

# SHARP FOCUS SERIES

## STANDARD EIGHT -2023

Time: 1hr 40mins

### SCIENCE

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 paper.

#### 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 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:

28. Absorption of water and mineal salts akes place in the
- A. gullet
  - B. stomach
  - C. ileum
  - D. colon

The correct answer is **D**.

On the Answer sheet:

25. [A] [B] [C] [D]

28. [A] [B] [C] **[D]**

27. [A] [B] [C] [D]

28. [A] [B] [C] [D]

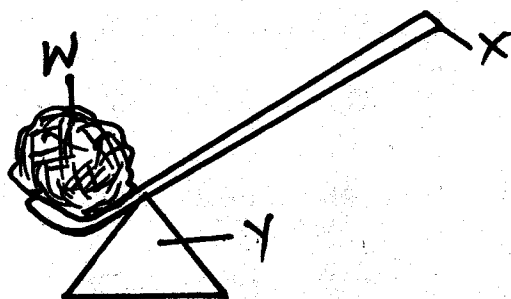
In the set of boxes number 28, the box with letter **D** printed in it is marked.

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.

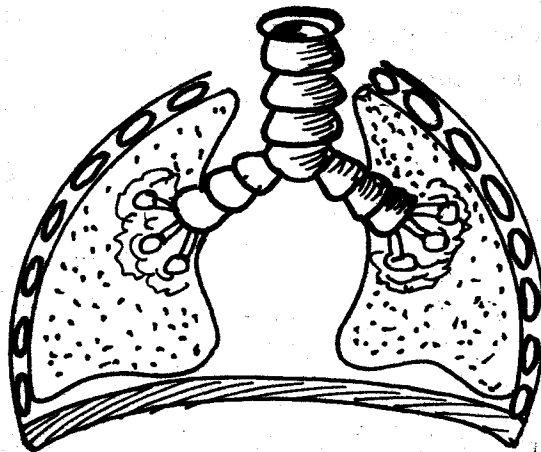
**TURN OVER**

- Which one of the following groups is made up of beverage crops only?
  - Coffee, simsim, flax
  - Carrot, cocoa, coffee
  - Coffee, cocoa, tea
  - Coffee, barley, cotton
- The type of soil with the highest capillarity also has
  - the lowest drainage
  - large particles
  - large air spaces
  - the lowest water retention
- Which one of the following are the percentage of the components of air used in making plant food and germination of seed respectively?
  - 78% and 0.03%
  - 21% and 0.03%
  - 78% and 21%
  - 0.03% and 21%
- Which one of the following is the correct arrangement of the load, the fulcrum and the effort of the lever drawn below when in use?



- | W          | Y       | X       |
|------------|---------|---------|
| A. Fulcrum | effort  | load    |
| B. Effort  | load    | fulcrum |
| C. Fulcrum | load    | effort  |
| D. Load    | fulcrum | effort  |

- The diagram below represent an excretory organ.



Which pair of excretory product does it relate?

- Water and sweat
  - Urea and carbondioxide
  - Vapour and urea
  - Carbon dioxide and vapour
- The following are effect of a drug abuse;-
    - Addiction
    - Impaired judgement
    - Truancy
    - Marital conflict
    - Lack of concetration

Which of the following are health effect?

- (ii), (iii)
- (iv), (v)
- (iii), (iv)
- (i), (v)

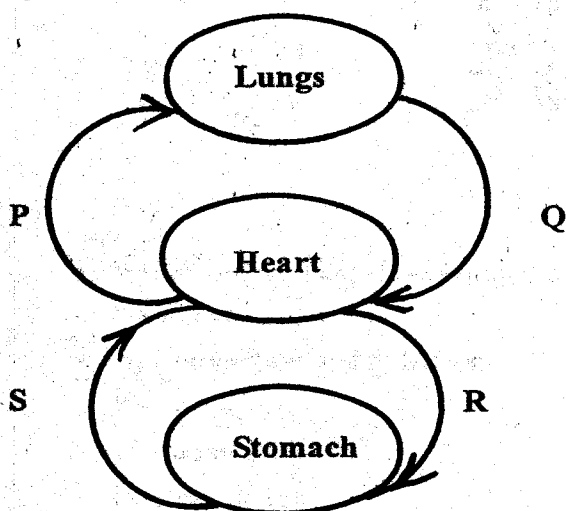
- A group of pupil mixed different liquid and recorded their finding in a table as shown below.

