

K.C.P.E SECOND TRIAL STANDARD EIGHT 2021

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.** The process by which plants lose water to the atmosphere is called

- A. capillarity
- B. diffusion
- C. transpiration
- D. evaporation

The correct answer is C (transpiration)

On the answer sheet:

4 | A | B | C | D | **14** | A | B | | D | **24** | A | B | C | D | **34** | A | B | C | D | **44** | 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. The following are characteristics of clouds
- They are rain laden.
 - They have a flat base.
 - They are dark or grey in colour.
 - They bring fine weather.
 - They are thick white feathery.

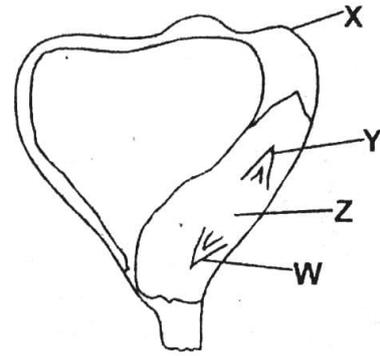
Which among the above characteristics describe cumulus clouds?

- (ii), (iv), (v)
 - (iii), (iv), (vi)
 - (ii), (iii), (v)
 - (i), (iii), (iv)
2. The fusion of sex cells in human being take place in the
- ovary
 - uterus
 - oviduct
 - testis
3. Which one of the following farm practices conserve soil and water?
- Terracing
 - Building gabions
 - Planting trees
 - Mulching
4. The following are signs and symptoms of certain diseases.
- Skin rashes.
 - Fever
 - Abdominal pains
 - Sore on the walls of intestines.

The disease is **LIKELY** to be

- Bilharzia
- Typhoid
- Cholera
- Malaria

5. The diagram below shows a maize seed.



Which one of the following statement is **TRUE**?

- Part Z is the endosperm.
 - Part Y forms the embryo.
 - Part W forms the shoot.
 - Part X store food for the young plant.
6. Which one of the following pairs of materials are opaque?
- Oil and mirror
 - Wood and windscreen
 - Skylight and paraffin
 - Frosted glass and metal
7. The following are materials used to make a certain weather instrument.
- Metal sheets.
 - Nail
 - Pole
 - Compass

The weather instrument is **MAINLY** used to measure

- strength of wind
 - amount of rainfall
 - air temperature
 - direction of wind
8. The following are sources of electricity **EXCEPT**
- car batteries
 - solar panel
 - torch bulb
 - dynamo.

9. Which one of the following materials is used as insulator?
- Copper wire
 - Rubber band
 - Iron rod
 - Aluminium wire

10. The **BEST** way of controlling the spread of HIV/AIDS among the school going pupils is by
- being faithful to one partner.
 - encouraging the use of condoms.
 - visiting V.C.T.
 - abstaining from sex.

11. Which one of the following excretory product is **NOT** excreted by the skin?
- Carbondioxide
 - Urea
 - Excess water
 - Excess salt

12. Which one of the following sexual transmitted infections is caused by virus?
- Syphilis
 - Gonorrhoea
 - Chancroid
 - Genital herpes

13. The following are adaptation of a certain plant.

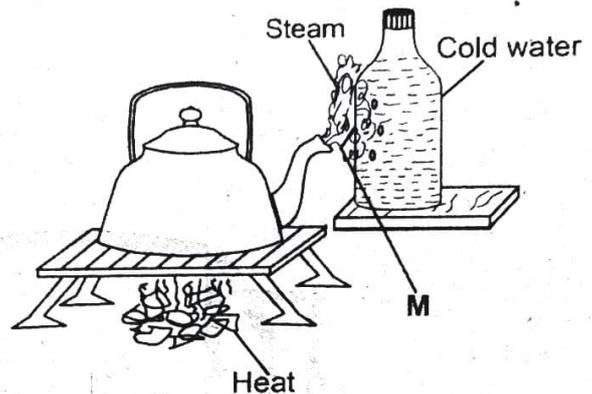
- Needlike leaves.
- Thick waxy cuticle.
- Sunken stomata
- Folded leaves

The plant growing in the same environment is also **LIKELY** to have

- large flat leaves.
- deep root.
- air sacs
- flexible stems

14. Which of the following pairs of plants are non green and flowerless?
- Algae and bacteria
 - Fern and liverworts
 - Mushroom and mucedor
 - Pine and cedar

15. The diagram below shows an experiment on change of state on matter.



Which process take place at the point marked M?

- Evaporation
- Boiling
- Condensation
- Freezing

16. Which one of the following is **NOT** as a result of bending of light?

- A coin in water appear raised.
- Formation of images on mirrors.
- Swimming pools appears raised.
- Formation of the rainbow.

