



SCIENCE

Time: 1 hour 40 minutes.

INSTRUCTIONS TO CANDIDATES (Read these instructions carefully.)

1. You have been given this question booklet and a separate answer sheet. The question booklet contains 50 questions.
2. Do any necessary rough work in this booklet.
3. When you have chosen your answer, mark it on the **ANSWER SHEET**, not in the question booklet.

HOW TO USE THE ANSWER SHEET.

4. Use an ordinary pencil only.
5. Make sure that you have written on the answer sheet:-
YOUR INDEX NUMBER
YOUR NAME
NAME OF YOUR SCHOOL
6. By drawing a **dark line** inside the correct numbered boxes, mark your full Index Number (i.e. School Code Number and the three-figure Candidate's Number) in the grid near the top of the answer sheet.
7. Do not make any marks outside the boxes.
8. Keep your answer sheet as clean as possible and **do not fold it**.
9. For each of the questions **1-50**, four answers are given. The answers are lettered A, B, C, D. In each case, only **ONE** of the four answers is correct. Choose the correct answer.
10. On the answer sheet, show the correct answer by drawing a **dark line** inside the box in which the letter you have chosen is written.

Example:-

In the Question Booklet:

15. The largest component of blood is

- A. red cells.
- B. white cells.
- C. plasma.
- D. platelet.

The correct answer is C.

On the Answer sheet:

14. [A] [B] [C] [D] **15.** [A] [B] [C] [D] **16.** [A] [B] [C] [D] **17.** [A] [B] [C] [D]

In the set of boxes number 15, the box with letter C printed in it is marked.

11. Your dark line **MUST BE** within the box.
12. For each question, **ONLY ONE** box is to be marked in each set of four boxes.

This question paper consists of 7 printed pages.

1. The following are signs and symptoms of sexually transmitted infections
- (i) Painful and swollen lymph glands
 - (ii) Hard lumps on the skin
 - (iii) Yellowish discharge from penis
 - (iv) Sores in the mouth and lips
- Which signs are for syphilis?

- A. i and ii
- B. ii and iv
- C. iii and iv
- D. i and iii

2. Which of the following shows the correct flow of urine?

- A. Ureter → kidney → urethra → bladder.
- B. Bladder → kidney → ureter → urethra.
- C. Kidney → ureter → bladder → urethra.
- D. Urethra → ureter → bladder → kidney.

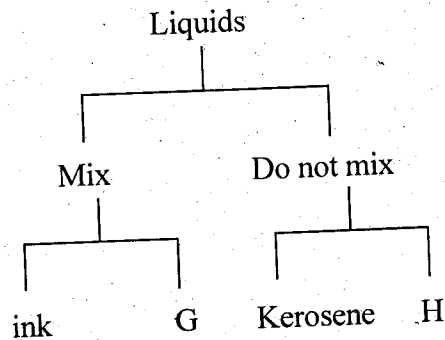
3. The force that opposes motion can be decreased by the following **except**

- A. using treads.
- B. streamlining.
- C. polishing surfaces.
- D. using lubricants.

4. Which one of the following pairs of parasites can be controlled by deworming?

- A. Ticks and tapeworms.
- B. Liverfluke and mites.
- C. Ticks and fleas.
- D. Roundworms and tapeworms.

5. The chart below represents a simple classification of liquids.



Which liquids are represented by H and G?

- | H | G |
|-----------|--------------------|
| A. Water | Milk. |
| B. Petrol | Methylated spirit. |
| C. Diesel | Milk. |
| D. Milk | Petrol. |

6. Which one of the following sources of electricity pollutes air?

- A. Dynamo.
- B. Diesel generator.
- C. Biogas driven generator.
- D. Solar panel.

7. Which of the following media can most effectively be used in the campaign against the spread of HIV and AIDS?

- A. Posters.
- B. Television.
- C. Newspapers.
- D. Radios.