Liquid	Water	Kerosene	Milk	Cooking oil
Water	Yes	No	Yes	No
Kerosene	No	Yes	No	Yes
Milk	Yes	No	Yes	No
Cooking oil	No	Yes	No	Yes

If the four liquid are poured into one container, how many layers of liquids will be formed?

- A. 3
- B. 4
- C. 5
- D. 2

8. The diagram below shows blood circulatory systems.



Which pair of blood vessels carries bright red blood?

- A. Q and R
- B. P and S
- C. R and S
- D. P and R

9. Which one of the following crop pest are correctly matched?

Fieldpest

Storage pest

- |                |           |
|----------------|-----------|
| A. Army worms  | White ant |
| B. Weevils     | Army worm |
| C. Aphids      | Curworm   |
| D. Weaver bird | Aphid     |

10. Grain eater have beaks that are
- A. strong, short and curved
  - B. long, sharp and pointed
  - C. strong, short, straight
  - D. long, sharp and pointed

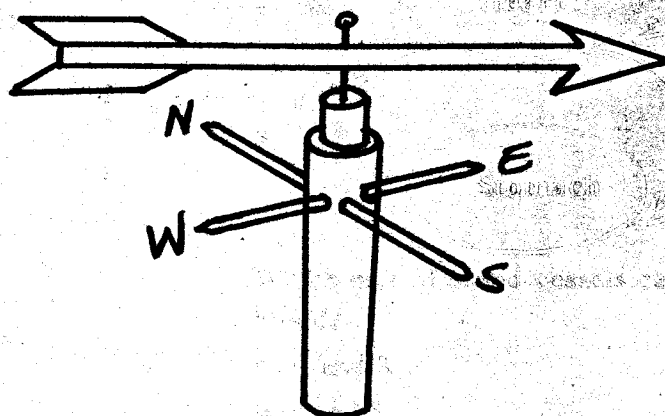
11. Which one of the following vertebrates is correctly matched with its characteristics?

Vertebrate

Character

- |             |   |
|-------------|---|
| A. Fish     | - Have moist skin, lay eggs cold blooded  |
| B. Mammals  | - Have feathers, lay eggs , warm blooded. |
| C. Birds    | - Have hair scales, warm blooded          |
| D. Reptiles | - Have scales, lay egg, cold blooded      |

12. When constructing a simple windvane class five pupils made a mistake as shown in the diagram.



Which one of the following observation was made due to the mistake?

- A. The arrow head pointed to where the wind was blowing from
  - B. The tail pointed to where the wind was blowing from
  - C. The windvane kept on moving anti-clockwise
  - D. The speed of the windvane reduced drastically
13. The following immunizable diseases are prevented by the same vaccine except
- A. Tetanus
  - B. Whooping cough
  - C. Diptheria
  - D. Polio

14. Which of the following pairs of component of environment consist of only living and non - living respectively?

- A. Animal and plant
- B. Stones and animal
- C. Soil and water
- D. Plant and air

15. During breathing out the following take place except

- A. the ribs move inward
- B. pressure in the chest cavity increases
- C. the diaphragm move downward
- D. The volume of the chest decreases

16. The following are function of amniotic fluid except:-

- A. prevent the foetus from shock
- B. keep the foetus warm
- C. prevent the foetus from harmful substance
- D. facilitates free movement and turning of the foetus

17. A pupil was advised to feed on the following food;-

- i) *Sukumawiki*
- ii) *Liver*
- iii) *Spinach*
- iv) *Red meat*

Which of the following was he likely to be suffering from?

- A. Kwashiorkor
- B. Anaemia
- C. Rickets
- D. Marasmus

18. The following are signs and symptoms shown in a certain stage of HIV infection;-

- i) *Loss of body weight*
- ii) *Frequent diarrhoea*
- iii) *Persistant fever*
- iv) *Continous cough*

In which stage are the signs and symptoms above shown?

