.
2.
 - a) Forward button- It moves the user to the next web page. It becomes active if the user has previously used the back button.
 - b) Refresh button- It is used to reload a web page.
 - c) Display window- This is the space where the content of the web page is displayed.
3.
 - a) Open the web browser installed in the computing device.
 - b) Type URL on the address bar of the browser to access the website.
 - c) Press the Enter key, Observe what happens.
 - d) Click on any search results. Observe what happens.
4.
 - a) A web page is a document which is displayed on a web browser.The web pages are written using mark-up language as Hyper Text Markup Language (HTML).

- b) A home page is the first page that appears when a website is opened.A home page contains hyperlinks to other pages on the website.The top-level page of a website is a home page. It is always the first page a computer user sees when they access a website.
5. Here are some ways browsers facilitate communication:
 - a) Browsers enable users to access websites on the internet. Users can navigate through web pages, view content and interact with websites using a browser.
 - b) Browsers are often used to search for information on the Internet using search engines such as Google, Bing or Yahoo to retrieve relevant information for users.
 - c) Browsers can be used to access email services such as Gmail, Yahoo mail or Outlook. Users can compose, send and receive email messages.
 - d) Users access social media platforms such as Facebook or Instagram, which enable them to communicate and share information with others.
 - e) Browsers also support instant messaging services such as WhatsApp, Facebook Messenger and Skype, which allow users to send and receive messages instantly.

3.4 Customising Browser

Revision exercise 3.4

1. Mozilla firefox, Internet Explorer, Google Chrome
2. Customising a web browser is to make some modifications in order to change how you interact with it or change its appearance.
3. The following are advantages of modifying a browser.
 - a) Customising browsers improves the work flow.
 - b) Customising browsers helps users to suit their needs and tastes. Users can simplify their processes and operate more efficiently.This increases productivity

- c) It helps users to easily access the favourite websites they frequently visit.
 - d) The browsing experience is made easy and enjoyable to the users.
 - e) It leads to a more efficient browsing experience.
 - f) It gives additional features: Users can add more features to their browser through extensions, enhancing its adaptability and use.
 - g) Modifying browser settings enhances privacy and security: Users can block tracking technologies, cookies and scripts that may endanger their personal information.
4. Features that can be customised are themes, wallpaper and tools. Other features that can be customised include:
- a) **Homepage:** The page that is displayed when the browser is first opened or when the home button is clicked.
 - b) **Search engine:** The default search engine used by the browser to search the web.
 - c) **Browser extensions:** Add-ons that provide additional functioning to the browser and can easily be installed from the browser's app store. They can be customised to add new features, remove features or change the behaviour of existing features.
 - d) **Bookmarks:** The list of saved web pages that can be easily accessed for future reference.
 - e) **Privacy and security settings:** The browser's security and privacy settings, such as cookie and tracking protection, can be customised to meet individual needs.
 - f) **Keyboard shortcuts:** The keyboard shortcuts which are used to control the browser can be customised to meet individual needs.
 - g) **Toolbar:** The user can remove, re-arrange or add buttons on the toolbar.
 - h) **Themes** allow the users to change the appearance of the browser. Colours schemes, fonts and background images can be changed to make the browser user-friendly and more attractive.
5. The following are techniques for customising web browsers.
- a) **Bookmarks** are features on a web browser which save web addresses for future references. They create short cuts to frequently visited and favourite websites and webpages.
 - b) **Private settings** can be set to ensure the safety of the users when they are using the Internet.
 - c) **Cookies** are files which are created by the websites visited by the user. Cookies save browsing information. They also keep the user signed in the website. Cookies are small text files stored on computer by a browser when the user visits a website. They store information about user's browsing activity such as their preferences and login information, so that website can remember settings the next time the user visits.
 - d) **Extensions** add new features to the browser interface. They also called add-ons.
 - e) **User styles** are used by users to customise the appearance of the browser or its general layout.

END OF STRAND 3 ASSESSMENT

1. Resource sharing whereby data, information and resources such as printers can be shared. Performance whereby there is efficiency in the transfer of data and information within the network.
2. LAN
3. Router connects different networks and sends data packets from one network to another. **Switch** intelligently forwards messages between network devices by filtering and sending data only to that port that is connected to the destination device.
4. History
5. Open the browser. Press Enter key. Click on any of the search results.
6. Bookmarks are features on a browser that save web addresses for future references. They create shortcuts to favourite websites and webpages.

4.0 COMPUTER PROGRAMMING

4.1 Computational Problem Solving Concepts

Revision exercise 4.1

1. Online shopping, online education, keeping business records, financial transactions and loan application
2.
 - a) Use of computer hardware devices such as computers, mobile phones, printers and scanners.
 - b) Utilising user application programs such as spreadsheets, presentation software, mobile applications, institutional website and portal building software.
 - c) Application of online platforms- These can be accessed by users for online buying, marketing and selling.
3. He can use online platforms- These can be accessed by users for online buying, marketing and selling.
4.
 - a) Inability to pay the loan in a timely manner leads to debt accumulation.
 - b) When there is need to boost business.
 - c) She should invest her money in business to service loan and get profit at the same time.
 - d) The bank or the lender can take away her resources that can be used to pay loan.
5. These are the importance of using computers to solve problems in society.
 - a) Online services: Government and private organisations' websites allow users to pay bills, renew licenses and access information.
 - b) Financial transactions: Banks and financial organisations utilise computers to conduct transactions, manage accounts and offer online banking services.
 - c) Social media: Computers can connect users and share information on social media platforms, which can be used to organise community activities, create awareness and rally support for causes.

- d) Online education: Educational films can be accessed on computers, giving learners classrooms access to education.
- e) Online shopping: Computers can be used to shop online saving time and effort.
- f) Online Entertainment Streaming Services can deliver music, movies and TV shows to people who do not have access to traditional entertainment.

4.2 Coding Blocks

Revision exercise 4.2

1. Motion blocks, event blocks, operator blocks, sound blocks, control blocks, sensing blocks, variable blocks, My Blocks
2.
 - a) A block from the desired category can be dragged in the script area. It is connected to other types of coding blocks.
 - b) Connecting blocks: Place the notch of a block close to the bump of another. The two notches of the blocks stick to each other when placed together. A sequence is created when more blocks are added to each other to make a stack.
 - c) Input fields are found on the command blocks and blocks that control the running of the Scratch program. These input fields can be rounded or hexagonal in shape. The functional blocks are added on the input fields.
 - d) The user can add rounded or hexagonal blocks on the blocks that have input fields. The blocks which have hexagonal input field, the user can only add the hexagonal functional blocks.
3. Tasks that can be performed using coding blocks
 - a) Creating stories
 - b) Creating animations
4. The importance of using code blocks
 - a) Coding blocks enable learners to focus on what each coding block does and how they work together.

- b) Efficiency-Coding blocks enable a programmer to identify the best approach to solving a problem while minimising computational time and resources.
- c) Accuracy- Coding blocks enable programmers to create error-free code by testing and debugging each block before combining them into a larger program.
- d) Quick feedback- As learners utilise coding blocks to address issues, they may see the outcomes of their efforts right away. As kids watch their projects come to life, this can additionally help them gain confidence.
- e) Promotes logical thinking -Learners analyse how each block interacts with the others and arrange them in the correct order to accomplish their desired end.

4.3 Robotics Concepts

Revision exercise 4.3

1. Robots are the electro-mechanical intelligent systems that automatically perform tasks. They are machines that are controlled using computer programs.
2. Robots have several characteristics that make them unique.
 - a) Automation: Robots are designed to perform tasks automatically, which makes them efficient and tireless.
 - b) Precision: Robots have the ability to perform tasks with high precision and accuracy, reducing the chances of human error.
 - c) Adaptability: Some robots have the ability to learn and adapt to new situations, which enables them to improve their performance over time.
 - d) Repetitiveness: Robots can perform the same task repeatedly, making them ideal for repetitive tasks.
 - e) Speed: Robots can perform tasks faster than humans, which can lead to increased productivity.
3. Functions of the following components of a robot
 - a) Actuators- These are responsible for movement such as motors, hydraulic pumps or pneumatic cylinders.
 - b) Wheels- Robot wheels are a common component used for mobility in robots.

