

K.C.P.E FINAL TRIAL STANDARD EIGHT 20

SCIENCE

Time: 1hr 40 mins

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

1. Which one of the following is the role of the rectum in human body?
- Absorbing digested food.
 - Storing roughages.
 - Storing undigested food temporarily.
 - Absorbing water.

2. Which one of the following components of a balanced diet have no nutritive value?
- Carbohydrate
 - Roughage
 - Vitamin
 - Mineral salt

3. Which one of the following animal is **CORRECTLY** matched with its products.

Animal	Product
A. Goat	Mutton
B. Beef cattle	Milk
C. Sheep	Mohair
D. Pig	Skin

4. If the soil is heated in a glass test tube and a bad smell and smoke is seen rising out from the tube. This shows that the soil contains
- alot of air
 - alot of moisture
 - living organisms
 - dead decaying matter

5. Which one of the following is the **BEST** way of controlling aphids and cutworms in the field?
- Handpicking
 - Scaring
 - Spraying
 - Trapping

6. The figure below represent a certain type of plant.



Which one of the following is **NOT** of its characteristics?

- It is a flowerless plant.
- It is a useful fungi.
- It's a non green plant.
- It is an insectivorous plant.

7. Which one of the groups of foods consist of body building food **ONLY**?

- Maize, melon and potatoes
- Termite, groundnut and beef
- Soda, chips and chicken
- Milk, beans and millet

8. One centimeter piece of wood floats on water while one centimeter piece of iron sink. This happen because of their difference in

- shape
- size
- material
- weight

9. Which one of the following is an effect of water pollution to non living things?

- Corrosion of iron sheet.
- Waterborne disease.
- Death of animals in water.
- Lead to growth of water weeds.

10. Which of the following shows magnetic materials **ONLY**?

- Aluminium, copper, glass
- Steel, iron, tin
- Iron, zinc, tin
- Glass, steel, iron

11. Two balloons rubbed on the same material are brought close to each other. What was **LIKELY** to have been observed?

- A. The balloon burst.
- B. They attracted each other.
- C. They repelled each other.
- D. There was no change.

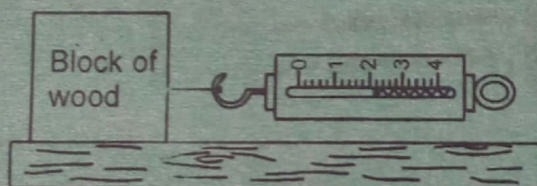
12. Which one of the following animal feeds is a preserved fodder crops?

- A. Lucerne
- B. Bonemeal
- C. Mollasses
- D. Hay

13. Which one of the following changes occurs in boys **ONLY** during adolescence?

- A. Releasing of mature sex cell.
- B. Broadening of hips.
- C. Quick growth.
- D. Growth of hair on the chest and face.

14. The figure below represent an equipment being used to measure a certain aspect of the block of wood.



The aspect being measured is the

- A. mass
- B. weight
- C. volume
- D. pressure

15. Which one of the following is **NOT** an effect of unhealthy crop?

- A. Robust growth.
- B. Low quality produce.
- C. Transmission of disease
- D. Decreased yield.

16. Which one of the following statement about birds and reptiles is **TRUE**?

- A. Both are invertebrate.
- B. They are warm blooded.
- C. Lay fertilized eggs.
- D. Have moist skin.

17. Which one of the following machines uses the principle of slopes?

- A. Wheelbarrow and crowbar
- B. Pulley and contour road
- C. Claw hammer and spade
- D. Ladder and staircase

18. When a pollen grain falls on the stigma. Which one of the following happens immediately?

- A. Breaking of pollen tube.
- B. Fusion of ovules and grains
- C. Germination of pollen tube
- D. Pollination of pollen grains

19. Which one of the following is brought by refraction of light?

- A. Formation of image.
- B. Using of periscope.
- C. Swimming pools appears shallower.
- D. Bouncing of light.

20. Which one of the following is the fourth and sixth planets from the sun?

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

21. The soil that make the shortest ribbon also

- A. best capillarity
- B. spread easily
- C. has rough texture
- D. has moderate drainage

22. The following are characteristics of a certain plant.
- (i) *Flesh stems.*
 - (ii) *Sunken stomata*
 - (iii) *Shallow fibrous root*
 - (iv) *Thin cuticle*

Which of the above characteristics are **LIKELY** to be found in a cactus plant?