17. The following are effects of drug abuse. Which one is an economic effect?

- Loss of income.
- Accident
- Poor health.
- Marital conflicts

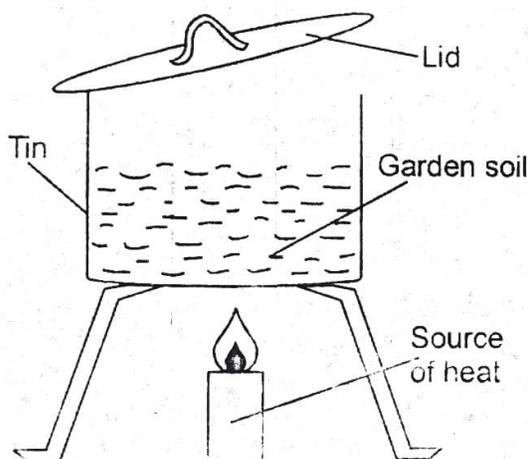
18. Birds that feed on flesh have

- short, straight, thick beaks
- strong, curved beaks
- flat, serrated beaks
- long, slender beaks

19. Which one of the following is **NOT** a sign of ill health in livestock?
- Rough coat.
 - Reduced yields.
 - Stunted growth.
 - Lower yields.

20. In which of the following parts of digestive system is food **NOT** digested?
- Small intestine
 - Stomach
 - Mouth
 - Large intestines

21. The set up below can be used to investigate the presence of a certain component of soil.



Which two component of soil can be investigated by the set up shown above?

- Water and humus
- Mineral particles and organic matter.
- Water and living organism.
- Humus and air.

22. The following are examples of straight fertilizer **EXCEPT**

- Munate of potash
- CAN
- Diammonium Phosphate
- Double supersphosphate

23. The body require enough mineral salts for
- energy
 - good health
 - growth and repair
 - muscle development

24. The following animals lay unfertilized eggs and live partially in water **EXCEPT**

- salamander
- toads
- crocodile
- newts

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

- Onions and sisal
- Coconut and mango
- Grass and beans
- Cowpeas and sorghum

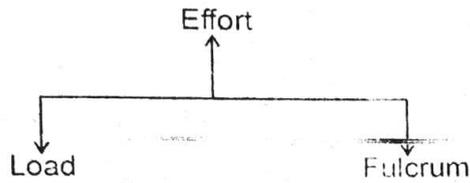
26. Which one of the following statement is **NOT TRUE** about all arteries?

- They carry blood rich in oxygen.
- They carry blood away from the heart.
- They have thick walls.
- Blood pressure in them is high.

27. Which two form of energy, **DOES NOT** require medium for transmission?

- Electricity and light
- Heat and light
- Sound and light
- Sound and heat

28. The diagram below represent the arrangement of the parts of a lever.



The lever illustrated above is **LIKELY** to be a

- A. spade
- B. wheelbarrow
- C. claw hammer
- D. crowbar

29. Which one of the following is **NOT** a way of reducing friction? Using
- A. ball bearing
 - B. rubber
 - C. lubricants
 - D. roller

30. The diagram below shows a food chain
Maize → rat → snake → vultures

Which one of the following animal is in the same level with the vultures?

- A. Duck
 - B. Goat
 - C. Hyena
 - D. Lion
31. The following are properties of matter.

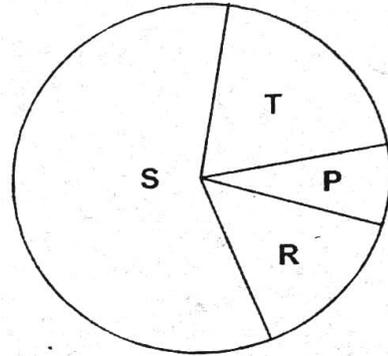
- (i) Have definite volume
- (ii) Have definite mass.
- (iii) Change state when heated.
- (iv) Occupy space.

Which substance given below have the above characteristics?

- A. Milk and water vapour
- B. Salt and ice
- C. Oxygen and nitrogen
- D. Water and milk

32. Which one of the following immunizable diseases are immunized at 10 weeks and immediately after birth to young infants?
- A. Polio, Tetanus, Tuberculosis
 - B. Whooping cough, Tetanus, Diphtheria
 - C. Tuberculosis, Measles, Polio
 - D. Yellow fever, Polio, Pertussis

33. The chart below represent approximate percentage of the component of air.

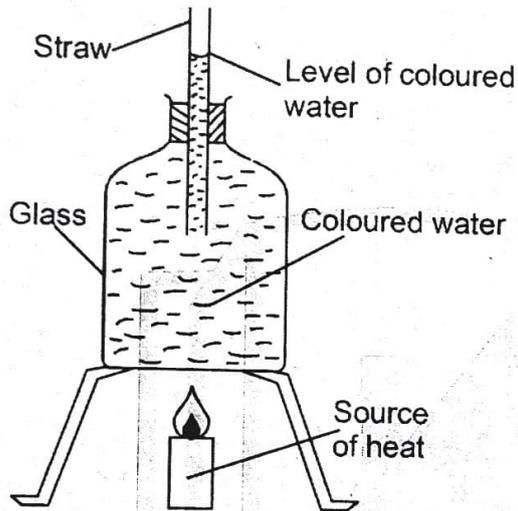


Which portion represent the gas that is **NOT** used by living things?