- c) CPU or 'e-brain'. It is responsible for processing information and making decisions, typically composed of a microprocessor or a computer system.
4. The benefits that robots play in real life situations
 - a) Industrial robots improve working conditions and reduce safety risks that human beings encounter in manufacturing and production.
 - b) Robots work in environments that are unsafe for humans where the safety of human beings is a concern.
 - c) Robots improve efficiency, quality and consistency of products in production.
 - d) Robots complete tasks quickly and with accuracy leading to increased productivity.
 - e) Robots complete repetitive and tedious tasks without getting tired or break down.
 - f) Robots do not save on labour costs.
 5.
 - a) Hospitals- Robots are used in surgeries on sensitive areas more precisely, rehabilitation and for assisting in medical procedures. Also, they provide therapy to patients, clean wounds and disinfect them.
 - b) Industries- Robots are used in warehouses and distribution centres to move and sort products. They are also used in entertainment industry for camera control and creation of special effects in drone filming, film making and crowd attraction.

END OF STRAND 4 ASSESSMENT

1. They use computers to process loan applications for their customers.
2. They use computers to book and issue electronic tickets.
3. He should use the Internet to promote and sell product and services.
4. Sound blocks, motion blocks
5.
 - a) Open scratch application program.
 - b) Select operators from the block palette.
 - c) Drag the addition (+) operator to the Script Area. Click the input field. Type 6 and 8 in the respective fields.
6.
 - a) Wheeled mobile robot
 - b) Aerial mobile robot

MODEL TEST PAPERS

MODEL TEST PAPER 1

- To avoid being electrocuted
- Philips head screwdriver
- To avoid, damaging the components of the computer.
- Consult the motherboard manual or seek help from the instructor.
- Power distribution: It distributes power to all other components through PSU.
 - Communication: motherboard enables components to communicate with each other.
- CPU socket: It is the area where processor is installed.
 - RAM slots: It is the area where memory modules are installed.
- Address bar consists of wires that carry memory addresses between the CPU and other components such as RAM or ROM.
 - Data bus is a set of wires that carry control signals that carry data between the CPU and other components.
 - Control bus is a set of wires that carry signals between the CPU and other components such as read and write commands, interrupt commands and clock signals.
- Allows information to pass in one direction and carries information about where data is stored in the memory.
- True
- They display text and graphics. They provide connectivity of other devices such as televisions and computers.
- Plotter
 - An inkjet printer
- Environmental safety to avoid pollution, user friendliness, user needs and compatibility with the office environment.
- RAM and ROM
- It stores system files. It ensures access and fast retrieval of data.
- It is fastest memory. It is the primary memory of computer. It is volatile. It determines the speed of computer.
- DRAM has short data lifetime while SRAM has long life. DRAM consumes less power.
- Rom stores data permanently or until the user decides to delete it.
- The only way to use ROM is to read it. You can get and change data stored in RAM.
- Cache memory, registers, buffers
- Registers are used to store data that is currently being processed by the CPU.
- Flash memory, memory cards
 - Compact disk
 - Hard disk
- Located inside the computer's case and is connected to the motherboard through data cable.
- External hard drives, compact discs, memory cards
- Music, pictures, contacts, files and documents.
- Virus, compatibility error
- To avoid repetitive strain injury.
- High stress level, low self-esteem, limited offline time
- Harassment
- High costs of genuine software,
- Data sharing. It is reliable. It is secure.

MODEL TEST PAPER 2

- PSU
 - Fan
- RAM
- This helps discharge any static electricity you may have built up.
- Computer bus
- Calculator screen, mobile phone screens, projectors
- Labels, receipts, barcodes, ID badges.
- Primary storage is directly connected to the CPU. The CPU uses the primary storage and access data quickly when it is executing instructions and performing operations.
- It allows storage of each bit of data in a separate capacitor within a specific integrated circuit.
- It is non-volatile, does not need to be refreshed, offers a permanent storage of data
- It is used to hold data that is being transferred between devices or between different parts of a computer program.
- Flash memory, memory cards
- It saving data into storage devices.
- True
- Compatibility, budget, speed, capacity
- Public loud, private cloud, hybrid cloud
- Virus attack
- Installing anti-virus.
- Conducting online learning, business transactions, communication
- Academic deterioration, personal neglect, health disorders
- Cyberstalking, trickery
- Renting
- Purchase from authorised dealers.
- LAN

24. Distance limits connection to devices
25. Copper twisted pair, coaxial cable, optic fiber cable
26. A server is an application or device that offers service to another computer program and its user. Hyperlink is a digital connection to data which allows the user to follow by clicking on it.
27. It enhances privacy and security of personal information.
28. Booking, tracking items, communication, loans, marketing, transaction of goods and services.
29. Event code blocks start and stop code from running based on particular events when the flag in the preview window is clicked. Motion code blocks allow moving of elements in the game or animation. It changes the sprite position to either turn or move by the steps given.
30. Speed- Robots perform tasks faster than humans.
Strength-Robots have the ability to lift heavy objects and perform tasks that are physically challenging to humans.

MODEL TEST PAPER 3

1. a) It does all the computer processing.
b) Keeps the CPU at a steady temperature.
2. Computer case
3. PSU
4. Ram compatibility
5. Heat sink or cooler
6. Use manual or seek instructor's help
7. True
8. It displays text and graphics.
9. Recycling to make new products. Reusing to make bookshelf, cat house, aquarium and chicken coop
10. Plotter
11. Give away to charitable organisation to repair and use if it is operational.
12. The CPU uses primary storage to store and access data quickly while executing instructions and performing operations.
13. It is used as a temporary storage for data that is being used.
14. RAM
15. Flash memory
16. Inside a CPU or in the input or output devices
17. Hard disk and flash memory
18. Reliability, durability and compatibility
19. Store large amounts of data. They are very fast to update and delete data.
20. a) Website
b) A web page

21. Connect the device. Identify the device. Open the device. Browse the files. Safely eject the device when finished reading data. Disconnect the device.
22. Compatibility, speed, capacity, durability
23. Data is secure
24. It is Internet dependent.
25. Installing antivirus to scan
26. In hospitals, they are used maintain information and monitor physical health conditions of patients
- 27: Browsers enable users to access websites on internet. Browsers are used to search for information on the Internet using search engines such as Google, Bing or Yahoo to retrieve relevant information for users. Browsers enable users to access social media platform such as Facebook and Instagram which enable them to communicate and share information with others,
28. a) Drive bays-the case should have enough drive bays to accommodate the desired number of storage devices.
b) Price- the price should be within his budget.
c) Cooling- the case should have enough cooling options to keep the components inside from overheating.
29. Autonomous robots-They perform tasks on their own without human intervention. They use sensors, algorithms and artificial intelligence to perceive their environment, make decisions and take actions. Mobile robots -They are capable of moving around and performing tasks in different locations. They can be equipped with wheels, legs or other locomotion systems. Autonomous mobile robots -They are both autonomous and mobile. They navigate their environment and perform tasks on their own, without requiring human guidance or intervention.
30. a) RAM b) Optical drive

MODEL TEST PAPER 4

1. To avoid wrong connections that could result to damage of components.
2. Motherboard
3. The computer did not boot.
4. Recycling, reusing, donating
5. Clip boards, hearings
6. Buses join the CPU memory and output devices, facilitating data flow. They connect different components and allowing them to communicate with each other.

