

K.C.P.E THIRD 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 | **C** | 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

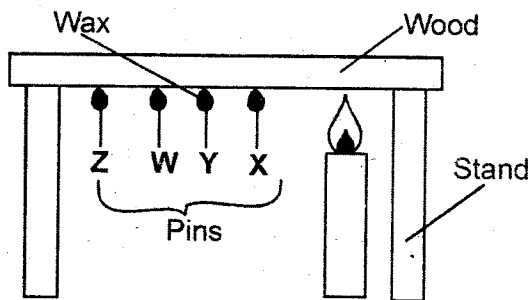
- Which of the following effects of HIV and AIDS affects the family?
 - Poor health.
 - Low self esteem.
 - Increase in number of orphans.
 - Low agricultural production.

- Which of the following is a health effect of abusing drugs?
 - Impaired judgement.
 - Truancy.
 - Drug induced accidents.
 - Marital conflicts

- The following are ways of creating public awareness about the spread and control of HIV/AIDS EXCEPT
 - chief baraza
 - market place
 - church service
 - job interview

- The quantity of medicine to be taken at a particular time is known as
 - prescription
 - expiry date
 - dosage
 - antibiotics

- The diagram below shows a set up that was used to investigate conduction in solids.



Which pin was the last one to fall?

- X
- Z
- Y
- None

- A periscope work under the principle of
 - bending of light
 - dispersion of light
 - splitting of light
 - bouncing of light

- The temperature at which a substance melts is the same temperature at which the substance
 - freezes
 - evaporates
 - condenses
 - expands

- The diagram below represents a snake basking on a rock on a sunny day.



Heat from the sun reaches the snake **MAINLY** by

- radiation and convection
- convection only
- radiation only
- conduction and radiation

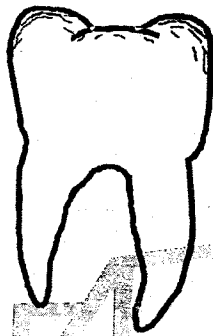
- Which one of the following is the use of light by the plants in the farm?

- Seeing clearly.
- Making of food.
- During transpiration.
- During germination.

10. Sound travels fastest in

- A. metal
- B. water
- C. air
- D. vacuum

11. Which one of the following statement is **TRUE** about the tooth shown below? They



- A. have a smooth edge.
- B. are used in biting and grinding.
- C. are 8 in number.
- D. are never shed.

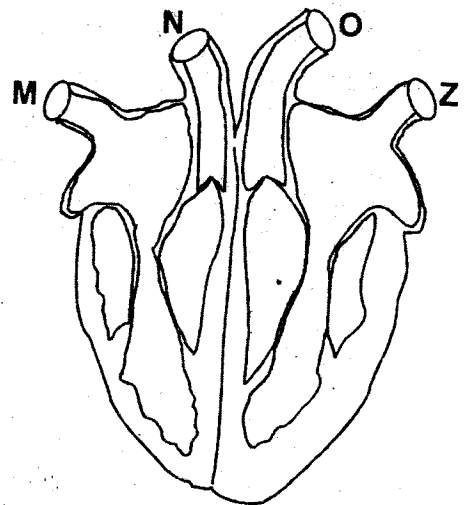
12. Which one of the following groups **ONLY** consist of materials that are magnetic?

- A. Steel, iron, tin
- B. Iron, zinc, tin
- C. Aluminium, copper, glass
- D. Glass, steel, iron

13. Which one of the following take place last during the birth process?

- A. Bursting of amniotic sac.
- B. Release of afterbirth.
- C. Contraction of uterine wall.
- D. Cutting and tying of umbilical cord.

14. The diagram below represent a mammalian heart.



In which pair of blood vessels have valves?

- A. N and M
- B. M and Z
- C. V and O
- D. N and Z

15. Which one of the following part protect the foetus from physical shock during pregnancy?

- A. Placenta
- B. Amniotic sac
- C. Umbilical cord
- D. Amniotic fluid

16. Which one of the following methods of food preservation is **BOTH** traditional and modern method?

- A. Use of honey.
- B. Canning
- C. Salting
- D. Use of low temperature.

