

KCPE NOVEMBER 2023 PREDICTION MASTER CYCLE 10

51600610

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KENYA NATIONAL PREDICTION TESTS
KCPE



516006

SCIENCE

Time: 1 hour 40 minutes

INSTRUCTIONS TO CANDIDATES (Please 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 this question booklet.

HOW TO USE THE ANSWER SHEET

4. Use an ordinary pencil only.
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 the 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, show the correct answer by drawing a **dark line** inside the box in which the letter you have chosen is written.

Example

In the Question Booklet.

5. Which one of the following components of blood is involved in clotting after an injury?
A. White blood cells.
B. Red blood cells.
C. Plasma.
D. Platelets.

The correct answer is D.

On the answer sheet:

5. (A) (B) (C) (D) 15. (A) (B) (C) (D) 25. (A) (B) (C) (D) 35. (A) (B) (C) (D) 45. (A) (B) (C) (D)

In the set of boxes numbered 5, the box with the letter **D** 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.



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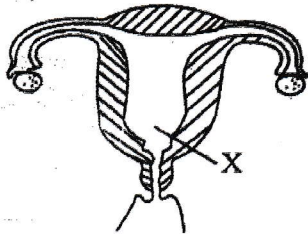
This question paper consists of 8 printed pages.

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Contact Mr Machuki 0724333200/0795491185 for Marking Schemes or kenyaeducators.co.ke

- Which one of the following is **not** needed when making a rainbow?
 - Basin
 - Sprayer
 - Torch
 - Water
- Which one of the following components of environment is found in all other components?
 - Air
 - Water
 - Soil
 - Plants
- The following are communicable diseases **except**
 - Polio
 - Tuberculosis
 - Malaria
 - Tetanus
- Which one of the following is a use of force that opposes motion?
 - Wear and tear
 - Skating
 - Heating of machines
 - Oiling
- Which crop below is **odd out**?
 - Oats
 - Beans
 - Wheat
 - Maize
- Which one of the following is a plant adapted to a dry area?
 - Acacia
 - Butter cup
 - Stinging nettle
 - Sugarcane
- Study the diagram below

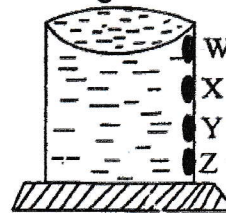


- What happens in the place marked X?
- Fertilization
 - Parturition
 - Implantation
 - Ovulation

- The chart below shows change of states in matter

Which one does **not** change the state on heating?

 - Solid
 - Liquid
 - Gas
 - Solid and gas
- The following happens when inhaling **except**
 - lungs inflate
 - diaphragm flattens
 - dust is trapped in the nose
 - rib cage moves inwards and upwards
- Which one of the substances below forms **one layer** when mixed together?
 - Milk and spirit
 - Paraffine and spirit
 - Cooking oil and milk
 - Water and diesel
- The diagrams below shows a water tank

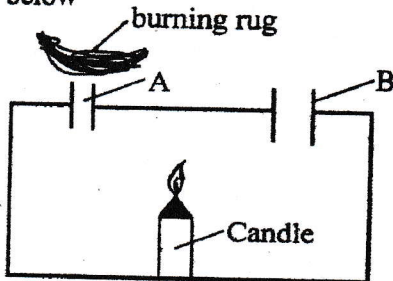


The best position for fixing an overflow pipe is

- W
 - X
 - Y
 - Z
- Study the following functions
 - facilitates the transfer of food and nutrients
 - facilitates gaseous exchange
 - facilitates the transfer of wastes products
 - prevent mixing of mother's blood and that of the foetus

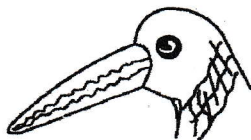
The above function are for:

- A. Amniotic B. Umbilical cord
 C. Placenta D. Uterine wall
13. Which one of the following is a condition necessary for both germination of seed and photosynthesis?
 A. Sunlight B. Temperature
 C. Oxygen D. Moisture
14. Pupils in std 6 set up the experiment below



The experiment did not work, which mistake did they make?