7. VDU or monitor
8. Plasma display, liquid crystal display, light emitting diodes
9. He can reuse or recycle to protect the environment
10. a) Inkjet printer b) Thermal Printer
11. Modern printers produce coloured copies. Printers can connect to computers wirelessly through Internet connection and networking.
12. The CPU retrieves the data from the RAM and executes the instructions, then stores the results back to the RAM.
13. True
14. Data stored cannot be permanent.
15. It does not need to be refreshed, consumes less power, stores data permanently
16. Refrigerator and microwaves ovens operate using them.
17. RAM is used to store data that is currently used by the CPU while ROM is used to store frequently used data and instructions.
18. Fixed storage devices and removable storage devices
19. Portability, capacity, speed, cost
20. Open file explorer. Navigate the folder and open file that you need. Transfer data by copying and pasting to the desired location.
21. Writing data means saving data to hard drives and solid state drives.
22. Flash memory, SD card
23. Making new items such as decorations and key holders minimises environmental pollution.
24. Google Drive
25. Use trusted software. Install anti-virus. Perform regular backups.
26. Sticky keys, adaptive mouse
27. Low self-esteem, depression, high stress level
28. Protection from cyber threats
29. Purchase software from authorised dealers.
30. It enables online business, instant feedback, banking and education

MODEL TEST PAPER 5

1. Switch off computer and unplug it from power source.
2. Power supply unit, processor
3. CPU. Gently place the CPU in the CPU socket, avoiding any force and close the retention arm to secure it.
4. Control bus is used by CPU to communicate with devices that are contained within the computer.
5. A VDU with high resolution and which displays coloured images.

6. Environmental safety, cost and user friendliness
7. RAM and ROM
8. In microwave ovens to store temporary data such as cooking time and temperature.
9. Cache memory is used to store frequently used data and instructions.
10. Flash disk technology is mostly preferred due to varying capacity in storage.
11. They can be damaged if the computer is not shut down properly.
12. Connect hard drive to computer. Open file manager to find files. Select file and copy it to the external hard drive. Eject the hard drive before unplugging it.
13. Public cloud storage, private cloud, hybrid cloud
14. Overheating, power problems, processor error
15. Playing music, offering online platform for learning
16. Limit time spent on computers
17. Keep strong password, block cyberbullies
18. Using latest software version.
19. Computers, printers
20. Browser, server, website
21. Browsers can be used to access email such as Gmail to compose, receive or send messages. Browsers can be used to access social media platforms such as Facebook, Twitter and Skype to send and receive messages.
22. It can help users to protect privacy and security by block tracking technologies, cookies and scripts. It streamlines user's work flow and increase productivity.
23. Customising the browsers theme, modifying the homepage
24. Tracking goods, acquiring a loan, communication, booking, marketing, transacting goods and services
25. Creating a social media account to market online.
26. Educational films can be accessed on computers, giving learners classrooms access to education.
27. Coding blocks are used in traffic control to manage and optimise traffic flow in cities and towns. They adjust signals to reduce congestion and improve safety.
28. Creating stories, gaming animations
29. They give quick feedback. They are accurate, efficient and promote logical thinking.
30. Power supply provides energy to run robots such as batteries, fuel cells or electrical outlets.

PRE-TECHNICAL

Revision exercise 1.1

1. It is a condition of being protected from our unlikely to cause danger, risk or injury.
2. Heights, electricity, slipping
3. Culture, workplace safety, employees' duties
4. Fewer accidents, prevents many injuries
5. Wear safety gears, maintain a clean working environments and report accidents as they occur.

Revision exercise 1.2

1. Faulty equipment, clutter, arson
2. Burn and respiratory injuries
3. Control sources of fire ignition, chimneys inspected and cleaned regularly
4. Protect against losing customers safety, reduces the risk of injury, protect against possible fines
5. smothering and cooling

Revision exercise 1.3

1. Thermal burn, electrical shock and burn.
2. Is a general practice of workers who are exposed to handling and maintaining electrically powered equipment?
3. Accidental contact with power outlets, defective power cords
4. Never use a damaged extension cord; never use a defective electrical device.
5. Are by treating the minor burns, cool the burn or hold the area under cold running water for about 10 minutes, remove rings or other tight items from the burn.

Topical questions 1

1. Replaced or repaired
2. True
3. True
4. False
5. False
6. False
7. True
8. Every time
9. If a person is electrocuted and you touch them, you will also become a victim, turn off power at the source or main.
10. The immediate neighbor and should also be trained and qualified.

11. Unsafe equipment or installation
12. Something that can cause harm or injury to a person or people.
13. To prevent similar accidents in the future
14. Ladders, scaffolding, electrical wiring, falling objects
15. shock, fire, explosion

Revision exercise 2.1

1. concrete, mud bricks, stone
2. Lower material cost, improve productivity
3. mason, bricklayer, paper Mache molder
4. Concrete is used as a formwork for foundations or a reinforcement for walls and ceilings, also used for roofing structures and window frames
5. papier mache

Revision exercise 2.2

1. Are materials made from clay
2. earthenware, stoneware, porcelain ware
3. Making dishware, making electrical accessories, making floors and wall tiles
4. They are hard, brittle and wear resistant
5. Clay

Topical questions 2

1. Clay
2. for making dishware and floor tiles
3. Are materials produced from two are more constituent materials?
4. Manufactured boards, papier Mache, plastic coated paper
5. Composition material
6. Bricks are used for house construction, stones for wall mounting
7. It is made of fine particles due to the process of transportation, making it a bit very plastic like.
8. They are nonmagnetic and thermal insulators
9. Used in manufacture of asbestos roofing sheets and breakable plates
10. Ceramic engineering, design and production
11. Plastic coated papers
12. Gravel, crushed stones, sand, cement
13. Porcelain ware
14. These are materials made from clay.
15. stoneware

Revision exercise 3.1

1. Are used for measuring and marking on a work piece to obtain accurate size and shapes
2. They increase accuracy
3. divider, tape measure, calipers, dot punch
4. Leave the work area in a safe, clean and tidy condition, Return all measuring hand tools to their appropriate storage cupboard, in a dry environment
5. Used in measuring electric potential difference between two points in an electric circuit.

Revision exercise 3.2

1. Are wedges used to remove materials from a work piece?
2. Leads to better productivity, saves on time
3. Snips, scissors, chisel, handsaws
4. Snips
5. Cutter

Topical questions 3

1. to draw lines at a right angle
2. measure the interior dimensions of tubes?
3. 90 degrees
4. Grinding, machining, reaming, chipping
5. vernier caliper
6. Flat chisel
7. Used for cutting materials of different kinds of products e.g., wires, cables and ropes.
8. Keeping them in dry places, cleaning them properly, storing them in a right place
9. Snips, chisel, shears, hacksaw
10. lubricating, regular cleaning
11. They increase accuracy and used for marking linear and centers for cutting or joining.
12. Is used to scribe lines parallel to the edges
13. Steel rule, pencil, scribe
14. It is made up of High carbon steel
15. For marking out work.

Revision exercise 4.1

1. It provides dimensions, notes and other important information
2. Are used to conserve space and time and yet to give precise and clear description
3. Continuous and dashed lines
4. Drawing by the use of hand
5. defines the edge of a form

Revision exercise 4.2

1. Helps in knowing the size of an object
2. One dimension, two dimension, three dimension
3. Should be placed in series and parallel, avoid using object lines.
4. Architect, engineer, assess any other
5. Continuous, dashed and chain line

Revision exercise 4.3

1. To allow us to accurately represent sites, spaces and buildings
2. Plain scale and diagonal scale
3. Maps and directions
4. 1 cm on paper is equivalent to 1 km on ground.
5. It is used to measure three consecutive units of a metric scale

Revision exercise 4.4

1. Involves using compasses for drawing lines and circles.
2. Pentagon, hexagon, octagon
3. Used in drawing angles, lines and line segments.
4. Mathematics teacher, plumber
5. an animator tells stories or shares information through moving images

Topical questions 4

1. Is an enlargement of an object
2. 10km
3. 1824m
4. Compass, triangle, stencil
5. Is the process of adding size information to a drawing
6. One, two and three dimensions
7. saves on time, helps in drawing the size of an object
8. Diagonal, Vernier scale
9. By drawing of maps and showing directions
10. Octagon, hexagon
11. Is a circle inside the polygon, touching each side at exactly one point?
12. are circles which passes all the vertices of a polygon
13. Construction worker, fashion designer and animator
14. Used in drawing angles, lines and line segments
15. It is used to measure three consecutive units of a metric scale.

