

SECTION A (40 MARKS)

1. Name the biological change that causes growth in insects.
✓ **Metamorphosis**
2. How can the pitch of sound produced by a flute be varied?
✓ **By closing and opening the holes at different intervals**
3. Name the type of hutch that has the same features as the fold system of keeping poultry.
✓ **Morant hutch**
4. Name any one intestinal worm which causes malnutrition in an individual.
✓ **Tapeworms//Pinworms//Askaris**
5. List down any one place where bacteria can be found.
✓ **Soil//Rubbish pit//Air//Dead animal bodies//Decaying matter**
6. Give any one tuber crop that can be affected by bacterial blight disease.
✓ **Sweet potatoes//Irish potatoes**
7. How does pouring oil on stagnant water control the outbreak of malaria?
✓ **Oil suffocates mosquito larvae//Wrigglers**
8. In which way is coal useful to road builders?
✓ **Used to make tar for surfacing roads**
9. Why do road builders pour small stones on murram roads?
✓ **To increase friction**

The diagram below shows a leaf of a certain drug. Study and use it to answer questions 10 and 11 correctly.



10. Identify the narcotic drug whose leaf is shown above.
✓ **Marijuana**
11. State any one way in which people abuse the above narcotic drug.
✓ **Smoking**
12. Where in the human body does respiration occur?
✓ **Body cells**

13. Why does the human skin develop goose pimples during cold weather?
- ✓ **To insulate the body against heat loss//To reduce heat loss from the body**
14. Mention any one reason why honey harvesting should be done during day time.
- ✓ **To ensure that clean honey is harvested**
 - ✓ **To prevent destruction of honey combs**
 - ✓ **Most of the worker bees are out of the hive**
 - ✓ **For easy identification of the honey combs**
 - ✓ **To prevent contamination of the honey**
- The diagram below shows a human body organ. Use it to answer questions 15 and 16 correctly.**



15. Name the human body organ shown above.
- ✓ **The brain/Human brain**
16. Give any one function of the human body organ shown above.
- ✓ **It stores information//Controls all body activities//Used for body balancing//For memory//Recalling//Remembrance//For thinking//For reasoning//For learning new things//For decision making//For interpreting information.**
17. How does gonorrhoea increase the chances of a person contacting HIV/AIDS?
- ✓ **By causing sores on the sexual organs through HIV passes**
18. Ligament is 35kgf. If she sits 2cm away from the pivot and balances with cartilage who sits 5cm away from the pivot, calculate cartilage's mass.

$$L \times L.A = E \times E.A$$

$$35 \times 2 = E \times 5$$

$$70 = 5E$$

$$\begin{array}{r} 14 \\ 70 \\ \hline 5 \end{array} = \begin{array}{r} 5E \\ \hline 5 \end{array}$$

$$E = 14\text{kgf}$$

19. Why is it dangerous to have long fingernails on the hands?
 - ✓ **They hide disease causing germs**
20. To which group of tuber crops do beetroots belong?
 - ✓ **Root tubers**
21. How is reproduction in a dove similar to that of a spiny anteater?
 - ✓ **Air has weight//occupies space//exerts pressure//can be compressed**
Mnemonic: WECO
22. State any **one** characteristic of a healthy person.
 - ✓ **Should be physically fit//socially upright//**
 - ✓ **Should not have any mental problem**
23. Give any **one** example of a primary sex characteristic among adolescent.
 - ✓ **Presence of ovaries//oviduct/fallopian tube//uterus//scrotum//testes//penis//**
 - ✓ **sperm duct//vagina//seminal vesicles**
24. Apart from equal distribution of health care services, give any **one** other principle of Primary Health Care.
 - ✓ **Should be accessible//affordable//available//total health for all//**
 - ✓ **Full participation for all members//Done according to priorities**
25. How can electric shocks be prevented in a home?
 - ✓ **Never touch electric appliances with wet hands//**
 - ✓ **Never touch naked electric wires//**
 - ✓ **Repairing of electric appliances should be done by experts...**

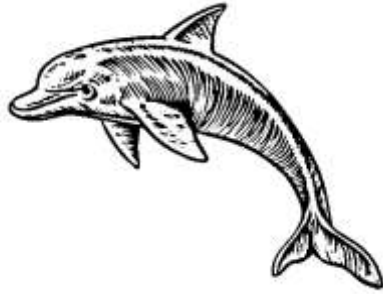
The diagram below shows a step involved in cleaning clothes at home. Study and use it to answer the questions correctly.



