

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. Which one of the following is the **COMMONLY abused drug in Kenya?**

- A. Tobacco
- B. Miraa
- C. Alcohol
- D. Tea

The correct answer is C (Alcohol)

On the answer sheet:

☐ A ☐ B ☒ C ☐ D ☐ A ☐ B ☒ C ☐ D ☐ A ☐ B ☒ C ☐ D ☐ A ☐ B ☒ C ☐ D ☐ A ☐ B ☒ C ☐ D

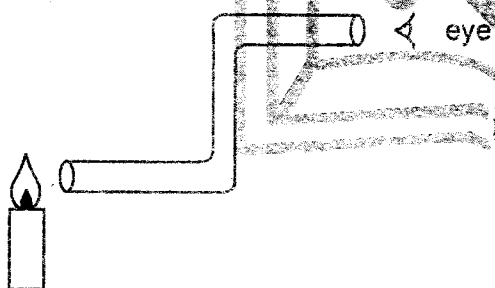
In the second set, the box with the letter C printed in it is marked.

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 7 printed pages

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

1. Heat is transferred through liquid by
 - A. conduction only.
 - B. radiation only.
 - C. convection only.
 - D. convection and radiation.
2. Which of the following processes occurs when temperature increases?
 - A. Evaporation and expansion.
 - B. Condensation and contraction.
 - C. Melting and contraction.
 - D. Freezing and melting.
3. Sound travel **BEST** in
 - A. air
 - B. vacuum
 - C. water
 - D. metal
4. The diagram below represents a set up used to demonstrate a certain property of light.



Which one of the following statement is **CORRECT** about the set up? Light

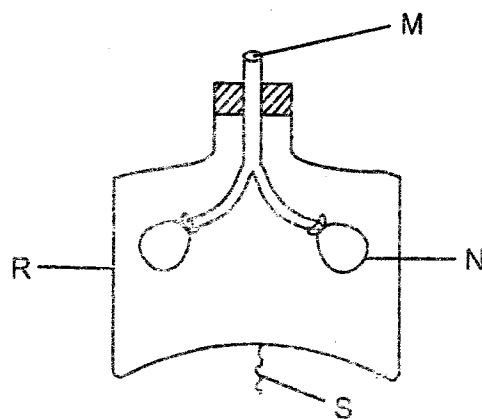
- A. is refracted at a corner.
 - B. travel in a straight line.
 - C. is reflected at a corner.
 - D. travel in all direction.
5. The following source of electricity work the same way as dynamo **EXCEPT**
 - A. wind driven turbine.
 - B. geothermal generator.
 - C. torch batteries.
 - D. petrol driven generator.

6. Digestion of food take place in all of the following parts **EXCEPT**
 - A. oesophagus
 - B. small intestine
 - C. stomach
 - D. mouth
7. The following are changes that occurs during adolescent stage.
 - (i) *Production of sex cells.*
 - (ii) *Hips broaden.*
 - (iii) *Enlargement of breasts.*
 - (iv) *Increase in weight and height.*

Which changes occurs in **BOTH** boys and girls?

- A. (ii) and (iv)
 - B. (i) and (iv)
 - C. (ii) and (iii)
 - D. (i) and (ii)
8. Which one of the following blood vessel carries blood from the heart to the lungs?
 - A. Pulmonary artery
 - B. Aorta
 - C. Venacava
 - D. Pulmonary vein

9. Study the diagram below and answer the question that follow



- When part marked S is pulled down part
- A. N burst.
 - B. M allow air to move out.
 - C. N decrease in size.
 - D. R move upward and outward.

10. The following are the functions of placenta. Which one is **NOT**?

- A. Facilitate transfer of waste products.
- B. Facilitate transfer of food.
- C. Protect the foetus from shock.
- D. Exchange of oxygen and carbondioxide.

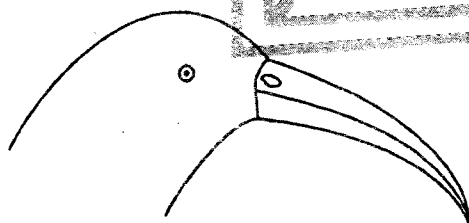
11. Which one of the following is an advantage of zero grazing?

- A. Animals feed on commercial feed only.
- B. Pasture is utilized properly.
- C. Pests and diseases spread easily.
- D. The manure can be easily collected.

12. Which one of the following is a **COMMON** characteristic between a newt and a nile perch?

- A. Have scales.
- B. Covered with moist scale.
- C. Lay unfertilized eggs.
- D. Take care of their young ones.