Revision exercise 5.1

1. Helps in the production of electricity
2. Chemical, electrical, heat, light
3. Bulb, generator, battery
4. electrician, welding, solar panel installer
5. It saves money, It reduces pollution, It saves energy, It generates energy and It replaces nonrenewable energy

Topical questions 5

1. It is the ability to do work.
2. Sun
3. It the energy stored in an object because of its position.
4. An object that is at rest e.g., a book on table, water in a lake, trees and mountains.
5. Is a type of energy that an object has because of motion.
6. It is the sum of kinetic and potential energy.
7. Used for powering many devices and technologies that we use in everyday life.
8. Welding, electrician, solar panel installer.
9. Saves money, reduces pollution, saves energy
10. Generator, bulb, solar panel.
11. It is the process where there is a change in energy from one form to another.
12. Electrical, heat, light, mechanical.
13. It is a device used to convert electrical energy to mechanical energy.
14. Industrial, domestic, commercial, transportation
15. Heat and light.

Model Test Paper 1

1. Calculate the number of sides of the polygon.

BCD has 33 sides and so it is a triangle.

Determine the size of the angles and/or side lengths within the polygon.

As ABD is an isosceles triangle,

$$\angle BAD = \angle BDA = (180 - 120) \div 2 = 30^\circ$$

$\angle DAE = 180 - (90 + 60) = 30^\circ$ as angles in a triangle total 180°

$$\angle ACE = 180 - (30 + 30 + 60) = 60^\circ$$

Angle CBD is corresponding to angle BAE so $\angle CBD = 60^\circ$.

This is the same for angle CDB as it is corresponding to angle DEA.

Recognise the other properties of the polygon.

All the angles in BCD are equal to 60° .

The polygon is an equilateral triangle, which is a regular polygon.

2. Poorly stored items, rooms with wet slippery floors, naked electric wires.
3. Are things people wear when carrying out tasks to avoid injuring themselves or others
4. A burn, a scald, cut and fracture.
5. Gloves, bandages, scissors and thermometer.
6. Saves life, gives one peace of mind, guards against pain and suffering.
7. Leather, rubber, textile, metal, plastic, wood, stone, glass etc.
8. Metallic are materials that have the properties of metals while nonmetallic are any materials which do not contain metal.
9. Assess to confirm that the learner has followed the steps below.
State/calculate the number of sides of the polygon.
Determine the size of the angles and/or side lengths within the polygon
Recognise the other properties of the polygon
10. Iron, steel, bronze, copper, aluminum.
11. Are metals that consist mostly of iron and small amounts of other elements.
12. Magnetism, appearance, heat conductivity, electricity conductivity.
13. Synthetic are obtained from a natural material which has undergone a chemical reaction in a laboratory while natural nonmetallic are materials that occur naturally.
14. Scissors, razor blade, needle, spanner, hammer.
15. Octagon
16. Oil or grease movable parts, sharpen cutting tools regularly, store tools properly after use.
17. A caliper is a tool used to measure length and width of objects in a work place. It can be used to measure very short distances between two surfaces or diameter of relatively small objects.
18. Is a drawing made to scale to communicate specific idea on how a physical object function or is constructed?

19. Is a plane figure having four sides and four angles.
20. Doors, windows, picture frames, TVs, laptops etc.
21. Helps in knowing the size of an object
22. Linear and radial dimensions
23. Should be placed in series and parallel, avoid using object lines.
24. sector, arc, radius, diameter
25. it measures and dimensions the diameter of a circle or arc, and places the dimension inside the object.
26. Are tools used to make an opening or an incision on another material
27. Leads to better productivity, saves on time
28. Snips, scissors, chisel, handsaws
29. Snips
30. Cutter

Model test paper 2

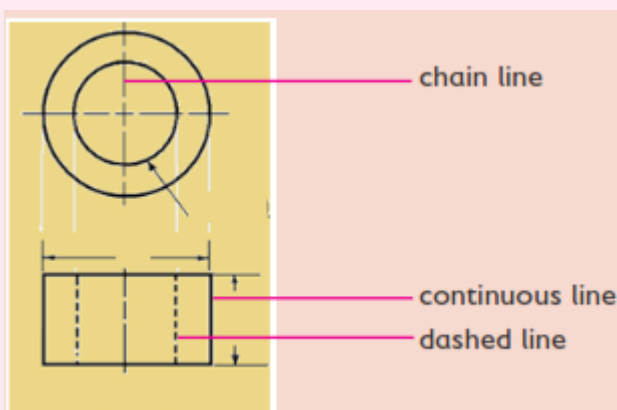
1. Helps in carrying out tasks, performing transportation activities, commercial activities.
2. It is the ability to do work.
3. Used in cooking, drying cereals, drying clothes, used in welding
4. These are energy sources that cannot be exhausted or finished even when used over a long period of time.
5. teaching, plumbing, carpentry, engineering.
6. Diameter, radius, Centre, arc
7. Are behaviours or conditions that make the child unsafe?
8. Hexagon
9. chemical, electrical, heat, mechanical.
10. Snips, shears, handsaw, hacksaw.
11. Saves time, reduces loses of property.
12. Four dimensional object
13. Earthenware and stoneware.
14. rake, spade, panga, watering can.
15. Try square.
16. Do not play around fire, cover your nose and mouth with a face mask, use hand gloves.
17. Chain and dashed.
18. When installing and repairing pipe systems and their components for both residential and commercial properties.
19. Is a scale that consists of a line divided into suitable number of equal units.

20. Hand brace, rotary leather punch, needle
21. They increase accuracy and used for marking linear and centers for cutting or joining.
22. Is used to scribe lines parallel to the edges
23. Steel rule, pencil, scribe
24. It is made up of High carbon steel
25. For marking out work.
26. for making dishware and floor tiles
27. Are materials produced from two are more constituent materials?
28. Manufactured boards, papier Mache, plastic coated paper
29. Composition material
30. Bricks are used for house construction, stones for wall mounting.

Model test paper 3

1. It is used to create an angular dimension between two lines that form angular shape.
2. Hexagon, octagon, heptagon.
3. Wind energy, solar power, biogas.
4. Chemical energy.
5. Burning fuel, food and batteries.
6. Is a person who tells stories or shares information through moving images.
7. Are used for making wall mounting, construction of houses, making doors and moldings.
8. Are nonmagnetic because they are not attracted or repelled by a magnet.
9. Never use damaged extension cord, not using defective electrical device.
10. Wheelbarrow, jembe, sickle, panga.
11. used to show accurate measurements
12. Used to scribe lines parallel to the edges
13. Assist in inscribing a parallel mark on metal or plastic
14. Help you to easily remove things like splinters from the skin.
15. Is a change from one form of energy to another.
16. cooling, smothering, fog attack
17. Burns, thermal burns, respiratory injuries.
18. Reduces damages to facility, protect against possible fines
19. Kitchen spatula, wooden ladle.
20. Are materials made from clay?
21. earthenware, stoneware, porcelain ware

22. Making dishware, making electrical accessories, making floors and wall tiles
23. They are hard, brittle and wear resistant
24. Clay
25. Is where drawing is done without instruments e.g., ruler and protractor.
26. Assess the drawing
27. Connects our hands to minds, helps people express their appreciation for the environment in their natural sense, makes us see and appreciate things that we cannot get close to physically.
28. To prevent similar accidents in the future
29. Ladders, scaffolding, electrical wiring, falling objects



Model test paper 4

1. Welding, electrician, solar panel installer.
2. control sources of fire ignition, ensure the employees are aware of their responsibility to report dangers
3. Faulty equipment, clutter, arson, human error.
4. Are sources of energy that can be exhausted or finished when used over a long period of time.
5. Petroleum products, natural gas, coal, nuclear energy.
6. Is where drawing is done without instruments e.g., ruler and protractor.
7. Dashed and continuous.
8. Connects our hands to minds, helps people express their appreciation for the environment in their natural sense, makes us see and appreciate things that we cannot get close to physically.
9. wiping, protecting the equipment from dropping, store them in clean and dry places.

