KCPE NOVEMBER 2023 PREDICTION MASTER CYCLE 6 5160066

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KENYA NATIONAL PREDICTION TESTS KCPE

516006

SCIENCE

Time: 1 hour 40 minutes

INSTRUCTIONS TO CANDIDATES (Please read these instructions carefully)

- 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. TAT TBT CO TET 15. TAT TBT CO TDT 25. TAT TBT CO TDT 35. TAT TBT CO TDT 45. TAT TBT CO TDT

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.

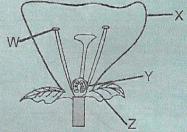




This question paper consists of 8 printed pages.

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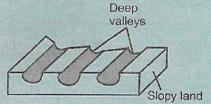
- 1. The placenta facilitates all the following processes except;
 - A. distribution of heat from the mother to the foetus
 - B. gaseous exchange
 - D. transfer of food nutrients from the mother to the foetns
 - D. removal of waste from the foetus
- 2. At ten weeks after birth, an infant is given;
 - A. 4th DPT and 2nd polio
 - B. 2nd DPT and 2nd polio
 - C. 1st DPT and Measles
 - D. 2nd DPT and 3rd polio
- 3. A certain drug has the effects below when abused;
 - i) Dryness of the mouth
 - ii) Loss of sleep
 - iii) Loss of appetite
 - iv) Mulnutrition and poor health
 - The drug with the above effects is;
 - A. cocaine
- B. bhang
- C. khat
- D. mandrax
- 4. A plant with needle-like leaves is also likely to have;
 - A. increased number of stomata
 - B. flexible stem
 - C. deep and widespread roots
 - D. thin cuticle on the leaves
- 5. The diagram below represents parts of a flower.



Which of the following pairs represents the part which protect the young flower and the part which produces the male sex cells respectively?

- A. X and Y
- B. Z and W
- C. W and Z
- D. Y and Z
- 6. A common characteristic between birds and

- reptiles is that both;
- A. lay unfertilized eggs
- B. have constant body temperature
- C. have scales on their body
- D. have varying body temperature
- 7. Which one of the following is the main function of the swim bladder in fish?
 - A. To propel the fish forward
 - B. To enable the fish change direction when swimming
 - C. For downward and upward movement by the fish
 - D. To enable the fish float when not swimming
- 8. Sandy soil had the highest drainage due to all the following features except;
 - A. large particles
- B. shiny particles
- C. rough texture
- D. large air spaces
- 9. In an experiment a pupil was dissolving salt in water. Which one of the following activities would not make the salt particles to dissolve faster?
 - A. Stirring the mixture
 - B. Warming the liquid substance
 - C. Using a bigger container to dissolve the mixture
 - D. Crushing the salt particles into powder form
- 10. The diagram below represents a type of erosion observed by pupils during a nature walk.

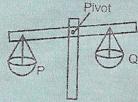


The type of erosion observed would best be controlled by;

- A. contour farming
- B. constructing porous dams
- C. digging terraces
- D. applying mulches
- 11. Which one of the following inorganic manures is not a source of Nitrogen to the plants?
 - A. Double superphosphate (DSP)

requires reduced friction?

- A. Door hinges
- B. Sole of footballer's boots
- C. Bicycle tyre
- D. Handles of a bicycle
- Equal amounts of substance P and Q were 25. balanced on a beam balance and the effect was as shown below



The substances would be made to balance by;

- A. adding some more of substance P
- B. reducing the amount of substance Q
- C. moving substance Q towards the pivot
- D. reducing the content in substance P
- Which one of the following parts of the skin 26. allows the sweat to evaporate on the surface?
 - A. Sweat glands
- B. Pores
- C. Hair folliele
- D. Sweat duct
- A certain sexually transmitted infection has the following signs and symptoms;
 - i) Pain in the lower abdomen
 - ii) Pain when urinating
 - iii) Discharge of yellowish pus from the genitals The disease decribed is:
 - A. chancroid
- B. syphilis
- C. gonorrhoea
- D. genital hernes
- Which one of the following is not a sign of 28. ill-health in livestock?

 - A. Loss of weight B. Retarded growth
 - C. Blood in stool
- D. Lower yields
- The illustration below represents a certain 29. lever in use.