13. The bird beak drawn below is **LIKELY** to be found in a



- A. muddy places.
- B. rice farm.
- C. granary
- D. flower garden

14. Which one of the following pair of animal feed provide animals with energy?

- A. Maize germ and rice husks.
- B. Fish meal and honey
- C. Salt lick and lucerne
- D. Desmodium and glycine

15. Which one of the following animal parasite can be controlled by dipping?

- A. Tsetsefly
- B. Liverfluke
- C. Tapeworm
- D. Mite

16. The soil which has smooth texture has

- A. large particle.
- B. best drainage
- C. best capillarity
- D. alot of humus

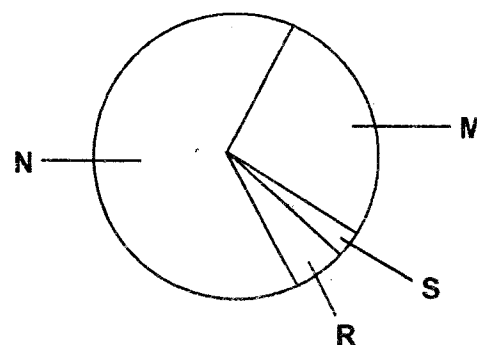
17. The **BEST** way of conserving soil in steep slope is by

- A. mulching
- B. terracing
- C. building gabion
- D. planting trees

18. Which one of the following type of manure is made of material collected from kitchen left-over and farm waste?

- A. Farnyard manure
- B. Straight manure
- C. Composit manure
- D. Green manure

19. The diagram below represent composition of air



The component of air used in preservation of drinks is represented by letter

- A. S
- B. N
- C. M
- D. R

20. Which one of the following materials works in the same way as side mirror?

- A. Frosted glass
- B. Skylight
- C. Clean water
- D. Milk

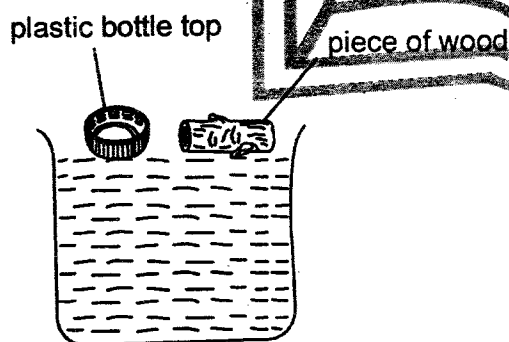
21. Which is the first step when separating a mixture of salt, sand and iron filling?

- A. Filtering the mixture.
- B. Using a magnet.
- C. Adding water to the mixture.
- D. Decanting the mixture

22. Which one of the following pair is made of materials that attract magnet?

- A. Office pin and aluminium foil
- B. Copper coin and staples
- C. Steel wool and nails
- D. Hair strand and glass

23. During a science lesson pupils set up the experiment as shown below to investigate factor that affect sinking and floating.



Both material floated because of their

- A. material
- B. weight
- C. shape
- D. size

24. Which one of the following is a **COMMON** characteristic between paraffin and ice cubes?

- A. Have indefinite size.
- B. Have indefinite mass.
- C. Have definite volume.
- D. Expand most on heating.

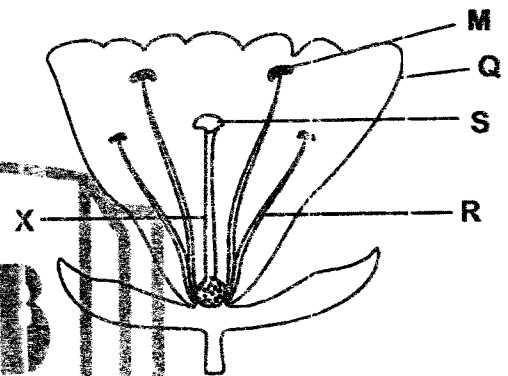
25. Pressure in liquids increases with

- A. surface area
- B. volume
- C. height
- D. depth

26. A plant with flexible stems also have

- A. thin cuticle
- B. fewer stomata
- C. shallow roots
- D. needlelike leaves

27. The diagram below shows parts of the flower



Pollen tube develop in part labelled

- A. M
- B. R
- C. S
- D. X

28. Which one of the following pairs consists of plants that are green and non flowering?

- A. Bracket tree and algae
- B. Cedar and fern
- C. Mushroom and moss
- D. Cypress and onions

29. Which of the following is a sign of unhealthy crops?

- A. Robust growth
- B. Leafy branches
- C. Streaked leaves
- D. Reduced yield

30. Study the food chain below and answer the question

Grass → grasshopper → frog → snake

The **MOST** abundant organisms is represented by

- A. grass
 - B. frog
 - C. snake
 - D. grasshopper
31. In which one of the following activities is water **NOT** used sparingly?
- A. Repairing leaking pipe.
 - B. Closing taps when not in use.
 - C. Using basin when bathing.
 - D. Construction of dam
32. Which one of the following will **NOT** pollute soil?
- A. Oil spillage
 - B. Overstocking
 - C. Rotting vegetable
 - D. Excess fertilizers
33. **MOST** fungi depend on other plants for
- A. support
 - B. habitat
 - C. shade
 - D. oxygen
34. During a science lesson, pupils collected the following material.
- (i) A glass bottle
 - (ii) Water
 - (iii) A container
 - (iv) Ink
 - (v) Manilla paper

Which weather instrument were pupils **LIKELY** to make?