10. Helps to view things properly, helps plant to make food.
11. Never put sharp objects in pockets, wear personal protective clothes, pick the right tool for the right task.
12. Three dimension
13. Helps us in deciding what materials to use, what design to make and builders/engineers rely on geometry to create framed structures.
14. Production of personal safety, marketing of safety equipment and personal safety services.
15. Is used to establish a vertical reference.
16. cuts caused by sharp objects, burns caused by fire, scalds caused by hot liquid or flames.
17. Wood, soil, textile, plastic.
18. Is a simple tool which you hold and operate without electricity or other power?
19. Fine aggregate + cement + water + coarse aggregate = concrete
20. Pruning shears
21. Faulty equipment, clutter, arson
22. 900
128.6
51.4
23. Control sources of fire ignition, chimneys inspected and cleaned regularly
24. Protect against losing customers safety, reduces the risk of injury, protect against possible fines
25. smothering and cooling
26. Helps humans to use energy sustainably. (assess any other relevant response)
27. Chemical, electrical, heat, light
28. Bulb, generator, battery
29. electrician, welding, solar panel installer
30. It will save money

Model test paper 5

1. By keeping them in dry places, store them in their original places, cleaning them regularly.
2. Is used to cut pieces of different shapes.
3. Shears, snips, chisel
4. To increase accuracy, used for determine physical quantities.






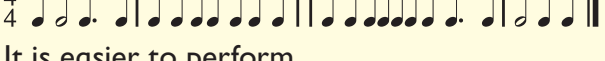
5. Lubricate the moving parts, clean the working area, regularly clean the tools after use.
6. It is used in measuring electric potential difference between two points in an electric circuit.
7. Are materials made from clay?
8. Used for making electrical accessories, making floor tiles and making dishware.
9. For manufacturing breakable plates and making teacups and mugs.
10. earthenware, porcelain
11. Are skin injuries caused by excessive heat or flame.
12. Have electrical equipment serviced regularly, ensure cooking food is always attended, ensure proper housekeeping.
13. Provide peace of mind for everyone, improves employee's morale due to secure working conditions.
14. Stones can be used in making wall mounting, bricks used in construction, manufactured boards used in making doors and moldings.
15. Power cords, lighting, exposed electrical wiring
16. Working without protective gear, naked electric wires, poorly stored items that can easily fall off, disarranged rooms where one can easily fall.
17. Magnesium-metals are highly attracted to magnets, appearance-have a silvery color, heat conductivity-they are better conductors of heat.
18. Chisel
19. It shows the plan of the house and where each room will be.
20. flat and star.
21. Helps in knowing the size of an object
22. Asses the figure drawn. The figure should be a pentagon.
23. Should be placed in series and parallel, avoid using object lines.
24. sector, arc, radius, diameter
25. mark the dimension outside the figure
Dimension lines should not cross
No line of the drawing should be used as a dimension line or coincide with one
Dimensions should reflect the actual size of the object not the scaled size
o not place dimensions in the diagram unless it is necessary
26. Thermal burn, electrical shock and burn.
27. Is a general practice of workers who are exposed to handling and maintaining electrically powered equipment?
28. Assess
29. 360 degrees
30 degrees
60 degrees
51.4 degrees
30. Sum of interior angles = $(n-2) \times 180^\circ$
where n represents the number of sides

PERFORMING ARTS ANSWERS

Revision exercise 1.1

1. Social Studies, Business Studies, Languages, Visual Arts, Mathematics
2. Languages in communication in drama, music, poetry, public speaking, dialogue
computer science for music and dance
production, social media for audience to view
physical education and sports when stretching,
dance for body movements
Social Studies for to identify locations for
filming, historical knowledge
3. Social Studies, Language, Visual arts,
Mathematics
4. Assess 5. Assess 6. Assess

Revision exercise 1.2

1. A dot added to a note increases the duration of that note by half.
2. A tie adds to the time value of the first note the value of the succeeding note or notes that are paired together by the tie or ties.
3. 
4. 
5. 
6. 
7. 
8. 
9. It is easier to perform
10. $\frac{3}{4}$ signifies three beats per measure, with the quarter note getting one beat
 $\frac{4}{4}$ means there are 4 beats in each measure and a quarter notes receives one count

Revision exercise 1.3

1. a) Staff- Is a five parallel lines with four spaces where music is written on
b) G Clef- is a type of musical clef used by instruments that play high pitched notes. It touches line G more than three times
c) Clef- A musical sign written at the beginning of the staff to tell which instrument or voice is singing
d) F clef- is a type of musical clef used by instruments that play low pitched notes. it loops and wraps itself around the note F on a staff.

2. 

3. 

4. 

5. 

6. # Sharp
b Flat
n Natural

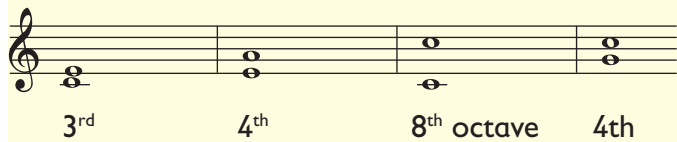
7. 

8. 

9. Assess

10. Assess

11.



12. Assess
13. Assess
14. Key C
15. Assess

Revision exercise 1.4

Assess

Revision exercise 1.5

Assess

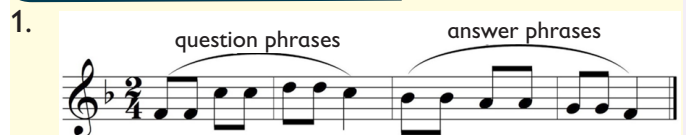
End of strand 1

1. This is a dance which combines cultural and creative movements.
2. Dance, Story, Costume, Music
3. This is the order of stages in a dance
4. Gender based violence, Corruption
5. Beginning, Rising, Climax, Falling action
6. A good plot enables the audience to follow the story and enjoy the dance more.
7. Social studies
Physical education and sports
Computer science
Life skills
8. Music, drama, film, elocution, dance
9. Songs helps to memorize historical facts in social studies
Cultural and cultural creative dances are performed using indigenous languages, English and Kiswahili.
10. It allows people to influence the world through public leadership
11. Speak loudly and with speed
Make eye contact with the people in the room
Use of gesture, facial expression
12. Gender based violence, Family, Corruption
13. Confidence
Ability to read the room
Self-awareness
Passionate
14. Subject matter, Characters, Scenery, Costumes
15. This is a play with only one act

Revision exercise 2.1

1. Assess
2. When two notes are tied the value of the second note is added to the first note.
3. by use of tied or dotted notes
4. Assess
5. a quaver
6. straight curved lines which joins notes of the same pitch

Revision exercise 2.2



- 1.
2. An accidental is a symbol in music notation that raises or lowers a natural note by one or two half steps.
3. Raises or lowers a natural note by one or two half steps.
4. In bar 2 and bar 3
5. Crotchet in bar 1 and bar 2

Revision exercise 2.3

1. It gives one ideas about the contents of the cultural creative dance.
2. Reading stories from other authors
Writing sequence of events
3. writing exciting scripts
Creating anxiety in the context
4. Floods, Drought, Corruption
5. They help critique and evaluate a story
6. Isukuti dance
7. Luhya
8. Giriama dance
9. The unseen partner

Revision exercise 2.4

1. Identify topic, Know your audience, Clear message, Prepare structure.
2. trustworthiness, Integrity
3. For easier flow and understanding
4. clear, Interesting, Easy to understand
5. HIV/AIDS, Environment conservation
6. appropriateness, Appealing
7. assess
8. This is the subject matter of a conversation.
9. Age of the audience, Set-up

Revision exercise 2.5

1. plot, story, theme
2. The growth of a character, Create a plot
3. setting, dialogue, action
4. charts, diagrams, images
5. Where, who, what
6. know your audience
Select a suitable structure of a scenario
7. bringing out experience to be shared
8. decor
Scenic design

Revision exercise 3.1

1. by a choir
2. True
3. voices are assigned to each part
Dynamic contrast
4. Assess
5. They are historical
They bring harmony
6. enhances cultural diversity
Source of entertainment
7. They earn money
8. People from diverse cultural meet together for entertainment.

