

SCIENCE

Time: 1hr 40mins

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

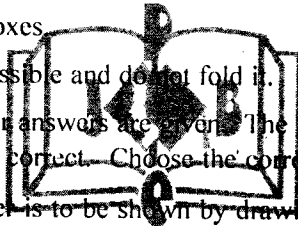
4. Use an ordinary pencil.
5. Make sure that you have written on the answer sheet:

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 and D. In each case only **ONE** of the four answers is correct. Choose the correct answer.
10. On the answer sheet the correct answer is to be shown by drawing a **dark line** inside the box in which the letter you have chosen is written.



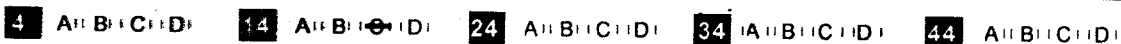
Example

In the Question Booklet:

- 14.** All of the items below are components of soil except
- A. water
 - B. air
 - C. light
 - D. humus.

The correct answer is C (light)

On the answer sheet:

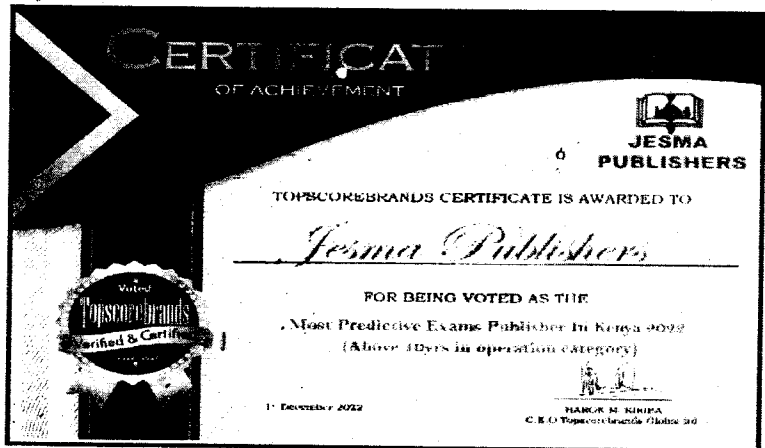


In the second set, the box with the letter C printed in it is marked.

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 8 printed pages

Candidates should check the question paper to ensure that all the pages are printed as indicated and no questions are missing



1. A child with rapid heartbeat and feeling dizzy should be given a diet rich in
- vitamin D
 - phosphorus
 - iron
 - protein

2. Which one of the following parts of the human digestive system is **correctly** matched with its function?

	Part	Function
A.	Nose	Absorption of air.
B.	Air sac	Moistening the air
C.	Bronchus	Passage of air
D.	Trachea	Exchange of gases

3. Which of the following forces stops a moving object?

- Friction
- Magnetic
- Weight
- Gravity

4. The following are some characteristics of animals:

- Have scales.
- Breathe through the lungs.
- Lay fertilised eggs.
- Have varying body temperatures.

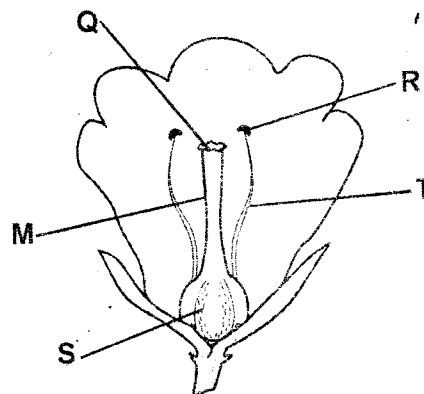
Which animal is **likely** to be described above?

- Amphibians
- Mammals
- Fish
- Reptiles

5. Which statement below is **true** about the soil that makes short ribbons?

- Has the smallest particles.
- Good for farming.
- Cracks easily when dry
- Has best drainage.