26. Name the step of cleaning clothes shown above.
 - ✓ **Rinsing**
27. Identify any **one** importance of the above step as used in cleaning clothes.
 - ✓ **It helps to remove lather from clothes//It helps to remove dirty water from clothes**

28. Give any **one** benefit of a woodlot to a community.
- ✓ **Source of food//Trees provide timber for making furniture//Source of wood fuel e.g. firewood//Provide poles for construction//Trees help in rain formation//Some trees are sources of herbal medicine//It can be used for bee keeping//Trees purify air**
29. In which **one** way is the human heart adapted to its function?
- ✓ **The heart is made up of cardiac muscles to withstand high blood pressure//**
 - ✓ **The heart has valves to prevent the backflow of blood//**
 - ✓ **The heart has septum to prevent oxygenated blood from mixing with deoxygenated blood//**
 - ✓ **The cardiac muscles have the ability to contract and relax when pumping blood//**
 - ✓ **The left side of the heart is thick walled to pump blood at a higher pressure**
30. What is soil erosion?
- ✓ **Soil erosion is the removal of top soil from the ground by its agents/erosional agents**
31. Give **one** effect of physical changes caused by earthquakes.
- ✓ **They destroy roads//They cause displacement of people//**
 - ✓ **They cause destruction of crops//They cause destruction of people's property//They cause death of people and other animals**
32. State any **one** functional similarity between the kidneys and the skin.
- ✓ **Both remove waste materials from the body//**
 - ✓ **Both regulate amount of water in the body**
33. Identify **one** sign and symptom of Newcastle disease among poultry.
- ✓ **Drooping feathers//Twisted neck//Bent neck//Coughing//Sneezing**
 - ✓ **Difficulty in breathing//Shivering //Greenish-yellow diarrhoea**

The diagram below shows a sea animal. Use it to answer questions 34 and 35 correctly.



34. Name the above animal.

✓ **Dolphin**

35. How is the above animal able to live in water?

✓ **Has blubber which keeps it warm during cold weather//**

✓ **Uses echoes to dodge obstacles in water//**

✓ **Has fore limbs modified into flippers for swimming in water//**

36. Give any one way in which crop farmers care for their crops during the wet season.

✓ **Weeding//Thinning//Spraying//Pruning//Watering ...**

37. Why are hamstring muscles regarded as voluntary muscles?

✓ **Their action or movement can be controlled by one's will**

38. Give one effect of heat gain on matter.

✓ **Heat gain causes sublimation//evaporation//melting//increase in temperature of matter//expansion of matter**

39. How can one identify a legume from other dicotyledonous plants?

✓ **Legumes have root nodules unlike other dicotyledonous plants//**

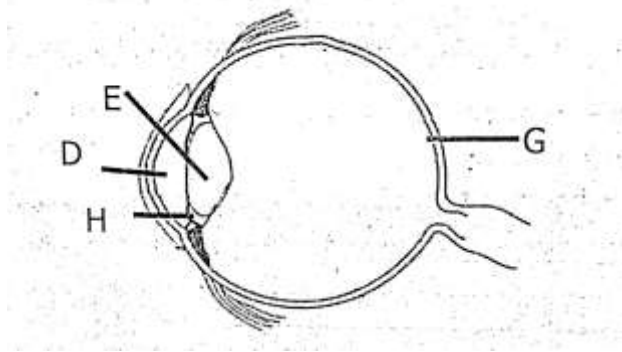
✓ **Legumes store their seeds in their pods unlike other dicotyledonous plants**

40. Which method of grazing cattle involves the use of electricity?

✓ **Strip grazing**

SECTION B (60 MARKS)

41. The diagram below shows the structure of the human eye. Study and use it to answer the questions that follow.



a) Name the parts marked **E** and **G**.

i) **E-Convex lens** ii) **G-retina**

b) Give the function of part **H** in the human eye.

✓ **Part H holds the convex lens in one position**

c) Identify one way of caring for the human eye.

✓ **Regular washing with clean water//Feeding on a balanced diet//Having regular physical exercises//Avoid touching the eyes with dirty hands//Avoid reading under too dim or too bright light//Avoid sharing face towels with infected people//Avoid wearing glasses that do not match with your eye lens**

42. a) What is a joint?

✓ **A joint is place where two or more bones meet in the body**

b) Give any two functions of joints in the human body.

✓ **Joints allow body movement//Joints allow flexibility**

c) Identify any one type of movable joint.

Hinge joints//Ball and socket joints//Pivot joints//Gliding/Sliding/Plane joints

43. a) State the meaning of the term food taboo.

✓ **A food taboo is a religious or cultural belief that forbids people from eating certain food stuffs**

b) Give any two religious food taboos observed by people in your community.

✓ **Christians are not allowed to eat meat on Fridays during the lent period//Moslems are not allowed to eat pork//Moslems are not allowed to meat slaughtered by a non-moslem**

c) Mention any **one** effect of food taboos to the health of children.

- ✓ **Food taboos can lead to malnutrition//Food taboos can lead deficiency diseases**

44. The diagram below show activities done to promote personal hygiene. Study and use them to answer the questions that follow.



a) Identify the personal hygiene activities done by the persons at **R** and **S**.

i) **R-Rinsing clothes** ii) **S-Bathing**

b) State any **two** reasons why the person at **T** is carrying out that activity.