Revision exercise 3.2

1. (Abu...bung'o)
2. horns, reeds or pipes, Flutes
3. By blowing at the truncated end or the hole on the side
4. Kikondit - kipsigis
5. adet - turkana
6. Arupepe - teso
7. Tung' - luo
8. reeds, twigs, bamboo
9. 4
10. used in parade bands
in controlling games

Revision exercise 3.3

1. a) 1st hole covered by left index finger
2nd hole covered by left middle finger 3rd hole covered by left ring finger Back hole covered by the thumb
b) A 1st hole covered by left index finger
2nd hole covered by left middle finger
Back hole covered by the thumb

2. go back to the beginning and come back to the end
go back to the sign and come to the end
3. tonguing, fingering, bowing, plucking, strumming and slurring
4. Sight-reading
 5. a) lento - slow
b) legato - Smooth
c) Adagio - Slowly
d) Allegro - Fast

Revision exercise 3.4

1. Understanding the central ideas and themes helps performers connect with the narrative, adding depth and authenticity to their expressions.
2. Internalizing the sequence helps dancers execute the performance more confidently and align their movements with the overarching narrative.
3. The choreographer discusses scenes, themes, characters, actions, songs, instruments, and patterns in the dance story.
4. Auditioning and casting ensure that performers are selected based on their ability to portray characters authentically, enhancing the overall cohesion of the performance
5. A soloist should possess qualities such as appropriate pitching, good memory, expressive singing, and smooth coordination to lead and enhance the performance.
6. Instrumentalists enrich the performance by playing instruments masterfully, providing a musical backdrop that enhances the storytelling element of the dance.
7. Body movements and patterns help convey different scenes, emotions, and actions, allowing dancers to communicate the narrative through physical expression.
8. Rehearsing songs ensures a polished and well-executed performance, maintaining consistency in rhythm, pitch, and overall vocal quality.
9. Considerations include how instruments enhance communication, their alignment with the context or action in the dance, and their ability to convey a variety of ideas within the plot.

- Costumes, props, and make-up contribute by portraying characters, adding color, and making the performance visually engaging, enhancing the overall impact.

Revision exercise 3.5

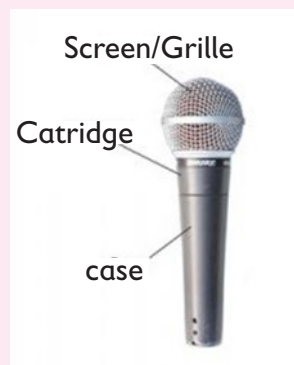
- Is the use of vocal qualities to convey meaning in public speaking
- Voice projection, voice variation, voice intonation, pause and inflexion
- This is how we communicate using our bodies and voices.
- Gestures, tone, body language, pitch of voice.
- Microphone
- To minimize unwanted voice vibrations.
- Raising eyebrows, fidgeting, and mirroring, smiling, eye contact.
- Good grooming is taking care of yourself and your body.
- Bathing daily, brushing your teeth, shaving hair, combing or styling hair, dressing decently, wear clean and polished shoes, trim your nails.
- use thought provoking questions.
voice variations
question and answer
Use visual aids example; graphs, pie charts
tell a relevant story

Revision exercise 3.6

- He or she oversees live productions from casting to performance.
- This is how the writer chooses and uses words to convey mood and meaning of a message.
- gives the mood of the audience
attracts attention
improves visibility of the actors
- To create mood, for the actor to express feelings on the stage
- Dialogue, action, style, music, lighting
- The director
- Are words spoken by two or more characters in a play.
- it conveys the mood of the story
reveals the true character of a person
it advances the storyline
- pitch, rhythm, articulation, volume, tone
pronunciation.
- It is the performance area.

End of strand 3

- Used for signaling.
Used for entertainment.
In controlling games and sports.
For verbal pauses.
Announcing of arrival and proceeding in musical events.
- Known when to service them.
Assemble and disassemble your instruments properly.
Keep them safe from damages and dropping.
Keep them in a dry place.
Keep the instrument clean from dirt.
Repair worn out casing.
- Emuou
- They support singing.
Help in passing messages.
Help in setting the mood.
The instrumentalist dramatizes the dance stroy.
They make the dance cycle complete.
- Make the setting and dance drama look real.
Make -up and props give credibility to a performance.
They show the mood thus enhancing the message.
For beauty
They show the origin of the performance.
- This is the use of vocal qualities to convey meaning in public speaking. It involves voice intonation, pause and inflexion.
- This is communication through use of our bodies and voices. Such as gestures facial expressions, body language, tone pitch of voice.
- good grooming.
-



10. Start with a thought provoking question.
Use quotes by famous speakers.
Use visual aids such as graphs, pie charts
Voice variation
Use question and answer methods.
Use relevant stories.
11. To minimize plosives when pronouncing letter B and P forcefully.
12. Substance and drug abuse.
Child labour
Conservation of the environment
Diseases
Gender based
13. Speak clear for easy understanding.
Your voice should
14. It lights up the stage.
It influences the mood of the audience.
It attracts attention.
It improves visibility of the actors.
15. They guide the design of sets, costumes props.
Tell actors where to move in each scene.
Break down scenes to develop characterizations.
Maintain communication with the stage manager.
Take notes on where actors need to improve.

Revision exercise 4.1

1. Some composers/singers lean towards Kenyan traditional music while others are in between.
Influences and use of local language to the language used
Use of Kenyan rhythms or rhythmic character
Simulation of Kenyan traditional instruments
Performance practice is borrowed from traditional music, costumes, and dance.
2. Pitch: strophes are wider in pitch range while the refrains are narrower.
Melody: they have descending melodic line.
There is use of pentatonic and non-pentatonic scale with lack of modulation and texture.
Rhythm: the rhythm structure should have rhythm structure of the original melody.
Dynamics: the quality of singing is from loud to soft or soft to loud.
3. Is how music sound is organized.

4. Monophonic: the tune here consists of a single, instrument without harmony or chords.
Homophonic: this is where the melody is the main element and is supported by harmony.
One voice (highest) plays a distinct melody while the accompanying voices articulate an underlying harmony.
Polyphonic: the music may be vocal, instrumental or both. It consists of two or more simultaneous lines of independent melody.
5. Are the variations in loudness between notes
6. Strophic: this is form in which each stanza retains the same bass while the melody varies at each repetition of the bass pattern.
7. ABA: In this form A represents ideas, B represents contrast and A (final) represents return to familiar music in the opening. It has three distinct sections.
AB: It can also be written as AABB. The first section is repeated, while the contrasting second section is not repeated.
8. it gives a feeling of social well being
It soothes the mind and gives it rest.
It heals the heart and makes it whole.
9. Choral music is singing that involves a group of singers with different voices.
10. The messages could exhibit a secular or sacred subject. They also educate the listeners on moral upbringing, and current happenings.

Revision exercise 4.2

1. Costumes, make-up and props gives the audience clue on the performance. This help to gain the authenticity of the performance.
Make-up enhances the appearance of the dancers thus making them look real , beautiful and believable.
Décor means the decoration done on the scenery by painting for communication.
Props are movable objects that the dancers use during their performance.
They make the performance to come to its originality and therefore bringing it to life.
The use of appropriate props and costumes interprets the message of the dance.
2. Cultural creative dance can be used as a vehicle for self-expression. It can tell a story, convey feelings and emotions, and connect with others.