- A. Symptomatic
- B. Window stage
- C. Asymptomatic
- D. Full blown

19. Digestion of food in the human alimentary canal ends in the

- A. large intestine
- B. anus
- C. stomach
- D. small intestine

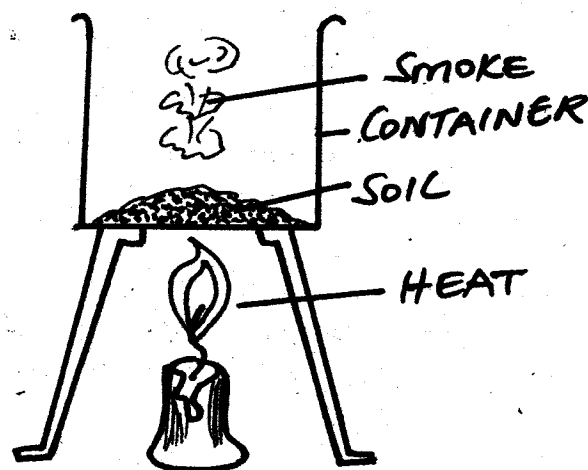
20. The following are root tubers except

- A. carrots
- B. irish potatoes
- C. arrowroots
- D. cassava

21. Which of the following parts of a maize seed stores food during germination?

- A. Cotyledon
- B. Embryo
- C. Endosperm
- D. Hilum

22. Pupils wanted to find out a specific component found in the soil by setting the experiment below.



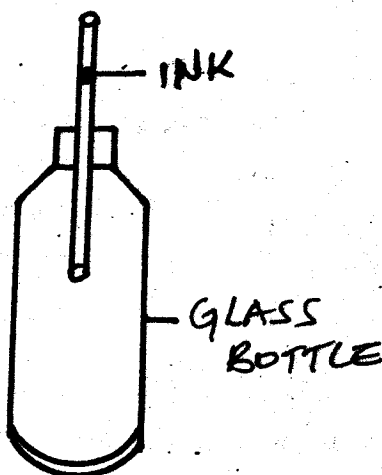
The best conclusion pupils made was that soil has

- A. water
- B. organic matter
- C. air
- D. inorganic material

23. Which one of the following statements is not correct about methods of grazing livestock?

- A. In herding animals are not fed on concentrates
- B. In zero grazing, animals are not fed on pasture
- C. In strip grazing, manure is evenly distributed
- D. In paddocking internal parasites are controlled

24. In the figure below represent a set up that can be used to investigate the effect of heat on matter.



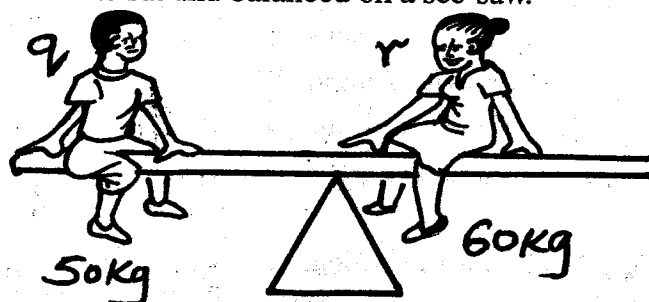
The set up was to investigate that

- A. liquids expand when heated
- B. matter changes state when heated
- C. gases expand when heated
- D. solids expand when heated

25. The size of soil particles determines the following except

- A. soil drainage
- B. water retention
- C. soil capillarity
- D. soil fertility

26. The diagram below shows two pupils q and r who sat and balanced on a see-saw.



Which one of the following statements is correct?

- A. Both pupils are seated at the same distance from pivot
- B. If r moves towards the pivot q would move downwards
- C. If q moves towards the pivot r would move upwards
- D. Pupils q is seated nearer the pivot

27. Which one of the following shows the correct order of separating sand, salt and beans?

- A. Dissolving - evaporating - filtration - picking
- B. Picking - dissolving - filtration - evaporation
- C. Sieving - dissolving - filtration - evaporation
- D. Filtration - sieving - dissolving - evaporation

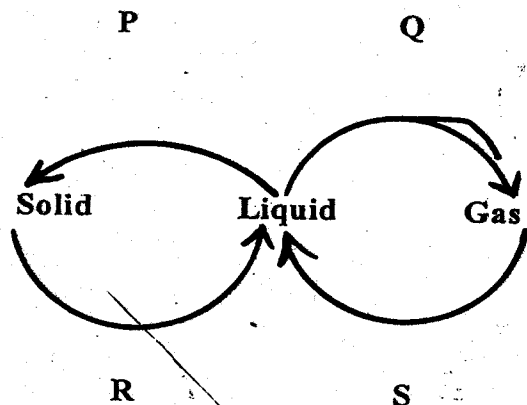
28. After fertilization of an ovum, at what stage do human fetus start developing?

