

**SIGNAL EXAMS 2020**  
**THIRD K.C.P.E SIGNAL**  
**SCIENCE**

Time: 1hr 40min

**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:**

4. Which one of the following is **not** a source of light?
- A. Candle
  - B. Lamp
  - C. Torch
  - D. Bulb

The correct answer is **D (Bulb)**

**On the answer sheet:**

4. [A] [B] [C]  [D]    14. [A] [B] [C] [D]    24. [A] [B] [C] [D]    34. [A] [B] [C] [D]    44. [A] [B] [C] [D]

In the set of boxes numbered 4, the box with the letter D is 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.

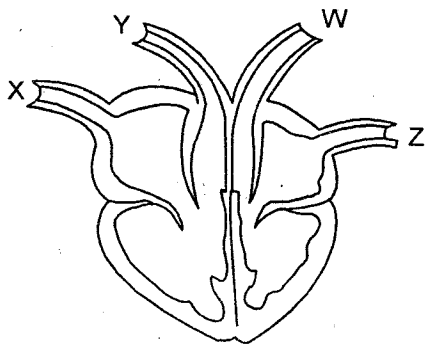
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- Which one of the following shows the **correct** path followed by urine?
  - Ureter → kidney → urethra.
  - Kidney → ureter → urethra.
  - Urethra → ureter → kidney.
  - Kidney → urethra → ureter.

- The following are effects of wind **except**
  - felling trees
  - blowing soil away
  - sailing boats
  - blowing roofs off.

- The diagram below represents a mammalian heart.



Which one of the following statements is **correct** about blood vessels X, Y, W and Z?

- Y- Carries blood at high pressure.
- Z- Receives blood from the body parts.
- X- Carries oxygenated blood.
- W- Has valves.

- Which one of the following is **not** an adaptation of animals to flying?
 

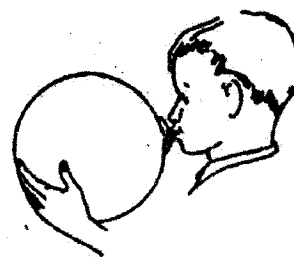
Presence of

  - wings
  - streamlined body
  - webbed feet
  - hollow bones.

- Which one of the following is **not** a way of conserving water?
  - Harvesting of water.
  - Recycling of water.
  - Re-using of water.
  - Treating water.

- Which of the following is the last stage during birth process?
  - Expulsion of after birth
  - Cutting of umbilical cord.
  - Release of amnion fluid.
  - Coming out of the baby.

- The diagram below represents a set-up that was used to demonstrate a certain property of matter.



The property demonstrated was that

- air has mass
- air exerts pressure
- air expands when heated
- air occupies space.

8. Which one of the following materials does **not** allow light to pass through?
- Oiled paper
  - Clean water
  - Skylights
  - Mirror.
9. Which one of the following methods of food preservation keeps off air?
- Canning.
  - Refrigeration.
  - Sun drying.
  - Use of low temperature.
10. People with HIV and AIDS need all the following **except**
- love and support
  - proper hygiene
  - isolation
  - good medical care.
11. Which one of the following foods is a source of oil?
- Avocado
  - Green grams
  - Milk
  - Groundnuts.
12. Which of the following statements describes incisors teeth? They
- are used for tearing food
  - are chisel like
  - have cusps and ridges
  - have **one** root and are sharp pointed.

13. Class 6 pupils were asked by their Science teacher to collect the following materials.

(i) *Cardboard*

(ii) *Candle*

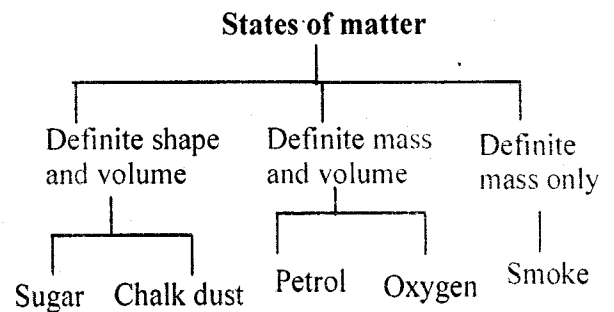
(iii) *Thread*

(iv) *Match box*

Which one of the following aspects of light were they **likely** to investigate?

- Light travels in a straight line.
- Light is reflected.
- Light bends when it travels from one medium to the other.
- Light travels in all directions.

14. The chart below shows simple classification of the states of matter.



Which one of the following states of matter is **wrongly** classified?

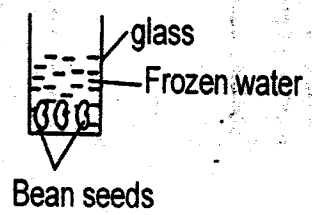
- Sugar
- Petrol
- Smoke
- Oxygen.