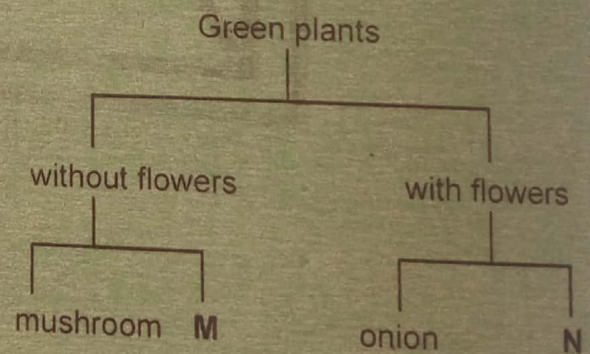
- A. (iii) and (ii)
 - B. (ii) and (i)
 - C. (i) and (iii)
 - D. (iii) and (iv)
23. A gas that cover approximate 20% of the environment is used in
- A. germination
 - B. preserving soft drinks
 - C. photosynthesis
 - D. making bulbs
24. Which one of the following is **NOT** a way of maintaing all simple tools?
- A. Proper storage.
 - B. Sharpening after use.
 - C. Cleaning after use.
 - D. Proper usage.
25. Which one of the following sources of current electricity work the same as a dynamo?
- A. Petrol driven generator
 - B. Solar panel
 - C. Wind driven turbine
 - D. Torch battery
26. When salt is used to preserve food, the food is
- A. cooled
 - B. coated
 - C. canned
 - D. dehydrated

27. Which one of the following pairs of animals are omnivores?
- A. Human beings and hippopotamus
 - B. Crocodile and gorrilla
 - C. Monkey and rhinos
 - D. Pig and chimpanzees

28. Which two blood vessels carry bright coloured blood?
- A. Pulmonary artery and pulmonary vein.
 - B. Aorta and pulmonary vein.
 - C. Pulmonary artery and aorta
 - D. Aorta and venacava

29. Which one of the following pairs of diseases are infants immunised against at 10 weeks?
- A. Tetanus and Polio
 - B. Measles and Diphtheria
 - C. Pertosis and Yellow fever
 - D. Tuberculosis and Polio

30. The diagram below shows a simple classification of plants. Which one of the following pairs represents N and M?

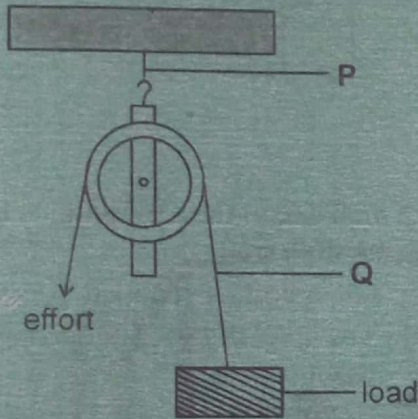


- | | |
|-------------|-------|
| M | N |
| A. Onions | Beans |
| B. Potatoes | Moss |
| C. Cypress | Sisal |
| D. Maize | Algae |

31. Which one of the following is a sign of food poisoning?
- A. Skin rashes
 - B. Swollen body part
 - C. Blood in stool
 - D. Fever

32. Which one of the following is a function of amniotic fluid?
- Facilitates transfer of food.
 - Connect the embryo to the placenta.
 - Facilitates movement of foetus.
 - Facilitates transfer of waste product.

33. Which one of the following is **NOT** correct about the simple tool shown below.



- The load is twice the effort used.
 - Make work easier by changing the direction of applied force.
 - The load move in the opposite direction to that of the load.
 - The effort distance is equal to load distance.
34. Which one of the following is an effect of HIV/AIDS to an individual?
- Poor economy.
 - Lack of parental care.
 - Sadness in the family.
 - Loss of income.
35. Which one of the following is **NOT** a way of conserving soil?
- Planting cover crops.
 - Contour ploughing.
 - Ploughing across the contour.
 - Terracing.

36. The following are steps of making a beam balance but not in correct order.
- Fix the stand and arm to the base
 - Suspend the tins on both sides of the arm.
 - Make a base, a stand and the arm.
 - Suspend the arm to find the balancing point.