- A. Foetus
- B. Zygote
- C. Implantation
- D. Embryo

29. The following are requirement of maintaining strong teeth except

- A. avoiding sugary foods
- B. chewing hard foods
- C. regularly brushing our teeth
- D. flosing our teeth

30. The processes marked P, Q and R are



- | P           | Q            | R            |
|-------------|--------------|--------------|
| A. Melting  | freezing     | evaporation  |
| B. Melting  | evaporation  | condensation |
| C. Freezing | evaporation  | melting      |
| D. Freezing | condensation | evaporation  |

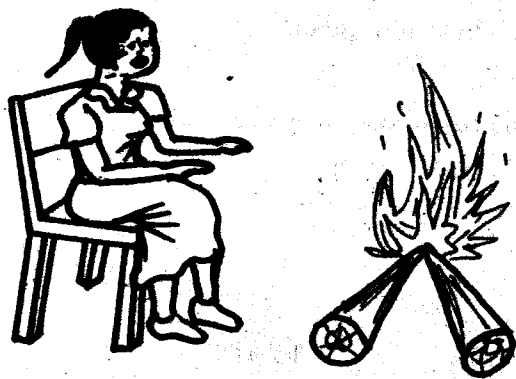
31. Which one of the following is not a renewable source of energy?

- A. Wind
- B. Coal
- C. Solar
- D. Charcoal

32. Which one of the following is not a myth about HIV and AIDS?

- A. AIDS is curable
- B. All thin people have AIDS
- C. AIDS is inheritable
- D. Anybody can get AIDS

33. The diagram below represent a person warming himself.



Which one of these shows how the heat reaches his knees?

- A. Convection and radiation
- B. Convection
- C. Radiation
- D. Conduction

34. A child with thin and brown hair, swollen hands, feet and face is also likely to

- A. have knock-knees
- B. appear weak and inactive
- C. have a face like an old man
- D. have faster heart beat

35. Which one of the following statements is not true about friction? Friction is a force that

- A. can be used to stop a moving vehicle
- B. is increased by treading tyres
- C. makes work difficult
- D. can be increased by oiling parts in contact

36. Use of excessive fertilizers will pollute

- A. soil only
- B. soil and air
- C. water only
- D. soil and water

37. Which one of the following groups of livestock parasite are found in the liver?

- A. Liverfluke, lungworms
- B. Tapeworms, hookworms, roundworms
- C. Lungworms, hookworms, tapeworms
- D. Tapeworms, liverflukes, roundworms

38. Which one of the following pairs of methods can be used to control internal livestock parasites?

- A. Deworming and dipping
- B. Rotational grazing and deworming
- C. Spraying and dipping
- D. Rotational grazing and dipping

39. Which one of the following methods of preserving food is both traditional and modern?

- A. Canning
- B. Salting
- C. Drying
- D. Pasteurization

40. Which group of the following planets are in the third, fifth and seventh position from the sun respectively?

- A. Earth, Jupiter, Uranus
- B. Uranus, Jupiter, Venus
- C. Earth, Saturn, Uranus
- D. Venus, Mars, Saturn

41. Which one of the following parts of a pitcher plant is modified for trapping?

- A. Flower
- B. Stem
- C. Leaf
- D. Bud

42. The following are signs and symptoms of a certain sexually transmitted infection;-

- i) *Painless sore on the genitals*
- ii) *A sore throat may develop*
- iii) *Painful skin rashes*
- iv) *May result to madness if not treated early*