6. The diagram below shows parts of a flower.



Breaking of the pollen tube takes place in the part labelled

- M
- Q
- R
- S

7. The following are signs and symptoms of a certain disease:

- (i) Muscular pains.
- (ii) Diarrhoea
- (iii) Fever
- (iv) Rashes on the skin.

The above disease is most *likely* to be

- A. cholera
- B. bilharzia
- C. malaria
- D. typhoid

8. All the following are fibre crops **except**

- A. flax
- B. cotton
- C. oats
- D. sisal

9. Which of the following food groups listed below have the **same** nutritional value?

- A. Groundnuts, milk, fish.
- B. Meat, butter, sugar.
- C. Liver, spinach, kales.
- D. Eggs, bread, fish.

10. Which one of the following is an adaptation of plants in dry areas?

- A. Thin cuticles.
- B. Wide spread roots.
- C. Numerous stomata.
- D. Broad leaves.

11. In which part of the digestive system are juices that digest starch **mainly** produced?

- A. Mouth
- B. Small intestine
- C. Large intestine
- D. Stomach

12. Which of the following pairs consists of non-flowering plants?

- A. Cactus and onion.
- B. Cypress and sugarcane.
- C. Moss and cedar.
- D. Carrot and sisal.

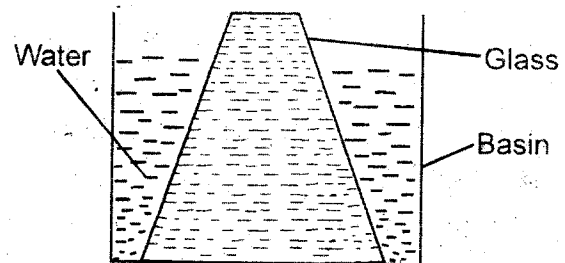
13. Which one of the following is a nectar feeder?

- A. Kingfish
- B. Duck
- C. Sunbird
- D. Eagle

14. A stone at the bottom of a swimming pool appears nearer the surface due to

- A. dispersion of light.
- B. reflection of light.
- C. bouncing of light.
- D. refraction of light.

15. The diagram below represents a set-up to investigate a certain property of matter.



The glass was tilted and air bubbles were seen. This shows that

- A. water exerts pressure.
- B. air occupies space.
- C. air has weight.
- D. air exerts pressure.

16. Which of the following is a natural way of lighting a house? Using
- a candle.
 - translucent roof.
 - hurricane lamp.
 - electricity.

17. The following are characteristics of a certain cloud.

- Appear high in the sky.
- Look like bundles of cotton.
- Have flat base.

The cloud is also likely to

- cover the whole sky.
- be dark grey in colour.
- bring thunderstorms and lightning.
- bring fine weather.

18. Which of the following is the most affordable way of preserving small fish?

- Freezing
- Canning
- Sun drying
- Smoking

19. During a science lesson, pupils collected the following materials.

- Manilla paper.
- A plastic bottle.
- Water and ink.
- A stand.
- A string.

In order to construct an air thermometer, they also required

- a thin glass bottle.
- funnels.
- a long measuring jar.
- a polythene bag

20. Which of the following is **not** required when making a compost manure?

- Inorganic manure.
- Kitchen refuse.
- Wood ash.
- Maize stalk.

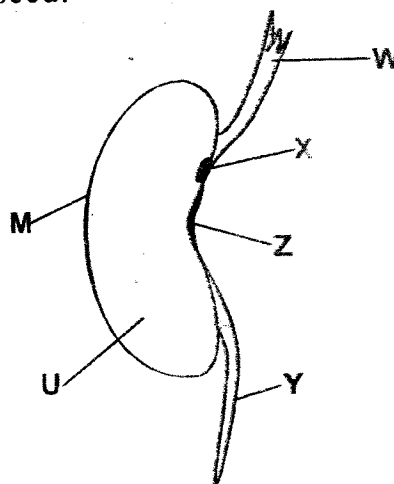
21. Jack observed letter **R** using a mirror. Which of the following shows how the letter appeared?