8. Through which one of the following media can sound travel the fastest?

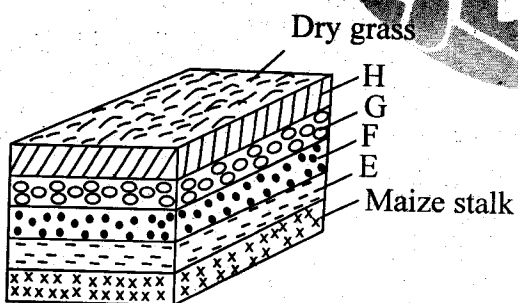
- A. Liquids.
- B. Vacuum.
- C. Air.
- D. Solids.

9. A plant with shallow roots and broad leaves is not likely to have
- flexible stem.
 - thin cuticles.
 - thick cuticles.
 - many stomata.

10. Which one of the following waste products is **not** excreted by the skin?
- Excess salts.
 - Excess water.
 - Carbon dioxide.
 - Lactic acid.

11. The purpose of salt in food preservation is to
- lower the temperature.
 - remove water.
 - hydrate the food.
 - remove air.

12. The diagram below shows a compost heap.



Which one of the above layers adds nutrients to the heap?

- G
 - H
 - E
 - F
13. Which one of the following pairs of blood vessels carries deoxygenated blood?
- Venacava and aorta.
 - Pulmonary artery and venacava.
 - Pulmonary vein and pulmonary artery.
 - Aorta and venacava.

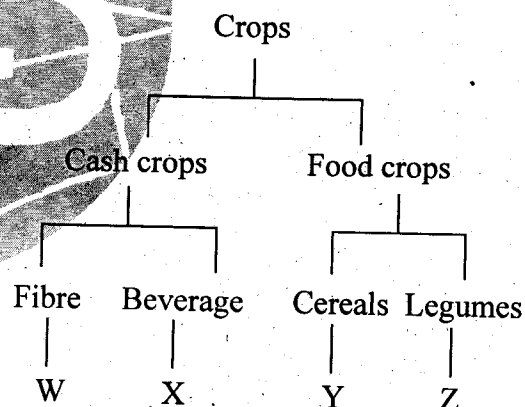
14. Which one of the following crops is **not** a fodder crop?

- Sweet potato vines.
- Oats.
- Kikuyu grass.
- Napier grass.

15. Which one of the following pairs consists of only living components of the environment?

- Water and air.
- Soil and plants.
- Animals and air.
- Plants and animals.

16. The chart below shows how std. 4 pupils classified crops:



Which one of the following shows the crops W, X, Y, Z respectively?

- Cotton, coffee, maize, peas.
- Sisal, cotton, wheat, beans.
- Palm tree, cotton, beans, sorghum.
- Simsim, tea, millet, peas.

17. The following are natural sources of light **except**

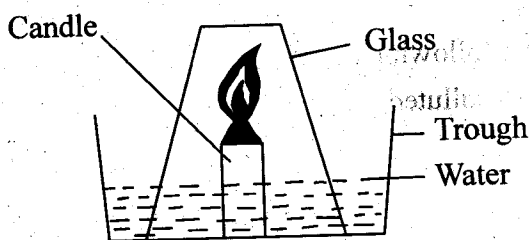
- glowworms.
- the sun.
- candle.
- stars.

18. The clouds that look like bundles of cotton wool are not likely to
- have a flat base.
 - be a sign of heavy rainfall.
 - be a sign of fine weather.
 - be found high in the sky.

19. Which of the following groups of activities only consists of recreational uses of water?
- Fishing, making fountains, surfing.
 - Boat racing, irrigation, making fountains.
 - Swimming, mixing chemicals, boat racing.
 - Surfing, swimming, boat racing.

20. Which of the following groups of foods consists of a balanced diet?
- Cassava, chicken, orange.
 - Spinach, lemon, beans.
 - Cabbages, pineapple, carrots.
 - Yams, kales, maize.