- ✓ **To remove germs and dirt from the hands//To kill germs in the hands**

45. In four brief sentences, describe the steps you can take in order to make charcoal.

a) **Cut trees into logs and pile them into a heap in one place**

b) **Cover the piled logs of wood with leaves or grass**

c) **Cover the wood and leaves with soil**

d) **Set the covered wood on fire**

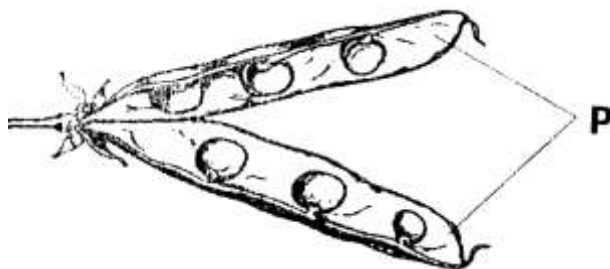
46. a) Write down any two organic materials used when making compost manure.

- ✓ **Sweet potato peelings//Banana peelings**

b) Besides compost manure, name any **two** other examples of natural fertilizers.

- ✓ **Farmyard manure//Green manure//Organic mulches**

47. The diagram below shows a method of seed dispersal. Use it to answer the questions that follow.



- Identify the method of seed dispersal shown in the diagram above.
✓ **Self-dispersal//Explosive mechanism**
 - State any **one** factor that makes the structure marked **P** to split during seed dispersal.
✓ **Long exposure to sun heat//maturity of the pods//Presence of the lines of weakness on the walls of pods**
 - Name any **two** other plants whose seeds are dispersal through the diagram above.
✓ **Castor oil//Beans//Peas**
48. In the table below, part **A** shows practices carried out in farm animals and part **B** has the importance.

Part A: Practices	Part B: Importance
Steaming up	Reduces injuries to other animals
Castration	Controls foot rot disease
Hoof trimming	Controls inbreeding
Dehorning	Stimulates milk production and let down

Use the importance in **B** of the table to match the practices below correctly.

- Steaming up - **Stimulates milk let-down and production**
 - Castration - **Controls inbreeding**
 - Hoof trimming - **Controls foot rot disease**
 - Dehorning - **Reduces injuries to other animals**
49. a) Give any **two** signs of parasites in rabbits.
✓ **Losing weight//Losing some of the fur//Rubbing the body on the walls**
- State **one** effect of parasites to rabbits.
✓ **They spread diseases to rabbits//They suck blood causing anaemia//They lower the quality of rabbit products//They damage the skin of rabbits//They cause irritation to the rabbits**
 - Mention any **one** way of controlling parasites in rabbits.
✓ **Spraying acaricides//Dusting rabbits//Regular deworming//Hand picking//Washing rabbits with water having chemicals**

50. a) Why is rainfall measured in millimetres?
- ✓ **To know how deep rainwater has entered the soil**
- b) How are the following components important on a rain gauge?
- i) Funnel - **Directs water into the measuring cylinder**
 - ii) Measuring cylinder - **Collects and measures the volume of rainwater for accurate readings**
 - iii) Bottle - **Collects rainwater for measurement of its volume**
51. a) Why is the inside part of an electric bulb coated with white powder?
- ✓ **To enable the bulb produce bright light//To increase the brightness of light produced//The powder determines the colour of light produced**
- b) State the function of the coiled filament in an electric bulb.
- ✓ **To produce light in an electric bulb**
- c) Identify any **two** conditions that can cause an electric bulb fail to produce Light in an electric circuit.
- ✓ **Blown electric bulb//Exhausted dry cells//Damaged bulb//Poorly arranged dry cells//Rusty internal metallic parts//Poorly placed bulb in its holder**
52. a) Name the germ that causes cholera.
- ✓ **Bacteria**
- b) Explain why cholera is common in heavily populated communities.
- ✓ **Due to an outbreak of poor sanitation that attracts houseflies which spread germs that cause cholera**
- c) Mention **one** way of controlling the spread of cholera in the communities in **(b)** above.
- ✓ **Proper disposal of human wastes//Covering food to avoid contamination//Sweeping away rubbish in the compound//washing hands regularly after visiting latrines...**
53. a) Give any **two** reasons why people eat food.
- ✓ **To have a healthy body//To overcome hunger//To enable the body get energy//To promote body growth**
- b) Identify any **two** values of food in the human body.
- ✓ **Food repairs worn out body cells and tissues//Food produces heat and energy required by the body//Food protects the body against diseases/Improves on the general health of the body**
54. a) What are plant fibres?
- ✓ **Plant fibres are long thin thread-like structures used to make fabrics got from plants**

b) Identify **two** examples of plant fibres.

✓ **Sisal fibre//Cotton wool//Jute fibre//Flax fibre//Hemp fibre//Raffia**

c) State **one** way of conserving plants as a resource in the environment.

✓ **Using charcoal saving stoves//Planting more trees//Using alternative sources of energy//Covering food when cooking//Enforcing strict laws against deforestation...**

55. a) Name the largest vein in the human body.

✓ **Vena cava**

b) Name the type of blood that is transported by the pulmonary artery.

✓ **Deoxygenated blood**

c) State **one** characteristics of arteries that enable them to transport blood at a high pressure.

✓ **They are thick walled//They have narrow lumens//They have no valves**

d) Give **one** way in which the structure of capillaries enables them to exchange body materials.

✓ **They are thin walled//They have moist surfaces**

END