- Я
- Я
- R
- Ɔ

22. Which of the following blood vessels carry deoxygenated blood away from the heart?

- Aorta
- Pulmonary vein.
- Venacava
- Pulmonary artery

23. The diagram below represents a bean seed.



Which of the following pairs represent the embryo?

- M and U
- X and Y
- Y and W
- Z and U

24. Which one of the following pairs consist of a substance which have definite mass and indefinite volume?
- Water vapour and oxygen.
 - Stone and water.
 - Dust and candlewax.
 - Ice and oil.

25. Which of the following practices can reduce the pollution of air?
- Avoid burning vegetation cover.
 - Treating sewage from industry.
 - Driving vehicle with well maintained engines.
 - Planting cover crops.

26. Which of the following statements describe soft water?
- Lather easily with soap.
 - Contain useful mineral.
 - Safe for drinking.
 - Form scum in water.

27. The gas that cover 21% of the environment has the following uses **except**
- support burning.
 - making of protein in plants.
 - germination of seeds .
 - used during breathing.

28. Which one of the following parts of the reproductive system is **correctly** matched with its function?
- Ovary - Attaches the zygote
 - Womb - Produce ovum
 - Urethra - Passage of ovum
 - Oviduct - Fusion of cells

29. Heat transfer through liquids and gases by
- radiation only.
 - conduction.
 - convection only.
 - convection and radiation.

30. Which of the following pair of materials are **correctly** classified?

	Opaque	Translucent
A.	Mirror	Oiled paper
B.	Stone	Windscreen
C.	White paper	Skylight
D.	Window panes	Clear glass

31. Which of the following effects of drug abuse consists of social and health effects **respectively**?
- Impaired judgement and marital conflicts.
 - Rape and withdrawal.
 - Addiction and lack of concentration.
 - Accident and truancy.

32. Which of the following pair of plants is **correctly** matched with the type of root system?

	Fibrous root	Tap root
A.	Acacia	Coconut
B.	Tomato	Pigweed
C.	Mango	Cactus
D.	Onion	Kale

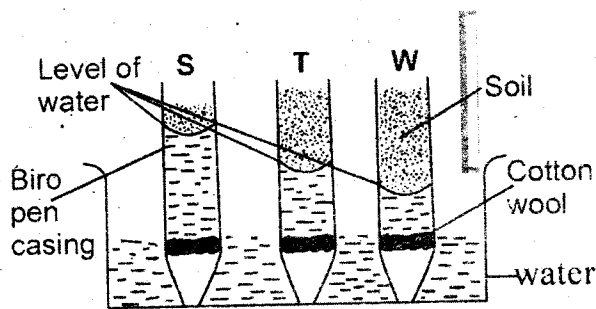
33. Which of the following is **not** a sign of attack of external parasites on animals?

- A. Restlessness
- B. Anaemia
- C. Enlarged stomach
- D. Irritation

34. Which one of the following pairs of methods of separating mixtures involves solids **only**?

- A. Winnowing and sieving.
- B. Use of magnet and evaporation.
- C. Evaporation and filtering.
- D. Sieving and filtering.

35. Pupils investigated capillarity in different types of soil. Their results were as shown in the diagram below.



Which of the following statements is **correct** from the set up done by the pupils?

- A. Soil **T** is the best in modelling.
- B. Soil **W** has the best drainage.
- C. Soil **T** has smaller particles than **S**.
- D. Soil **S** has bigger particles than **W** and **T**.

36. Which one of the following activities does **not** help to conserve water?

- A. Digging trenches.
- B. Mulching seedlings.
- C. Treating industrial waste.
- D. Sprinkle irrigation.