21. Standard 6 pupils set up an experiment as shown below.



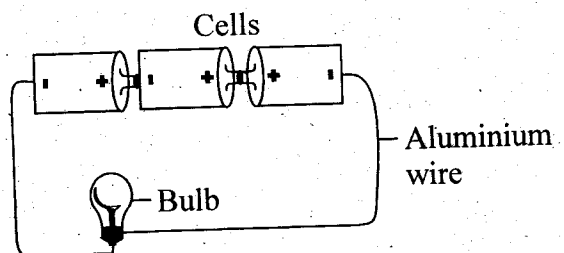
- After the experiment they concluded that
- air occupies space.
 - oxygen supports burning.
 - carbon dioxide supports combustion.
 - water supports burning.

22. Which one of the following plants is classified as both green and non-flowering?
- Sisal.
 - Grass.
 - Cypress.
 - Sugarcane.

23. The following are some characteristics of a certain vertebrate:
- Lays eggs that are externally fertilized.
 - Scales on the body
 - Varying body temperature
- The animal with the above characteristics is likely to be
- salamander.
 - lizard.
 - eagle.
 - tilapia.

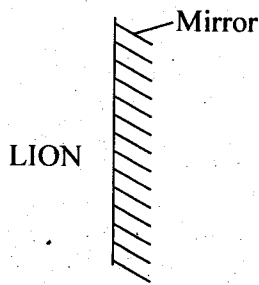
24. Which one of the following is an effect of HIV and AIDS to the nation?
- Congestion in hospitals.
 - Poor health.
 - Stigmatisation.
 - Lack of parental care.

25. Std. 7 pupils made a simple electric circuit as shown below.



- They found out that the bulb did not light. What mistake could they have made?
- Using aluminium wire instead of copper wire.
 - The connection of dry cells.
 - Using three dry cells.
 - Placing a wire at the lower part of the bulb.

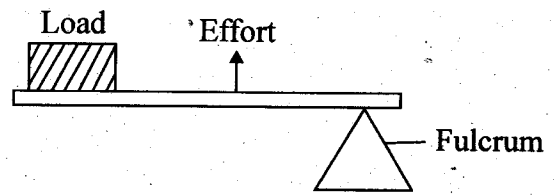
26. Simon wrote the word LION on a piece of paper and held a mirror in front of the paper.



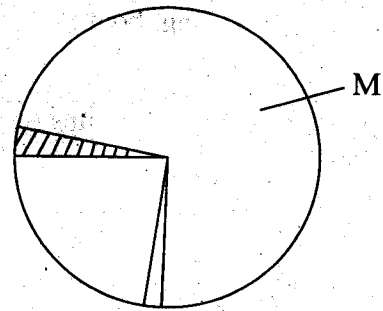
Which one of the following shows how the word appeared on the mirror?

- A. LION
 B. NOIL
 C. LION
 D. NOIL
27. Which one of the following pairs of foods can be used to prevent kwashiorkor?
 A. Fish and peas.
 B. Sweet potatoes and mutton.
 C. Oranges and bananas.
 D. Rice and beef.
28. Which of the following is a use of translucent materials?
 A. Partitioning walls of room in a house.
 B. Making windows in bathrooms.
 C. Making of vehicle windscreens.
 D. Making of window panes.
29. The soil that cracks when dry is also likely to
 A. have good drainage.
 B. have large air spaces.
 C. become waterlogged.
 D. be suitable for farming.
30. A river passing through a coffee plantation is **mainly** polluted by
 A. oil spillage.
 B. flooding.
 C. human waste.
 D. excess farm chemicals.

31. Which one of the following levers can fit in the illustration below?



- A. Spade.
 B. Wheelbarrow.
 C. Crowbar.
 D. Claw hammer.
32. The pie-chart below represents composition of air in the atmosphere.



Which of the following is the function of the gas labelled M?