Which one of the following is the **CORRECT** order

- (iii), (iv), (i), (ii)
 - (ii), (i), (iii), (iv)
 - (iii), (iv), (ii), (i)
 - (iv), (iii), (i), (ii)
37. The **LAST** energy transformation in a radio using dry cell is
- magnetic energy
 - chemical energy
 - electric energy
 - sound energy
38. Which one of the following is made of major components of the environment **ONLY**?
- Light, animal, air
 - soil, water, animal
 - Animal, plants, building
 - Sound, light, air
39. Animals that live in the soil gets oxygen from
- water
 - plants
 - air
 - soil
40. Which one of the following is an effect of livestock disease?
- Lower yield
 - Rough coat
 - Stunted growth
 - Blood in stool

41. Which one of the following is **TRUE** about heat transfer by conduction? It takes place in

- A. solid and liquids
- B. gases only
- C. liquids and gases
- D. solid only

42. A card with the word **MAIZE** written on it placed in front of a mirror. Which one of the following shows how the word would appear in the mirror?

- A. **MAIZE**
- B. **ƎSIAM**
- C. **MAIZƎ**
- D. **ƎSIAM**

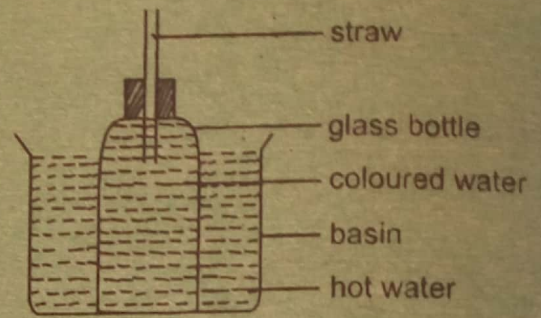
43. Which one of the following consists **ONLY** characteristics of wind pollinated flowers?

- A. Sweet scented and large number of pollen grains.
- B. Sticky stigma and hanging anthers.
- C. Small in size and sticky pollen grains.
- D. Light pollen grain and dull petals.

44. The reason why coloured water is used in the construction of the liquid thermometer is

- A. to expand faster.
- B. to make it absorb heat.
- C. make it visible.
- D. increase density.

45. The diagram below represents a set up to demonstrate a certain aspect of matter



Which one of the following is **LIKELY** to occur after some time?

- A. Glass bottle expanded
- B. The level of hot water dropped in the basin.
- C. Hot water entered the glass bottle.
- D. Coloured water rose in the straw.

46. Which one of the following is a way of using energy sparingly?

- A. Switching off bulbs when not in use.
- B. Using a jiko with a clay lining.
- C. Using charcoal to cook food.
- D. Using non renewable sources.

47. Which one of the following is a **COMMON** water borne disease in areas with stagnant water?

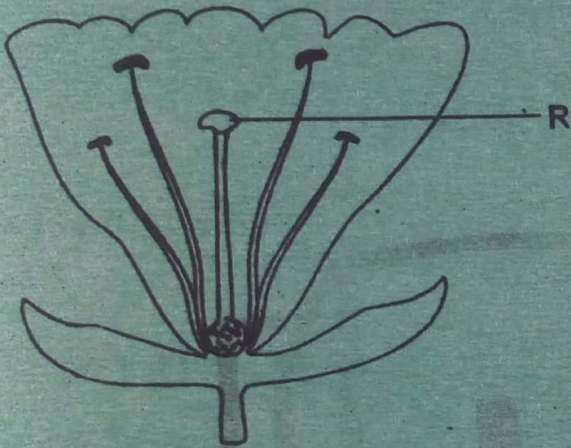
- A. Typhoid
- B. Malaria
- C. Bilharzia
- D. Cholera

48. Which one of the following pair of plants uses nitrogen to make protein?

- A. Groundnuts and green gram
- B. Millet and sorghum
- C. Tomatoes and beans
- D. Maize and potatoes

49. Which one of the following materials can be recycled?
- A. Ash
 - B. Cowdung
 - C. Broken glasses
 - D. Coffee husk

50. The diagram below represent parts of a flower.



- Which one of the following processes take place in part labelled R?
- A. Production of pollen grain.
 - B. Germination of pollen grain.
 - C. Breaking of pollen tube.
 - D. Fusion of the sex cells.