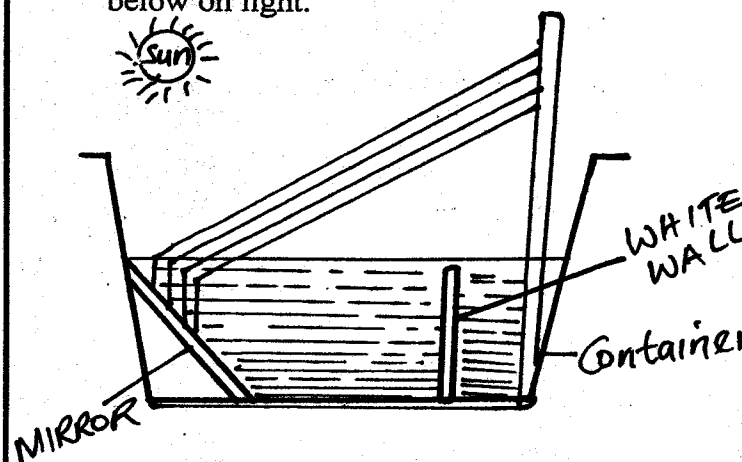
The sexually transmitted infection described above is

- A. chancroid
- B. AIDS
- C. gonorrhoea
- D. syphilis

43. Non-conductors of electricity can be used in making of

- A. insulators
- B. handles of cooking utensils
- C. contacts in switches
- D. fuses

44. The diagram below represents an experiment below on light.

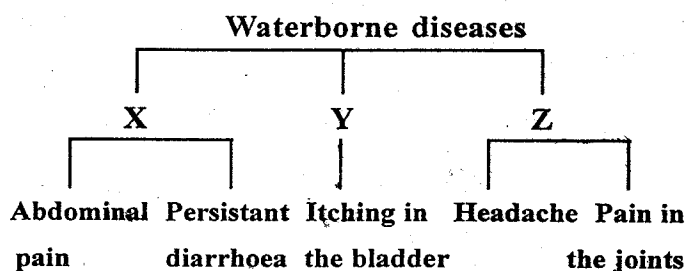


The diagram best illustrates

- A. refraction
- B. emulsion
- C. dispersion
- D. reflection

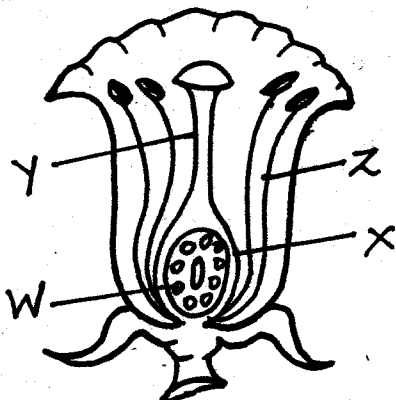
45. Which one of the following is the third stop when making a simple beam balance?
- Making a hole at the balancing point
  - Fixing the arm to the base and stand
  - Suspending the tins
  - Suspending the arm to find a balancing point

46. The chart below represent waterborne diseases



Which one of the following groups of waterborne disease are represented by X, Y and Z respectively?

- Typhoid, cholera, bilharzia
  - Bilharzia, cholera, typhoid
  - Cholera, bilharzia, typhoid
  - Typhoid, bilharzia, cholera
47. Which one of the following statements on water is true?
- Soft water is good for drinking
  - Permanent hardness can be removed by boiling
  - Soft water forms scum with soap
  - Hardwater forms scale upon mixing with metals
48. Which one of the following pairs of parts of the flower will not wither after maturity?



- W and Y
- X and W
- Z and W
- X and Z

49. Pupils collected the following materials during a lesson to experiment on floating and sinking:-

- Trough
- Wood
- Iron
- Water

Which one of the following factors were they most likely to investigate?

- Type of material
  - Weight
  - Size
  - Shape
50. The following different foodstuffs were fed to pupils W, X, Y and Z as shown below.
- | Pupil | Food type                            |
|-------|--------------------------------------|
| W     | Locust, irish potatoes and vegetable |
| X     | Groundnuts, meat and potatoes        |
| Y     | Ripe bananas, tomatoes and fish      |
| Z     | Pumkin leaves, beans and fruits      |

Who ate a balanced diet?

- X
- Z
- W
- Y