

# K.C.P.E NINTH TRIAL

## STANDARD EIGHT 3RD TERM 2021/ 2022

### 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 |

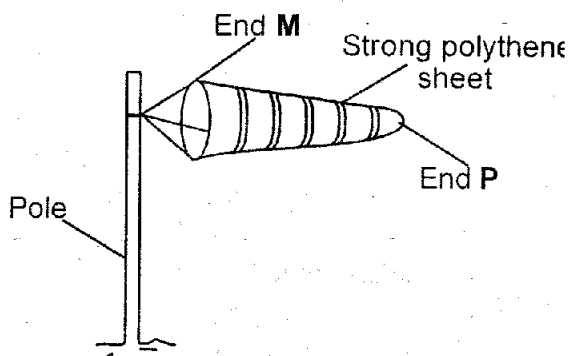
In the second set, the box with the letter C printed in it is marked.

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

1. In which part of the breathing system is air warmed and cleaned?
  - A. Bronchus
  - B. Trachea
  - C. Air sacs
  - D. Diaphragm
2. Which one of the following is a function of placenta?
  - A. Allow the exchange of blood between the foetus and mother.
  - B. Keep the foetus moistened.
  - C. Hold the amniotic fluid.
  - D. Facilitate transfer of waste products.
3. Which one of the following is a characteristic of wind pollinated flower?
  - A. Sticky stigma
  - B. Heavy pollen grain.
  - C. Small in size.
  - D. Firmly attached anther.
4. The diagram below shows a windsock.



When end **P** is pointing toward East the wind is blowing from

- A. North
- B. West
- C. South
- D. East

5. Which one of the following is a **COMMON** characteristic between a newt and a turtle?
  - A. They lay eggs.
  - B. They have scale.
  - C. Give birth to young one.
  - D. Have internal fertilization.
6. Which is the **BEST** way of controlling pigweed in a seedbed?
  - A. Uprooting
  - B. Slashing
  - C. Using herbicide
  - D. Mulching
7. The part that produces juice to digest protein is the
  - A. liver
  - B. small intestine
  - C. stomach
  - D. large intestine
8. Which one of the following animal parasite attack all domestic animals?
  - A. Tick
  - B. Tse tse fly
  - C. Fleas
  - D. Hookworm
9. Which one of the following is **NOT** a use of light energy?
  - A. Taking photograph.
  - B. Making of plant food.
  - C. Warming the house.
  - D. Prevent accident.
10. The component of air that helps to preserve soft drink is also used in
  - A. making fire extinguishers.
  - B. making bulbs
  - C. supporting seed germination.
  - D. making protein in legumes.

11. A pupil rubbed his plastic pen on his cloth. The pen was able to pick some small pieces of papers, this is because
- heat was produced.
  - there was opposing force.
  - the pen got static electricity.
  - the pen became magnetized.

12. Which one of the following plant is a legume?
- Peas
  - Coffee
  - Sorghum
  - Millet

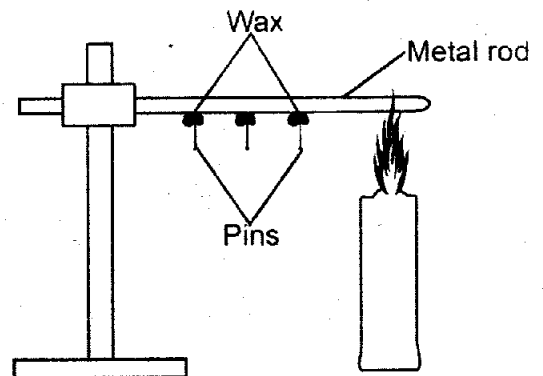
13. Which one of the following is a health effect of drug abuse?
- Truancy
  - Lack of concentration
  - Rape
  - Marital conflict

14. Planting cover crop on land reduces soil erosion by
- slowing the movement of running water.
  - increasing soil fertility.
  - minimizing amount of rainfall.
  - improving soil drainage.

15. Which one of the following pair of machines belong to the **SAME** group as staircase?
- Claw hammer and crowbar
  - Ladder and road winding up a hill
  - Pulley and a flag post.
  - Wheelbarrow and a spade.