- A. S
 - B. T
 - C. P
 - D. R
34. Oil and grease are used in some simple tools to
- A. reduce opposing force
 - B. make them more durable.
 - C. increase friction.
 - D. make them more attractive.
35. Which of the following feeds provide livestock with protein?
- A. Maize germ
 - B. Lucern
 - C. Cotton seed cake
 - D. Mollasses

36. One of the following is **NOT** in the same group as a tick. Which one?
- Spider
 - Scorpion
 - Mite
 - Crab

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



The aspect of matter demonstrated is that

- liquid expand and contract.
 - gases expand and contract.
 - water exert pressure
 - air occupies space.
38. Pre-test counselling is given
- after the result of the test are released.
 - after the test is done.
 - before one takes an HIV test.
 - before results are released to the person who is tested.
39. Which one of the following foods will help boost the immune system of the body?
- Egg, milk, bacon
 - Carrot, rice, cassava
 - Onions, spinach, tomatoes
 - Peas, beans, greengrams

40. When tea leaves is put in a glass of cold water and heated at the bottom, the tea leaves are observed to rise and fall. This is because tea leaves
- are carried by hot water which come down on cooling.
 - and water rise when heated and come down on cooling.
 - becomes lighter than water when heated.
 - rise when heated and come down on cooling.

41. Which one of the following is a **MAJOR** non living component of environment?
- Animal
 - Buildings
 - Plant
 - Soil

42. Which one of the following is **NOT** a use of water in factory?
- Making fountains.
 - Surfing
 - Mixing chemicals
 - Cleaning equipments.

43. Which one of the following activities is water conserved by re-using?
- Using domestic water for washing toilets.
 - Treating sewage water.
 - Turning off taps after use.
 - Harvesting rain water from roofs.

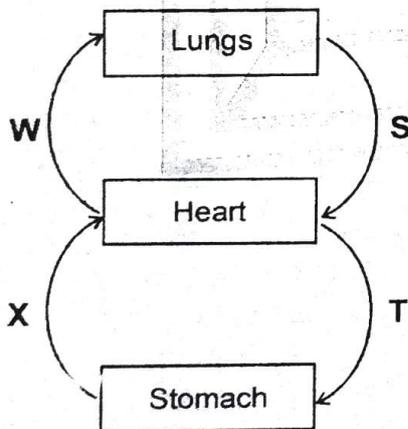
44. During pregnancy period, the placenta has all the following functions **EXCEPT**
- facilitates the exchange of foods from the mother to the foetus.
 - allow the mother's blood to mix with foetus blood.
 - facilitates the exchange of gases between the mother.
 - allows the passage of waste from the foetus to the mother.

45. During the investigation of soil water retention all the following materials need to be the same **EXCEPT**
- size of the funnel.
 - time allowed for the experiment.
 - types of soil.
 - amount of water added.

46. A flower which has long feathery stigma and loosely held anthers is also **LIKELY** to
- produce nectar.
 - have sweet scent.
 - have brightly coloured petals.
 - produce many pollen grains.

47. A beam balance is used for
- comparing mass of different objects.
 - measuring volume of objects.
 - comparing size of different objects.
 - measuring height of objects.

48. Study the diagram below

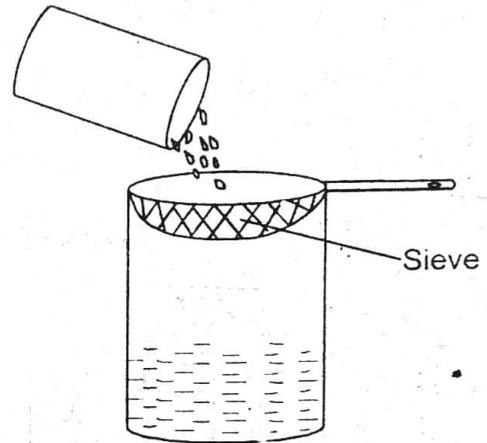


Which pair of blood vessels above carry blood that is bright red in colour?

- W, X
- W, S
- S, T
- T, X

49. Carnassial teeth found in the carnivorous animals are modified
- canine and premolars
 - pre molars and molars
 - canine
 - incisors

50. The diagram below shows a method of separating mixture



The method can be used to separate

- coarse and fine sand
- salt and iron filings
- sugar and water
- maize and beans