- A. The convectional box is too small
 B. They did not put a third chimney
 C. They did not place the candle below chimney B
 D. They did not place the candle below chimney A
15. The following are sources of current electricity **except**
 A. hydro-electric generators
 B. dynamo
 C. dry cells
 D. petrol
16. Which tools below is not used in maintenance of other tools?
 A. Pliers B. File
 C. Screw driver D. Knife
17. The diagram below represents a certain beak of a bird



The bird is

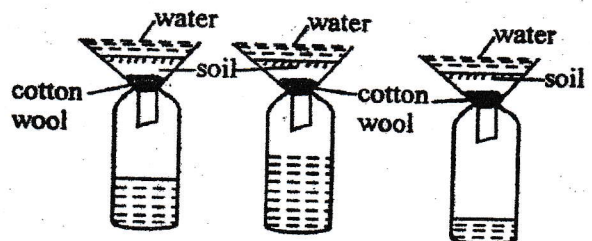
- A. grain eater B. filter feeder
 C. flesh eater D. nectar feeder
18. Which one of the following groups of materials consists of magnetic materials?
 A. Aluminium, zinc, copper
 B. Copper, iron, silver
 C. Silver, iron, cobalt
 D. Nickel, cobalt, steel

19. The brightest planet is
 A. venus B. mars
 C. jupiter D. mercury
20. What is the meaning of hallucinations in relation to drug and substance abuse?
 A. illegal drugs
 B. narcotic drugs
 C. legal drugs
 D. drugs that makes abuser to see and hear imaginary things
21. The diagram below shows a certain type of clouds



The clouds above indicate

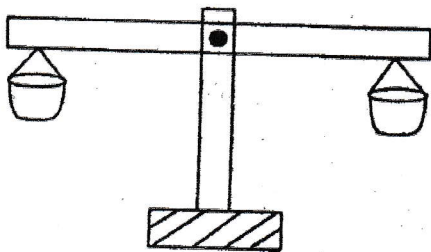
- A. heavy down pour
 B. fine weather
 C. dry season
 D. thunderstorms and lightning
22. Which one of the following sexually transmitted diseases is not caused by bacteria?
 A. HIV and AIDS B. Gonorrhoea
 C. Chancroid D. Syphilis
23. Which one of the following is **not** a characteristics of soil that cracks when dry?
 A. It is a heavy soil
 B. Suitable for constructing fish ponds
 C. Easily waterlogged
 D. Well aerated
24. What is force?
 A. A pull or a push
 B. A lift
 C. newton
 D. inertia
25. Std 5 pupils carried out the experiment below.



Which soil above is mixed with cement for construction?

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

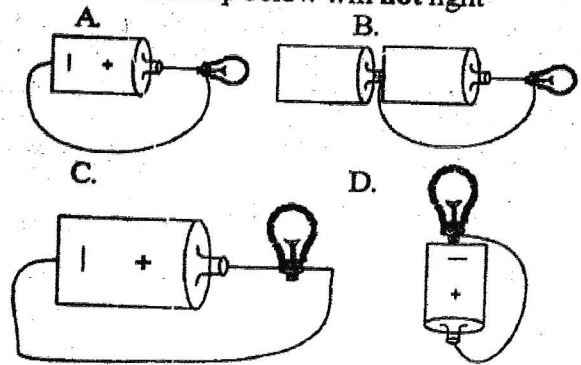
26. Water in the farm can be used in the following ways **except**
- mixing chemicals
 - irrigation
 - fishing
 - watering animals
27. Which one of the following adaptation in xerophytes does **not** help in water preservation?
- Few leaves
 - Leaves reduced to spines
 - Deep wide spread roots
 - Thick cuticles
28. Which one of the following is **not** a safety measure against lighting?
- Fitting lighting arrestors on tail building
 - Wearing shoes with thick rubbers soles when in pools
 - Avoid touching switches with wet hands
 - Lie flat on the ground when lighting strike
29. The plant with bread leaves and air sacs grow in
- water
 - dry area
 - sandy area
 - wet area
30. The diagram below shows a beam balance



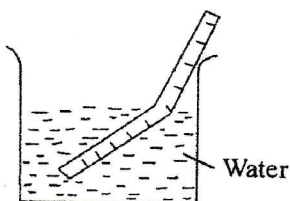
The working of this machine is similar to