Dancers use movements to share their feelings. Mood is portrayed through dancing to imaginative movements.

Dance is a form of non-verbal communication and expression.

As a means of communication, dance is used to lure and keep mates; define and perpetuate gender roles, form, and cultivate social and cultural bonds.

3. Cultural creative dance can be used as a vehicle for self-expression. It can tell a story, convey feelings and emotions, and connect with others.
4. Dancers use movements to share their feelings.
5. Mood is portrayed through dancing to imaginative movements.
6. role, profession, culture, status, traits and behaviour
7. Theme or message, plot, use of music or song instruments
dance
use of body, voice and space
costumes
décor
overall achievement

Revision exercise 4.3

1. oral introduction, body of the speech, language use, audience awareness, personality, conclusion and overall impression and achievement
2. be aware of the audience knowledge, create a rapport with them, involve them in the presentation, have eye contact with them
3. well projected voice, too loud or too soft voice, pauses, voice variation, voice inflection and voice intonation
4. using humorous stories, use visual aids, question and answer, use powerful relevant quotes, clear language, define unfamiliar terms
5. observing protocol, salutation and defining the topic and concepts in the topic
6. evaluation is making correct judgment concerning something
7. good organization of ideas, be knowledgeable of the content, ideas should flow smoothly, have good mastery of the facts, focus on the topic, use examples, quote from credible sources, have a conclusion)

8. conservation of environment, good nutrition, health and diseases, drugs and substance abuse, child labour
9. summarising the presentation, recapping the main points
10. to maintain attention

Revision exercise 4.4

1. It ensures that the storyline is easy to follow and engages the audience effectively.
2. It conveys emotions, advances the play, captures the attention of the audience
3. It adds depth and authenticity to the play thus making the characters more relatable and interesting
4. It maintains rhythm that keeps the audience engaged and develops the plot
5. adds tension and excitement making the play more dynamic and engaging
6. They guide the actors and enhance the overall production of the play thus making it successful
7. It creates backdrop for the story influencing the mood.
8. It gives the audience a sense of closure and satisfaction while winding up the storyline
9. This is the artificial environment where a performance takes place
10. story, scenic design, theme, credible acting

End of strand 4

1. Drugs and substance abuse.
Diseases such as HIV/AIDS, TB, Covid-19, malaria
Gender based violence.
Property
Child labour
Environmental conservation
2. Assess
3. They give the audience clue on the performance. They make the performance real. They interpret the message of the dance.
4. Oral introduction -the introduction should attract the attention of the audience.
Good grooming.
Have knowledge of the participants.
Focus on the topic.
Well organized speech.

5. Move close to your audience
Move around while asking questions to involve the audience.
Give each point its own spot.
Give your main message from the power position.
6. Ask questions.
Use audio-visual aids.
Introduce a familiar song about the speech.
Story-telling
7. To inform by sharing knowledge with the people in the society.
To influence decisions.
Motivate change which can make people not to do something or change behavior.
Helps one to win the crowd
8. Story-should have a clear structure and plot.
Should be engaging
Theme - identify items the actor uses to express the theme.
Find out the main message in the play.
Are the actors in line with the theme?
Acting - check actor's interpretation of their roles, stage presence, interaction with one another
Scenic design - the situation of a play
Observe work of each actor and how they work together
Sound - observe keenly on any sound device used
The use of sound within the contest of the play
Costumes - should match the theme of play
Give the information about a character
Identify the occupation and background of the character.
9. Story - way of bringing meaning of experience that can be shared and understood by others.
Plot - this is the series of events that make up a story.
Conflict - are internal or external struggles that create dramatic tension
Characters - people in the play (actors) that perform actions
Language and style - language are words spoken in a play. Style is the choice of how words will be written.

Theme - this is the story line or the message being conveyed.

Setting - is the design and decor of a scene.

10. Scenario is a sequence of events that brings out an imaginary picture of the story.

End of strand 5


1. Theatre transforms crowds through a shared moment in front of stage.
Music helps in educating the mass on current issues.
2. It conveys information, news and ideas to the public.
It raises socio-economic issues
3. Moral rights
Royalties
Reproduction and communication rights
4. Selling, broadcasting, performing content without the owner's authorization.
5. They are generated when copyright works are performed, recorded or played in public.
6. Playing performance to the best of your ability
Avoid plagiarism.
Good moral behaviour in music.
7. This is an authorized use of someone's ideas or works.
8. Recording contract.
9. Protects your work against use by others.
Allows you to get money for your work
10. You must give your permission before anyone records and shows your work in public.
11. Do not sign or agree to anything you do not understand.
Give legal advice on any contract.
12. It helps in flourishing of performing arts.
13. Cultural inclusivity.
Legal and disclosure
Personal and professional integrity
14. It should be put in writing.
15. Give permission before someone can film or audio-record your performance.
Get legal advice on any contract.
Do not sign or agree to anything you do not understand.

Model test paper 1

1. Microphone
2. Plot, Character, Theme, Language
3. Encourages children to explore their emotions
Expands children imagination
Helps one to develop on unique voice
4. Conflict is the internal or external struggles that creates dramatic tension
5. Three
6. Introduction, Body, Conclusion
7. It is a source of Income
To rebuke
To worship
They tell a history of a community
To give moral teachings
8. Quaver and semiquaver
9. Because it was shared from generation to generation by word of mouth
10. The plot is the most significant event of the story and how the characters and their problems change over time
11. This is a series of physical movements that are accompanied by music which relate to the common people
12. Plot, Characters, Theme, Language, Story
Conflict, Setting
13. Characters
14. Descant recorder
15. Fingering, Tonguing, Pinching, Blowing, Holding
16. Graphics are visual aids that visually compliments a speech
17. To enhance movement
Inform the audiences about a character
To reveal the characters age
18. Drama, Poetry, Music, Dance
19. Engage the audience
Help the audience understand easily
Stimulate emotional response
Help to communicate important message
20. Introduction, Body, Conclusion
21. Average, Above average, Superior speech
22. Refers to body movements, gestures, facial expressions among other features
23. Has confidence
Communicates clearly
Audible

24. To inform by sharing one's knowledge with the people in the society
Influence decisions
Motivates changes e.g. behavior
Helps one to win the crowd
25. Confidence, Knows how to address
Well groomed
26. Storyline, Theme, Characters
27. Beginning, Rising, Climax, Falling action
28. is the speaker in a verse
29. Enables the audience to follow the story and enjoy the dance more
30. Enables the audience to identify the characters through appearance

Model test paper 2

1. These are songs sung by one performer
2. A person in a play
3. Script
4. Appeal - Should be attractive to arose response from the audience
Appropriateness - Should be suitable to the audiences
5. 
6. 4/4
7. Love, Compassion, Patriotism, Courage

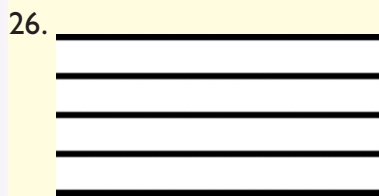
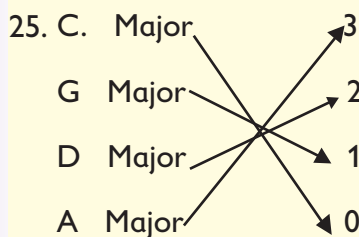
No	Economic benefits of performing arts	Social benefits of performing arts
1	Folk songs in private parties	They tell the story of a community
2	Performers earn money by performing folk song	They educate on importance of animals and other resources
3	Folk song musicians are a source of revenue when they pay taxes	They are source of entertainment
4	Folk musicians can be independent artists by recording and selling their music	They are a source of unity and collaboration among community members