15. The following are ways of handling food properly **except**
- A. covering food well while preparing it
  - B. putting small amount of food in the mouth at a time
  - C. washing oranges before eating
  - D. thorough washing of utensils.

16. In an investigation on sound energy, pupils were asked to drop their Science text books from different heights on their lockers. Which of the following aspects of sound were they investigating?
- A. Loud and soft sound.
  - B. Special sound.
  - C. Sound pollution.
  - D. Pitch of sound.

17. Which one of the following is a common characteristic between chicken and fish? They
- A. breathe through lungs
  - B. are warm blooded
  - C. lay fertilised eggs
  - D. have scales.

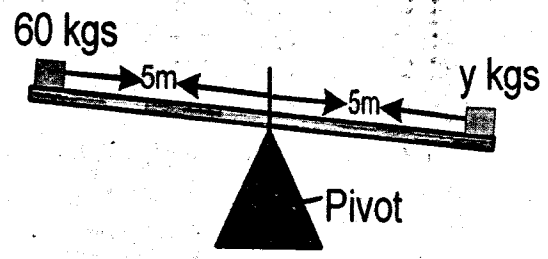
18. Standard six pupils set up an experiment as shown below.



- Which condition of germination were they investigating?
- A. Air
  - B. Temperature
  - C. Moisture
  - D. Light.

19. Which one of the following types of manure provide specific nutrients to the soil?
- A. Diammonium phosphate.
  - B. Organic mulches.
  - C. Green manure.
  - D. Farm yard manure.
20. Birds that suck nectar from flowers have
- A. a serrated beak
  - B. a short, strong and straight beak
  - C. feet with sharp and strong claws
  - D. a long slender and slightly curved beak.

21. The diagram below shows a sea-saw.



Which statement is **true** about the sea saw above?

- A. Y is lighter than 60kgs.
- B. For balancing Y should be moved away from the pivot.
- C. Y is equal to 60kgs.
- D. For balancing the distance between Y and the pivot should be reduced.

22. Which one of the following statements describes window stage in HIV infection?

The patient

- A. tests negative and appears unhealthy
- B. appears healthy and shows signs
- C. test positive and shows no signs
- D. appears healthy and tests negative.

23. The following are characteristics of a certain soil.

- (i) *Good capillarity.*
- (ii) *Poor drainage.*
- (iii) *Small air spaces.*

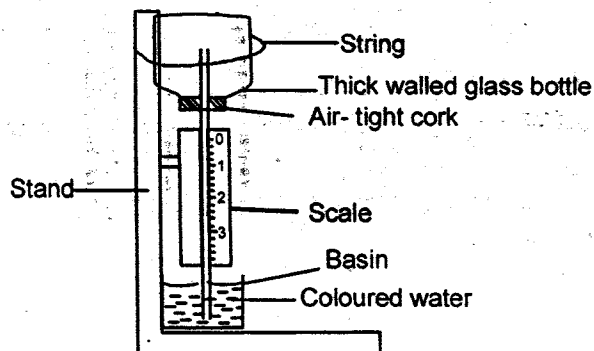
The type of soil described above is

- A. clay soil
- B. a mixture of loam soil and sand soil
- C. sand soil
- D. loam soil.

24. A child with brown thin hair that falls off easily should be fed with plenty of

- A. carbohydrates
- B. balanced diet
- C. minerals
- D. proteins.

25. Pupils constructed the weather instrument below.



Which mistake was made in the construction of the instrument?

- A. Using a thick walled glass bottle.
- B. Using coloured water.
- C. Using a narrow straw.
- D. The labelling of the scale.

26. Which one of the following components of environment is a means of transport and recreation?

- A. Animals
- B. Water
- C. Air
- D. Soil.

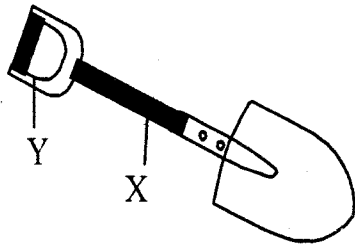
27. The following are safety precautions when using simple tools **except**

- A. ensuring the handle is firmly fixed
- B. cutting edge should face away from ones body
- C. oiling and greasing metallic parts
- D. handling the tool firmly when in use.

28. Which one of the following pairs of plants have the same type of root system?

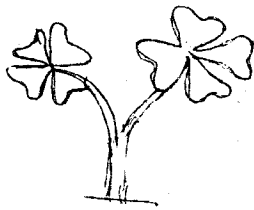
- A. Kales and beans.
- B. Maize and peas.
- C. Cabbage and coconut.
- D. Groundnut and wheat.

29. The diagram below represents a lever when in use.



The parts represented by X and Y are

- | X          | Y       |
|------------|---------|
| A. Fulcrum | Effort  |
| B. Load    | Fulcrum |
| C. Fulcrum | Load    |
| D. Effort  | Fulcrum |
30. The diagram below show a certain type of weed.