- spring balance
 - ruler
 - wheelbarrow
 - See saw
31. Four pupils ate their different foods as follows
- Tamara - ugali, milk, kales.
 Kennedy - mango, cabbage, apple.
 Salome - fish, beans, chicken.
 Damaris - bread, chapati, chips.
- Who ate a diet suitable for a person suffering from Kwashiorkor?
- Tamara
 - Kennedy
 - Salome
 - Damaris

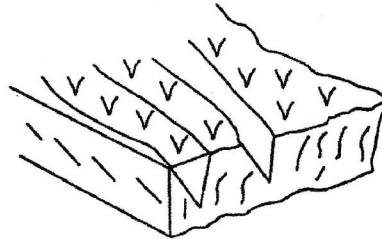
32. Class 5 pupils heated water in a tin which was half full, after boiling they put a lid and poured cold water on it, the tin can collapsed inwardly, what led to the observation?
- expansion of the water
 - expansion of the tin
 - sudden expansion of the tin
 - air pressure
33. The following is a list of animals and their products, which one is wrongly matched
- Sheep - wool and milk
 - Goat - mutton and mohair
 - Cow - beef and hide
 - Pig - pork and bacon
34. Rotational grazing is practised in all the following ways **except**
- tethering
 - herding
 - strip
 - paddocking
35. Karis stated the following characteristic of states of matter
- had definite mass
 - had definite size
 - had no definite shape
- The matter above is likely to be
- salt
 - toothpaste
 - air
 - stone
36. The following are reasons for food preservation. Which one is **not**?
- to avoid wastage
 - to sell when prices are favourable
 - to reduce the nutrient and flavour
 - keep for future use
37. A farmer preserved his animal feeds as follows
- cut and chopped into small pieces
 - store under airtight condition
 - compressed during preparation
- Which animal feed was he preserving
- silage
 - hay
 - pasture
 - commercial feeds
38. Which set up below will **not** light



39. The following are ways of conserving water, which one is **not**?
- Harvesting rain water
 - Building dams
 - Drip irrigation
 - Keeping fish in a pond
40. Which one of the following is important for people living with HIV/AIDS?
- Small quantities of food at regular intervals
 - Much sleep
 - A lot of body exercise
 - Large quantities of balanced diet at once.
41. The stages of HIV/AIDS infection occur as follows:
- Asymptomatic → window → symptomatic → fullblown
 - Window → incubation → symptomatic → fullblown
 - Incubation → window → symptomatic → fullblown
 - Window → incubation → asymptomatic → fullblown
42. A thick waxy cuticle on a plant is an adaptation feature that helps
- desert plants minimize evaporation of water
 - the aquatic plants to float on water
 - Prevent the water from standing on leaves of water plants
 - to prevent wild animals from browsing desert plants
43. The friction force can be reduced in the following ways except
- streamlining bodies
 - using ball bearing
 - smoothing surfaces
 - using glue
44. What is the importance of top soil making compost manure.
- Add nutrients to the compost
 - speed up the rate of decomposition
 - introduce decomposers
 - reduce the temperature
45. The set up below shows

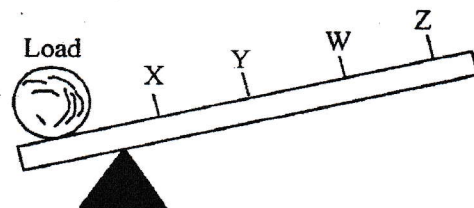


- reflection of light
 - refraction of light
 - diffusion of light
 - splitting of white light
46. The loudness or softness of sound is called
- pitch
 - echo
 - vibration
 - volume
47. The diagram below shows a certain type of soil erosion



It is **best** controlled by

- planting cover crops
 - terracing
 - making porous dam
 - contour farming
48. Which one of the following does **not** increase the rate at which a substance dissolves in water?
- increasing the temperature of solvent
 - stir the mixture
 - increase the size of the solute
 - heat the solute
49. The diagram below shows a lever in use



In order to use more effort, the effort position should be at point

- X
 - Y
 - W
 - Z
50. Which material have the following importances?
- provide privacy
 - a flow limited light in
 - cannot see clearly through
- Opaque
 - Transparent
 - Transparent and opaque
 - Translucent material