16. Which one of the following deficiency is caused by lack of a certain vitamin and mineral salts?
- Marasmus
  - Anaemia
  - Kwashiorkor
  - Ricket

17. The diagram below represents a set up that can be used to demonstrate a certain aspect of heat?



After sometime the pins fell. This was due to

- expansion and contraction
- convection and conduction
- conduction and radiation
- expansion and conduction

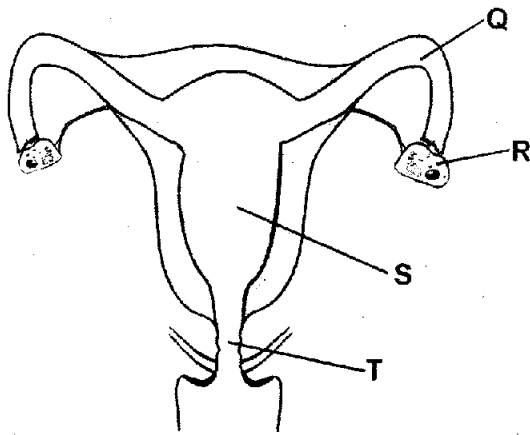
Hookworms in livestock are found in the

- small intestine
- stomach
- liver
- Lungs

19. The **MAIN** reason why an improved jiko conserve energy is because it
- has small space for holding charcoal.
  - made of metallic parts.
  - has clay lining walls to insulate heat.
  - uses renewable source of energy.

20. Which one of the following methods of separating mixtures, separate solids that do **NOT** dissolve in water?
- Evaporation and decanting
  - Winnowing and picking
  - Picking and use of a magnet
  - Filtering and decanting

21. The diagram below represent female reproduction system.



The fusion of sex cell take place in the part labelled

- A. T  
B. Q  
C. S  
D. R
22. The **MAIN** reason of adding farmyard manure in a compost heap is to
- A. nourish bacteria  
B. speed up decomposition  
C. introduce decomposers  
D. improve air circulation
23. Presence of skin rashes and itching in the bowels is a sign of
- A. Typhoid  
B. Cholera  
C. Malaria  
D. Bilharzia
24. During a science lesson, pupils boiled water in a sufuria and put seeds in it. They covered the surface of water with oil. Which factor necessary for germination were they investigating?
- A. Oxygen  
B. Water  
C. Soil  
D. Warmth

25. Which is the fifth and seventh planet from the sun in the solar system?
- A. Saturn and Neptune  
B. Jupiter and Uranus  
C. Mars and Jupiter  
D. Saturn and uranus

26. Which one of the following is **NOT** a safety measure when handling and spraying crop with herbicides?
- A. Reading manufacturers instruction carefully.  
B. Spraying against the wind direction.  
C. Avoid smoking cigarette when handling chemicals.  
D. Put on gloves and face mask when spraying.

27. What happens to lizards when they basks in the sun? Its body temperature
- A. rises  
B. remains the same  
C. falls  
D. rises and then falls.

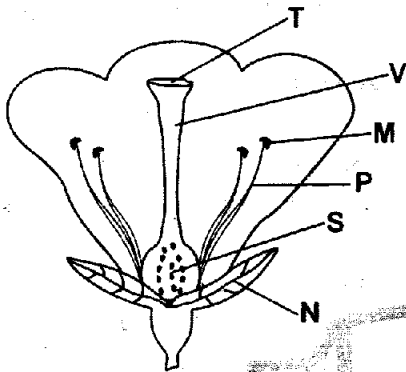
28. Which one of the following describes the recreational use of water?
- A. Watering animals  
B. Making fountain  
C. Washing vegetables  
D. Skiing

29. Which one of the following places is transparent materials **NOT** used?
- A. Glass window  
B. Windscreen  
C. Washroom window  
D. Spectacle

30. The 3<sup>rd</sup> DPT vaccine is administered to an infant at the age of

- A. 6 weeks
- B. 14 weeks
- C. 10 weeks
- D. 9 months

31. The diagram below represents a flower.



Which two part form the stamen?

- A. M and P
- B. V and S
- C. T and V
- D. N and P

32. Which one of the following is a MAJOR non living of environment?

- A. Animal
- B. Air
- C. Plant
- D. Building

33. Force is measured in

- A. gramme
- B. kilogram
- C. newton
- D. tonnes

34. Which one of the following is an adaptation of herbivores to feeding?

- A. Well spaced teeth.
- B. Horny hard pad
- C. Carnassial teeth
- D. Streamlined body.

35. A plastic bowl and candle wax float on water due to their

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

36. Which one of the following is NOT an immunizable disease?

- A. Malaria
- B. Tetanus
- C. Tuberculosis
- D. Typhoid

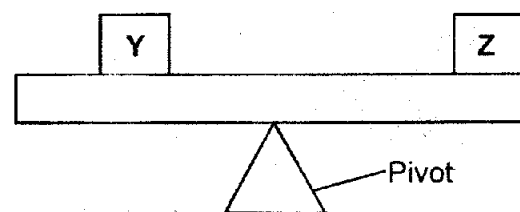
37. The following are functions of leaves?