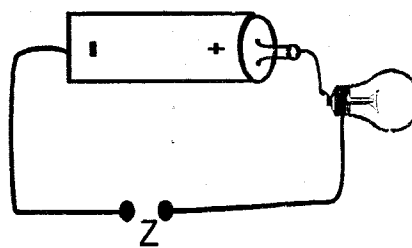


The type of weed shown above

- A. is poisonous  
 B. has pink flowers  
 C. spreads on the ground  
 D. has a tap root system.
31. A weighing scale is used for
- A. measuring mass of objects  
 B. measuring force  
 C. comparing volume of liquids  
 D. measuring weight of different objects.

32. Which one of the following consists of **only** female parts of a flower?
- A. Anthers, pollen grains, stigma.  
 B. Style, stigma, pollen grains.  
 C. Filament, style, anther.  
 D. Style, ovary, stigma.
33. The following statements describe proper use of medicine **except**
- A. proper labelling of medicine before storage  
 B. taking of the recommended dose  
 C. buying of medicines with a doctors prescription  
 D. medicines that remain should be destroyed.
34. Which of the following planets are in the 4<sup>th</sup> and 6<sup>th</sup> positions from the sun?
- A. Mars and Jupiter.  
 B. Earth and Saturn.  
 C. Jupiter and Mars.  
 D. Mars and Saturn.
35. Which one of the following is **not** a rotational grazing method?
- A. Strip grazing.  
 B. Herding.  
 C. Paddockking.  
 D. Tethering.

36. Which of the following internal livestock parasites attacks intestines **only**?
- Lungworm.
  - Hookworms.
  - Liverflukes.
  - Roundworms.
37. The following are safety measures when handling chemicals at home. Which one is **not**?
- Do not store chemicals near food.
  - Store chemicals in a lockable room.
  - Wash hands thoroughly with soap before spraying chemicals.
  - Do not store chemicals in soft drinks bottles.
38. Which one of the following groups consists of non magnetic materials?
- Alnico, brass, gold.
  - Steel, aluminium, copper.
  - Copper, silver, aluminium.
  - Steel, chromium, iron.
39. Which of the following mixtures **cannot** be separated by decanting?
- Sand and water.
  - Flour and kerosene.
  - Beans and water.
  - Salt and water.
40. In an experiment to investigate a certain component of soil, water was added in a clear container with garden soil then shaken and allowed to settle. The component of soil being investigated was
- minerals in soil
  - organic matter in soil
  - air in soil
  - living organisms in soil.
41. Which one of the following is **not** an importance of fibre in the diet?
- Facilitates digestion of food.
  - Makes the food bulky.
  - Facilitates movement of undigested food.
  - Makes movement of food during digestion easier.
42. Which one of the following pairs of non-green plants consists of useful fungi **only**?
- Mushroom and yeast.
  - Mucor and toadstool.
  - Penicilium and bread mould.
  - Puffballs and yeast.
43. The diagram below represent a simple circuit in use.

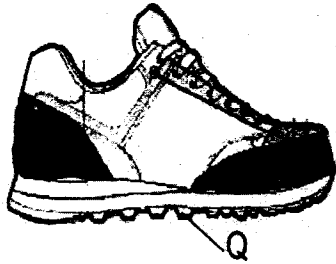


- Which one of the following materials when placed at point Z will **not** complete the circuit?
- Glass plate
  - Graphite rod
  - Water
  - Silver plate.

44. Which one of the following statements is **not** correct about a windvane?
- A. It should be placed in an open place.
  - B. It shows the direction of wind.
  - C. The tail is larger than the head.
  - D. The arrow points to where the wind is blowing.

45. Which one of the following is a method of softening hard water?
- A. Boiling
  - B. Sieving
  - C. Decanting
  - D. Filtering.

46. The diagram below represents a shoe.



When the part marked Q wears out

- A. the grip between the shoe and the ground increases.
- B. the shoe becomes more flexible.
- C. the shoe becomes efficient on slippery surface.
- D. the friction force of the sole reduces.

47. Which one of the following is **not** a function of the placenta?
- A. Facilitates transfer of food.
  - B. Prevents the foetus from shock.
  - C. Allows exchange of waste products.
  - D. Allows exchange of gases.

48. Which of the following factors allows a cork to float on water?
- A. Material
  - B. Shape
  - C. Size
  - D. Mass

49. Which one of the following types of erosion is controlled by building of gabions?
- A. Rill erosion.
  - B. Splash erosion.
  - C. Gully erosion.
  - D. Sheet erosion.

50. Which one of the following is **not** a way of controlling HIV and AIDS through mass education?
- A. Seminars
  - B. Bronchures
  - C. Workshops
  - D. Camps.

**NB: For a comprehensive revision in Science get yourself a copy of 'SIGNAL K.C.P.E REVISION SCIENCE' from Signal Publishers. AVAILABLE AT BOOKSHOPS COUNTRYWIDE.**