17. The following are signs and symptoms of a certain disease.

- (i) *Brownish and thin hair.*
- (ii) *Swollen body parts.*
- (iii) *Sores at the corner of the mouth.*
- (iv) *Skin appears loose.*

A child with above symptoms should be fed on food rich in

- A. vitamins
- B. carbohydrates
- C. protein
- D. all nutrients

18. Which one of the following pairs consist of energy giving foods?

- A. Mutton and groundnuts
- B. Honey and sweet potatoes
- C. Mango and beans
- D. Avocados and oranges

19. Soil that is easily water-logged has

- A. high capillarity
- B. rough texture
- C. large air space
- D. high water drainage

20. Which one of the following practices will lead to soil pollution?

- A. Disposing of kitchen refuse in the soil.
- B. Ploughing along the slope.
- C. Use of organic fertilizers.
- D. Planting cover crop.

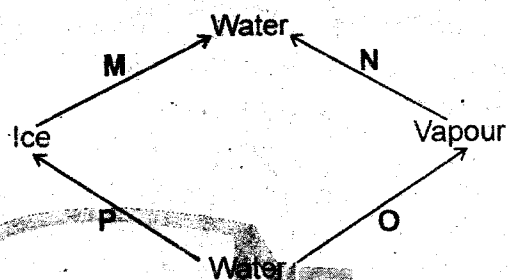
21. Which of the following effects describe sheet erosion?

- A. V shaped trenches in the ground.
- B. Small holes in the ground.
- C. Small and shallow channels in the ground.
- D. Top layer of soil missing on a gentle slope.

22. A basin made of iron may float when placed on water because of its

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

23. Study the diagram below and answer the question



Which two processes M,N,O,P represent increase and decrease in temperature **RESPECTIVELY?**

- A. P and O
- B. M and P
- C. N and M
- D. O and P

24. Which one of the following is a **COMMON** characteristics between oil and glass?

- A. Definite mass.
- B. Indefinite volume.
- C. Definite shape.
- D. Indefinite size.

25. Which one of the following methods of separating mixture will be the **LAST** when separating a mixture of salt, iron fillings and maize flour?

- A. Use of magnet
- B. Sieving
- C. Filtration
- D. Evaporation

26. Which of the following materials listed below are transparent **ONLY**?
- Oil, glass, mirror, skylight
 - Clear glass, clear water, windscreen
 - Water, wall, polythene bag
 - Clear water, mirror, air

27. Which one of the following gases is **CORRECTLY** matched with its uses?

| Gases | Uses |
|------------------|------------------------|
| A. Oxygen | - Making soft drink |
| B. Carbondioxide | - Making plants food. |
| C. Rare gases | - Fire extinguisher |
| D. Nitrogen | - Germination of seed. |

28. An animal which lives partly on the land and partly in water is also **LIKELY** to
- have scale.
 - breathe through gills.
 - lay unfertilized eggs.
 - have internal fertilization.

29. The **MAIN** reason why fish have streamlined body is to
- reduce resistance during movement.
 - float without sinking.
 - feed comfortably in water.
 - enhance breathing in water.

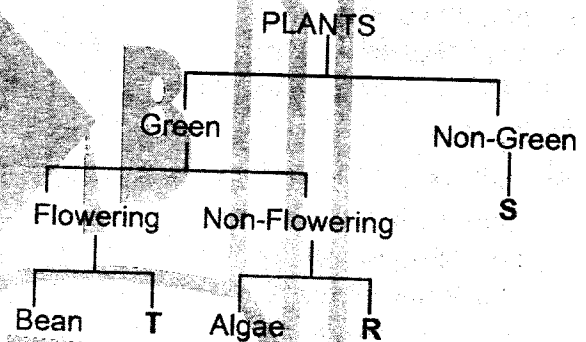
30. Which one of the following is a **COMMON** characteristics of all mammals?
- Lay eggs.
 - They have mammary glands.
 - Breathe through gill.
 - They have varying body temperature.