- (i) Storage of food.
- (ii) Breathing
- (iii) Making of food
- (iv) Trapping of insects

Which of the functions are performed by all leaves?

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

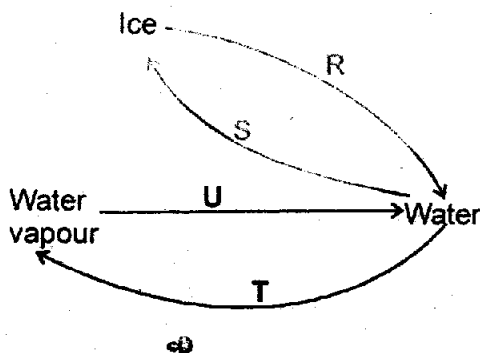
38. The diagram below shows two pieces of log pivoted at point X. The two pieces Y and Z are balanced as shown



It is TRUE to say that

- A. Log Y is heavier than log Z.
- B. The two logs have equal masses.
- C. If Log Z is moved near the pivot, the othe side will tilt downward.
- D. Log Z is heavier than log Y.

39. What happens when the left ventricle of the human heart contracts? Blood is pumped
- to the lungs.
  - to the right auricle.
  - out through the venacava.
  - to all parts of the body.
40. Which one of the following need **NOT** to be same when carrying out capillarity in the soil?
- Amount of cotton wool.
  - Amount of water in the basin.
  - Size of the tube.
  - Time taken
41. Treating sewages in factories will **MAINLY** control pollution in
- water only
  - water and soil
  - air only
  - soil and air
42. In a certain meal of fried eggs, chicken, beef and rice. What needs to be added to the meal to make it include all nutrients?
- Milk
  - Green grams
  - Avocado
  - Potatoes
43. The diagram below shows processes R, S, T and U, which bring about change of state of matter.



Which two processes involves absorption of heat from the surroundings?

- U and S
- T and U
- S and R
- R and T

44. Which one of the following pairs of drug are **NOT** prohibited in Kenya?
- Alcohol and Tobacco
  - Alcohol and mandrax
  - Cocaine and Heroine
  - Mirra and bhang

45. Which one of the following source of electricity is friendly to the environment?
- Petrol -driven generator
  - Geothermal generator
  - Diesel -driven generator
  - Wind driven generator

46. Which one of the following properties of soil does **NOT** depend on the size of its particles?
- Colour
  - Drainage
  - Water retention
  - Texture

Which maintenance practices on simple tools helps to save time when using?

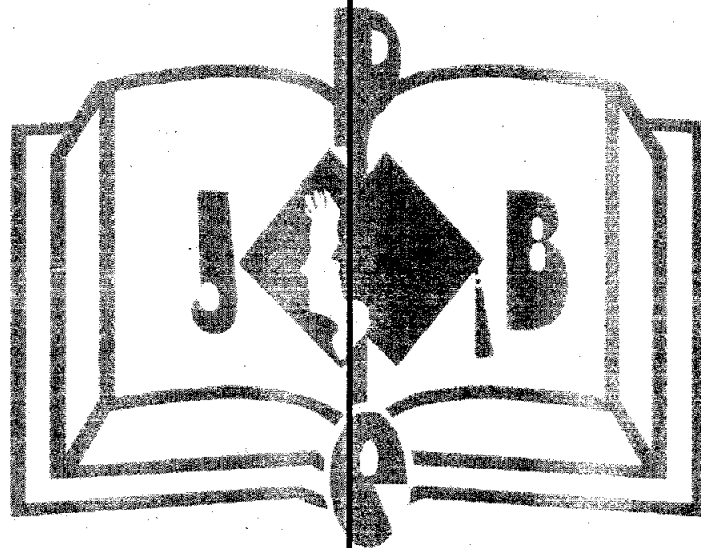
- Proper storage
- Oiling and greasing
- Repairing broken parts.
- Sharpening.

48. During an experiment done on a sunny day, pupil collected the following materials.
- Straw
  - Water
  - Container
  - Soap

The aspect of light **LIKELY** to be demonstrated is

- how light travels.
- making a rainbow.
- reflection of light.
- refraction of light.

49. Which one of the following animal has three body parts and move by leaping?
- A. Frog
  - B. Flea
  - C. Scorpion
  - D. Spider
50. Which one of the following pairs of substances can be separated by the use of magnet?
- A. Iron filling and office pins.
  - B. Flour and silver coins.
  - C. Steelwool and copper filling
  - D. Staples and razor blades.



**JESMA K.C.P.E PREDICTION WILL BE OUT ON 18<sup>TH</sup> FEBRUARY, 2022  
DON'T MISS!!!**