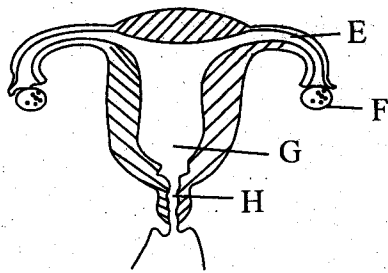
- A. Used in extinguishing fire.
 B. Used in electric bulbs.
 C. Used in photosynthesis.
 D. Used by legumes in making proteins.
33. The following are ways in which water gets polluted. Which one is **not**?
 A. Spills from oil tanker.
 B. Burning vegetation cover.
 C. Using farm chemicals excessively.
 D. Untreated sewage.
34. Which one of the following pests will destroy crops in the field?
 A. Weevil.
 B. White ant.
 C. Mice.
 D. Stalkborer.

35. Std. 6 pupils were to conduct an experiment on making a rainbow. Which of the following materials were they likely to use?
- Mirror and water.
 - Pencil and water.
 - Ruler and water.
 - Torch and ruler.

36. Which of the following fertilisers is **not** classified as straight fertilisers?
- Calcium ammonium nitrate.
 - Single superphosphate.
 - Diammonium phosphate.
 - Urea.

37. Clouds are classified according to all the following **except**
- appearance.
 - size.
 - height.
 - shape.

38. Use the female reproductive system below to answer the question that follows.



Implantation takes place in the part labelled

- E
 - H
 - F
 - G
39. Which one of the following external parasites attacks all domestic animals?
- Flea.
 - Mite.
 - Tsetsefly.
 - Tick.

40. Which one of the following is **not** a function of mulching?
- Control weeds.
 - Conserves soil moisture.
 - Encourages soil erosion.
 - Adds organic matter in the soil.

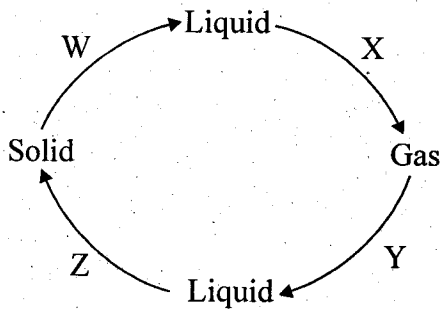
41. Which one of the following is the last stage of giving birth?
- Labour pains.
 - Elimination of the afterbirth.
 - Bursting of the amniotic fluid.
 - Contraction of the cervix.

42. Which of the following metals is **not** magnetic?
- Iron.
 - Silver.
 - Cobalt.
 - Steel.

43. Which vaccine is administered to protect the infant from whooping cough?
- B.C.G
 - Anti-polio.
 - Ant measles.
 - DPT

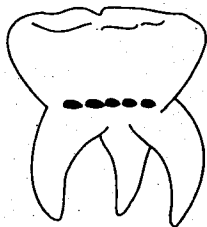
44. Which one of the following planet is the fourth from Mercury?
- Saturn.
 - Uranus.
 - Jupiter.
 - Mars.

45. Use the diagram below to answer the question that follows



Which two processes require absorption of heat from the surrounding?

- A. W and Z
 B. Y and Z
 C. W and X
 D. X and Y
46. The function of the amniotic fluid is to
- A. prevent mixing of the mother's blood and foetus blood.
 B. protect the foetus against shock.
 C. facilitate food passage from the mother's blood to the foetus' blood.
 D. facilitate the removal of waste products from the foetus to the mother's blood.
47. Which one of the following is false about the type of teeth shown below?



- A. They are twelve in an adult.
 B. They have cusps.
 C. They are used for grinding and chewing.
 D. They are part of deciduous teeth.

48. Which of the following is **not** a myth and misconception about HIV and AIDS?
- A. All people can be infected with HIV and AIDS.
 B. Mosquito bites can transmit HIV.
 C. Sexual intercourse with a child can cure AIDS.
 D. Sharing utensils can transmit HIV.

49. Which one does **not** function the same way as a petrol driven generator to produce electricity?
- A. Hydro-electric generator.
 B. Dry cells.
 C. Wind driven turbine.
 D. Bicycle dynamo.

50. Which method of grazing uses a temporary movable fence?
- A. Paddockging.
 B. Stall feeding.
 C. Tethering.
 D. Strip grazing.