31. Which one of the following animal parasite **CANNOT** be controlled by rotational grazing?
- Roundworm
 - Tick
 - Tsetsefly
 - Tapeworm

32. The following are ways through which small animals protect themselves against danger **EXCEPT**
- coiling
 - running
 - leaping
 - stinging

33. The **MAIN** reason why cactus plants are green is to
- make their own food
 - store water
 - reduce water loss
 - allow gaseous exchange

34. The chart below shows a simple classification of plants.



Which one of the following represent T,R and S?

| T | R | S |
|------------|----------|-----------|
| A. Fern | Avocado | Mould |
| B. Onions | Cedar | Yeast |
| C. Maize | Sisal | Cypress |
| D. Oranges | Mushroom | Toadstool |

35. The following are parts of a flower.

- (i) Anther
- (ii) Style
- (iii) Stigma
- (iv) Ovary
- (vi) Filament

Which two parts produces sex cells?

- A. (iii) and (vi)
- B. (ii) and (iii)
- C. (iv) and (vi)
- D. (i) and (iv)

36. Which one of the following pests is **CORRECTLY** matched with the part of the crop it attacks?

| Pest | Part of crop attacked |
|---------------|-----------------------|
| A. Weevils | Leaves |
| B. Stalkborer | Stem |
| C. Aphids | Grain |
| D. Cutworms | Branches |

37. Which of the following is the **MAIN** function of stem in sugarcane?

- A. Supporting branches.
- B. Transporting water.
- C. Food storage.
- D. Absorption of water.

38. Which of the following statements is **TRUE** about clouds that bring fine weather? They

- A. are shaped like mountains.
- B. are dark grey in colour.
- C. appear low in the sky.
- D. appear like bundles of cotton.

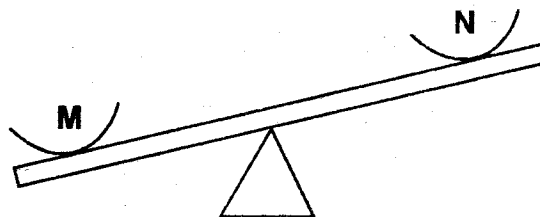
39. Which one of the following materials is **MOST** appropriate to use when making a wind sock?

- A. Polythene sheet.
- B. Sheet of metal.
- C. A mosquito net
- D. Coloured water.

40. Which of the following planets are in the fourth and sixth position from the sun?

- A. Earth and Jupiter
- B. Mars and Uranus
- C. Saturn and Neptune
- D. Mars and Saturn

41. Two pupils were balancing on a seesaw as shown below.



In order to balance on the see-saw

- A. move the pivot toward pupil M.
- B. pupil M should move away from the pivot.
- C. move pivot toward pupil N.
- D. pupil N should move toward the pivot.

42. The **MAIN** reason why tyres of vehicles have treads is to

- A. improve road grip.
- B. reduce weight.
- C. increase motion.
- D. increase durability.

43. Which one of the following examples of levers has the position of load between the effort and fulcrum?

- A. Spade
- B. Claw hammer
- C. Crowbar
- D. Wheelbarrow

44. Which of the following is **NOT** a way of maintaining all simple tools?

- A. Sharpening
- B. Proper storage
- C. Repairing
- D. Proper use

45. Which of the following is measured using a beam balance?
- A. Friction
 - B. Weight
 - C. Mass
 - D. Gravity
46. Which of the following pairs forms the **MAJOR** living components of environment?
- A. Soil and water
 - B. Air and plant
 - C. Plants and soil
 - D. Animals and plants
47. Which one of the following ways of conserving water work the same way as mulching?
- A. Planting cover crop.
 - B. Recycling
 - C. Reusing
 - D. Using sparingly
48. The **BEST** way of preventing the spread of Cholera and Typhoid is by
- A. wearing protective clothes.
 - B. proper sanitation.
 - C. covering pit latrines.
 - D. regular deworming.
49. Which of the following is a suitable way of softening temporary hard water?
- A. Filtering to remove particles.
 - B. Adding chemicals.
 - C. Boiling.
 - D. Sieving the dirt.
50. In which one of the following activities is water used for recreation?
- A. Making fountain.
 - B. Skiing
 - C. Mixing chemicals.
 - D. Watering plants.