- A. Liquid thermometer
- B. Rain gauge
- C. Wind vane
- D. Air thermometer

35. Which one of the planets is between Mars and Saturn?

- A. Jupiter
- B. Earth
- B. Neptune
- D. Uranus

36. Thick and feathery clouds also

- A. are dark in colour.
- B. cover the whole sky.
- C. have flat base.
- D. are low in the sky.

37. Which one of the following pairs consist of health effects of drug abuse?

- A. Trauma and addiction.
- B. Impaired judgement and marital conflicts.
- C. School dropout and loss of consciousness.
- D. Addiction and lack of concentration.

38. The following are signs of a certain sexually transmitted infections.

- (i) Sore throat.
- (ii) Painless chancre
- (iii) Skin rashes
- (iv) Lead to madness

The infection is **LIKELY** to be

- A. syphilis
- B. gonorrhoea
- C. chancroid
- D. genital herpes

39. Which one of the following ways of campaign against HIV and AIDS is the **MOST** effective? Use of

- A. newspapers
- B. radio
- C. billboard
- D. wedding ceremonies

40. Which one of the following diseases is **NOT** immunizable but communicable?

- A. Tuberculosis
- B. Measles
- C. Typhoid
- D. Malaria

41. The following are effects of HIV and AIDS to the family **EXCEPT**

- A. loss of income.
- B. school drop out.
- C. embarrassment
- D. increase number of orphan.

42. Which one of the following is a recommended way of storing medicine?

- A. Taking medicine according to doctor's prescription.
- B. Completing the dosage.
- C. Labelling all the medicine.
- D. Checking expiry date when buying medicine.

43. A child had the following signs

- (i) *Wasted muscles.*
- (ii) *Alert eyes.*
- (iii) *Visible bones.*
- (iv) *Crying alot.*

Inorder to control the above disease, the child should be given food rich in

- A. protein
- B. all nutrients
- C. iron
- D. mineral salts

44. Which one is **NOT** a traditional method of preserving food?

- A. Canning
- B. Use of honey
- C. Drying
- D. Smoking

45. Which one of the following lists consist of food rich in protein?

- A. Milk, banana, soya beans
- B. Fish, wheat, irish potatoes
- C. Rice, ugali, yams
- D. Coconut, peas, termites

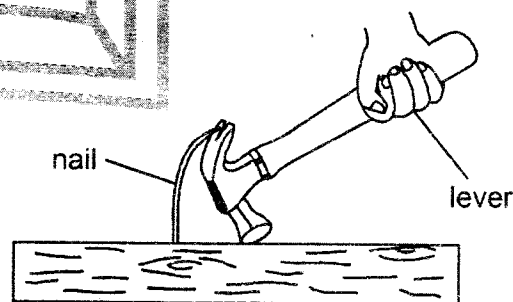
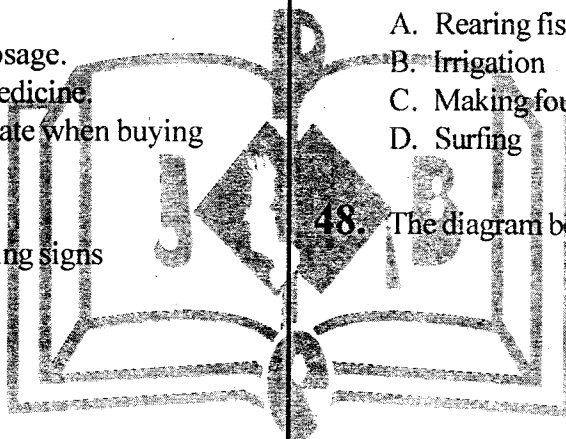
46. Which one of the following is a sign of cholera?

- A. Persistent cough
- B. Dehydration
- C. Skin rashes
- D. Pain in the joints.

47. Which one of the following is an industrial use of water?

- A. Rearing fish
- B. Irrigation
- C. Making fountain
- D. Surfing

48. The diagram below represents a lever in use



The lever illustrated above works in the same way as a

- A. wheel barrow
- B. crow bar
- C. spade
- D. bottle opener

49. Metallic tools are **MAINLY** oiled and greased in order to
- A. reduce friction.
 - B. prevent theft.
 - C. make work easier.
 - D. prevent rusting.
50. Which one of the following is measured using a spring balance?
- A. Weight
 - B. Mass
 - C. Length
 - D. Inertia