37. Which of the following pairs of animals produces **both** meat and dairy?

- A. Cow and goat
- B. Goat and sheep
- C. Cow and sheep
- D. Sheep and pigs

38. Which one of the following sources of electricity pollute the environment?

- A. Car battery
- B. Solar panel
- C. Dynamos
- D. Diesel generators

39. During a science lesson, pupils collected the following materials:

- (i) Bottle top.
- (ii) Water.
- (iii) Hammer.
- (iv) Metallic bowl.

Which of the following factors that affect sinking and floating were they **likely** to investigate?

- A. Type of materials.
- B. Shape of materials.
- C. Colour of materials.
- D. Size of materials.

40. Which type of soil erosion is demonstrated by pouring water at different positions on a gentle slope?

- A. Gully erosion.
- B. Splash erosion.
- C. Rill erosion.
- D. Sheet erosion.

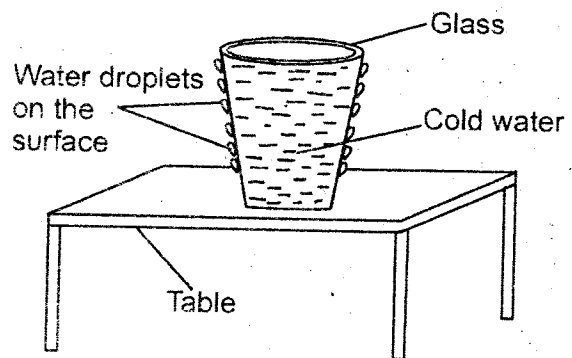
41. All the following are myths and misconceptions about HIV/AIDS. Which one is **not**?

- A. AIDS only attack immoral people.
- B. HIV is mainly spread through sharing piercing objects.
- C. HIV patients get opportunistic infections at full blown stage.
- D. All people with HIV have AIDS.

42. Which one of the following is a positive effect of moving air?

- A. Felling trees.
- B. Winnowing.
- C. Blowing off roofs.
- D. Carrying top soil.

43. During a sunny day, pupils placed a glass containing cold water outside the class as shown below.



Which of the following processes were they investigating?

- A. Condensation
- B. Melting
- C. Freezing
- D. Evaporation

44. Which one of the following statements describes the beak of a bird that feeds on flesh?

- A. Short, strong and slender.
- B. Long, flat and serrated.
- C. Short, strong and curved.
- D. Long, slender and curved.

45. Which one of the following weeds is poisonous and has thorns on the fruit?

- A. Sodom apple
- B. Pigweed
- C. Black jack
- D. Thorn apple

46. Which one of the following parts of the skin is found in **both** dermis and epidermis?

- A. Sweat pore
- B. Sweat duct
- C. Sebaceous glands.
- D. Sweat glands.

47. Which of the following features enable a fish to float on water even if it is **not** swimming?

- A. Fins
- B. Gills
- C. Air bladder
- D. Lateral line

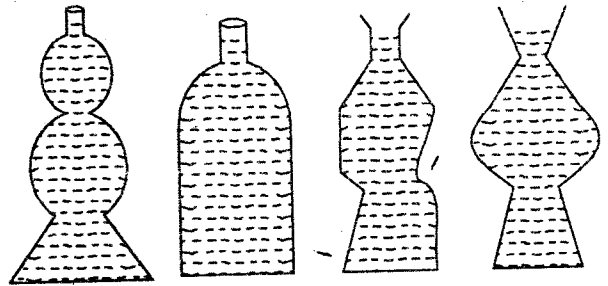
48. Which of the following animal feeds is in the same group as desmodium?

- A. Sunflower seed
- B. Maize germ
- C. Mollasses
- D. Clover

49. Which of the following is **not** a sign of pregnancy?

- A. Reduced appetite.
- B. Enlargement of the abdomen.
- C. Morning sickness.
- D. Movement of the foetus can be felt.

50. The diagram below shows a set up to investigate a certain property of liquids.



The set up shows that liquids have

- A. definite volume.
- B. indefinite shape.
- C. definite mass.
- D. definite shape.