- Patriotism, love, Unity
9. Community origin, Function, Occasion type
 10. Naming, Work, Marriage, Funeral, Worship
 11. To be able to convey its meaning and intention

to the audience

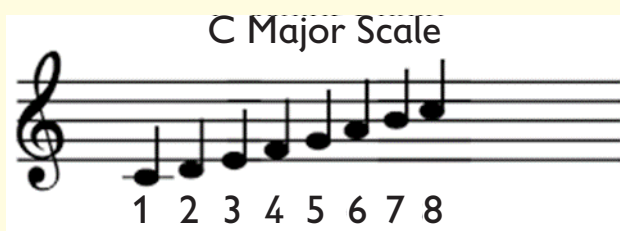
12. Dynamic space Rhythm
13. Costumes
14. Accept relevant response
15. Know your audience, Know the occasion
Select a topic, Select a purpose
16. Choose one that will bring out the clear picture of the theme
Should be easy to use
Availability of the chosen graphic material
17. Grooming, performance, creativity, oral introduction, summery, source
18. Helps to engage the audience through singing
Helps to ensure that our ideas are communicated clearly
19. Lines, Stanza, Rhythm, Theme
20. It is a story that is written/told to someone
21. Moving around while asking questions
Giving each point its own spot
Moving closer to the audience
22. Asking questions
Showing objects and visual aids
Introducing a familiar song
23. They will not get your message
They will not appreciate
Can cause embarrassment

24. Festivals



27. It is a sequence of successful notes or sound ascending or descending

28.



29. - G -

30. A Flat

Model test paper 3

1. It is an important event that happens in the skit at a specific time
2. Enables one to earn money after performance
Is a source of employment where someone can offer lessons
3. Sacred songs - Songs sang to worship God
Lullaby songs - Songs sang to soothe babies
Action songs - Songs with movements for the words said in the song
4. Communicate to the audiences on what is happening on stage
Identify the occupation and background of the characters
5. Are objects used on stage by actors during performance
6. Performers, Songs, Ornamentation, Props, Costumes, Instrumentation, Dance, Makeup
7. To accompany folk songs and dances to sustain the tempo of performers
Harmonize other instruments/voices
Play solo sections of a performance
8. War songs, Epic songs, Love songs
9. Descant recorders
(i) Sound hole
(ii) Finger hole
10. Hand outs, Photos, Flip chart, Music
11. Is a succession of syllables, words and sentences in one and varied key on each sound has a single unvaried tone
12. Remember the note values and their equivalent rests
Repetition of given notes groupings
Variation of various grouping of this notes and rests
Beat time to keep a steady beat and adhere to time signature
13. Pen and paper, Storage devices, Cameras
14. Cameras, Smart phones
15. Improves communication skills
Enables one to increase the ability to present ideas in an organized manner
16. Facial expressions, Gestures, Body movements
17. Introduction, Body, Conclusion
18. The speakers presentation, Grooming
Choice of words, Audibility
19. It's how you take care of self and body

20. Lack of audience involvement in my speech

They were bored

Introducing a familiar song

Asking questions

Using examples

21. One who is able to manipulate voice

Uses songs

Dance

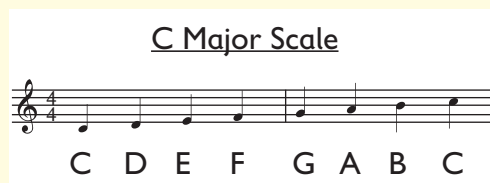
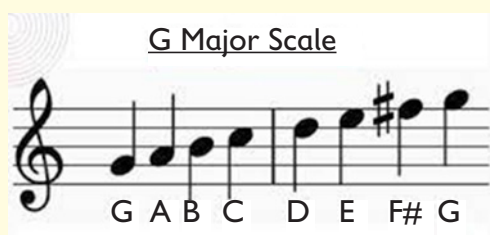
Use gestures, facial expressions and space

22. Has confidence, Communicates clearly, Audible

23. Story line, Theme, Characters

24. Rhythm, Melody, Harmony

25.



26. Words used in music

27.



28. Is used to generate ideas for melodies

29. G-clef

30. 0

Model test paper 4

1. Unison, second, Third

2. 2

3. an interval

4. Membrane

5. Drum



7.



8. A tie is a curved line that connects two notes of the same pitch while a dote is a mark added to a note to increase the duration of the note by half

9. Dal segno go back to the beginning

Da capo go back to the sign

10. i. D.S

ii. D.C

11. A poet language creates the mood and tone of a poem

12. Through combination of pitch and rhythm

13. Banana fibers can be used as costumes

Paint can be used as makeup

14. Ply wood, Nails, Sticks

15. Entertainment

Tell the story of a community

As sources of unity and collaboration among community members

Folk song musicians are Source of revenue when they pay taxes

Performers can earn money

16. The Toriki

17. Marriage, Circumcision, Naming

18. Tune one not eon the instrument and match it with another on another instrument that is in tune or key

Listen carefully to the not you play on your instrument

Play the same not eon a piano

Use your sense of pitch to compare the pitch of the not eon your instrument and the target pitch

Adjust parts of the instrument that will assist in changing the pitch

Continue to listen and adjust until the two notes match the pitch of the target note

19. Repair when spoilt

Store appropriately

Should be handled carefully

Clean using materials such as polish, piece of cloth and clean water

20. Composer, Instruments

21. Are cosmetics applied to the faces to improve or change your appearance

22. Vocal, Instruments, Dance

23. Sharp and Flat

24. This refers to how quietly or loudly a piece of music should be played

25. Violin, Guitar, Trumpet, Piano

26. Striking, Scrapping, Clapping, Plucking, Stamping

27.



28. Verses have themes like environment which are related to agriculture
When performing cultural dances we use indigenous languages like English and Kiswahili
We use songs to recall historical facts in social studies

29.

30.

Model test paper 5

1. Because a note is equal to the beats must be made up to 2 beats
2. Should be short and easy to remember
Moves mainly step by step
Uses simple short rhythmic patterns
Uses repeating elements to give itself a clear character
Starts on soh and ends on the tonic note doh
3. Saves money
They can be re-used
Improvised costumes have good shape
4. Sucks, Papers, Paints, Sisal, Fiber
5. One singer or a small group of singers sing a line and the whole group makes a reply
6. Wood blocks, Marimba, Bamboo block
7. Gourd, Seeds
8. Clapped, Diaphones, Stamped, Scrapped, Struck
9. English, Physical education, CRE
10. Taa
11. Folk tunes, Languages, Use of indigenous language, Creative elements
12. Music, Dance, Story, Costumes, Décor
13. They show the cultural source of the dance
The songs reflect the mood at a particular stage
Instruments make the dance more enjoyable
They help in enhancing presentation of culture
14. Speaker - The person giving a speech
Message - The information you want to pass to your audience
Audience - People listening or receiving information
Feedback - The response you get from your audience

Situation - Refers to time and location of your speech

15. HIV and AIDs

Solid conservation

Drug and substance abuse

Early pregnancy

Sex education

16. Understand your audience i.e. in terms of their age, interest etc.

Your language should be clear, concise and easy to understand

Engage the audience by use of the rhetorical questions, humor or personal stories to connect with the audience

Use visual Aids and nonverbal communication

17. Confidence - Should have self-assurance of body and language

Knowledgeable - Should be well prepared and knows much about

Organised - Speaks in an organized manner to guide the audience

18. Setting, Subject manner, Story, Language, Costume

19. This is a dance which combines cultural and creative movements

20. Beginning, Rising, Climax, Falling action

21. This is the order of stages in a dance

22. Gender based violence, Corruption

23. A good plot enables the audience to follow the story and enjoy the dance more

24. Subject matter, Characters, Scenery, Costumes

25. Luo, Iteso, Pokot, Turkana

26. Tung – luo

Mulele – luhya

Emborogo – kuria

Auleru – iteso

27. Voice projection, Voice variation

Voice intonation, Pause, Inflection

28. Voice projection is the strength of speaking where the human voice is used powerfully clearly and loudly. While voice variation is the way of communicating by changing the sound of your voice using different speeds and tones

29. Facial expression, Body language, Gestures
Tone

30. It is basically taking care of yourself and your body