The lever illustrated above is likely to be;

- A. scissors
- B. bottle opener
- C. tweezers
- D. wheel barrow
- Which one of the following is not an excretory organ?
 - A Anus
- B. Lungs

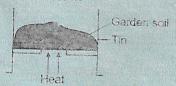
C. Skin

D. Kidney

- The following are signs and symptoms of a 31. certain nutritional deficiency disease;
 - i) Reduced growth
 - ii) Swollen feet, hands and stomach
 - iii) Thin brownish hair
 - iv) Sores at the corners of the mouth

The disease can be prevented by feeding on all the following except;

- A. eggs
- B. fresh vegetables
- C. beans
- D. fish
- 32 When the left ventricle contracts:
 - A. blood leaves the heart through the pulmonary vein
 - B. deoxygenated blood is pumped to all the body parts
 - C. blood leaves the heart through the oarta
 - D.blood flows to the right chambers
- In an experiment to investigate presence of 33. water in the soil, pupils set up the apparatus as shown below.



For correct observations, the pupils should;

- A, add some water to the soil
- B. place a lid on the tin
- C. increase the amount of heat
- D. shake the soil during heating
- Which one of the following is the fourth 34. planet from Venus?
 - A. Mars
- B. Uranus
- C. Saturn
- D. Jupiter
- The diagram below represents a maize plant. 35.

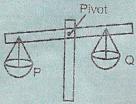


The part of the thread-like features marked X represents the:

- A. style
- B. stigma
- C. anthers

requires reduced friction?

- A. Door hinges
- B. Sole of footballer's boots
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- 25. Equal amounts of substance P and Q were balanced on a beam balance and the effect was as shown below.



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- 26. Which one of the following parts of the skin allows the sweat to evaporate on the surface?
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- D. Sweat duct
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 - A. chancroid
- B. syphilis
- C. gonorrhoea
- D. genital herpes
- 28. Which one of the following is not a sign of ill-health in livestock?
 - A. Loss of weight
- B. Retarded growth
- C. Blood in stool
- D. Lower yields
- 29. The illustration below represents a certain lever in use.



The lever illustrated above is likely to be;

- A. scissors
- B. bottle opener
- C. tweezers
- D. wheel barrow
- 30. Which one of the following is not an excretory organ?
 - A. Anus
- B. Lungs

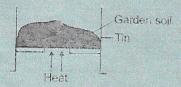
C. Skin

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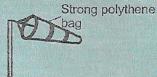
- A. add some water to the soil
- B. place a lid on the tin
- C. increase the amount of heat
- D. shake the soil during heating
- 34. Which one of the following is the fourth planet from Venus?
 - A. Mars
- B. Uranus
- C. Saturn
- D. Jupiter
- 35. The diagram below represents a marze plant.



The part of the thread-like features marked *X* represents the:

- A. style
- B. stigma
- C. anthers
- D. filament

- 36. Waterborne diseases can best be prevented by;
 - A. drinking boiled or treated water
 - B. draining stagnant water
 - C. wearing protective clothing when handling stagnant water
 - D. maintaining cleanliness
- 37. The diagram below represents a weather instrument constructed by Std 5 pupils.



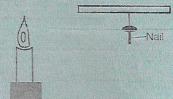
Which one of the following will not make the instrument effective in its functioning?

- A. Painting it with black and white stripes
- B. Fixing narrrow end to the side of the pole
- C. Opening it on both ends
- D. Placing it in an open field
- 38. An iron box has the handle made of plastic or wood mainly to;
 - A. provide a firm grip when ironing
 - B. allow conduction of electricity
 - C. prevent burning one's hand during ironing
 - D. reduce the amount of power used when ironing
- 39. Which one of the following nutrients is needed by plants in small quantities?
 - A. Sulphur
- B. Zinc
- C. Oxygen
- D. Carbon
- 40. Which one of the following diseases is communicable but not immunisable?
 - A. Malaria
- B. Tuberculosis
- C. Tetanus
- D. Whooping cough
- 41. The illustration below represents a simple food chain.

Plants → Locusts → Lizards → Hawks
Which one of the following is likely to happen
if all the lizards dies in that environment?

- A. Hawks would increase
- B. Plants would decrease
- C. Locusts would decrease
- D. Hawks would eat plants
- 42. Which one of the following methods of food preservation makes the germs inactive?
 - A. Freezing
- B. Use of honey
- C. Canning
- D. Salting
- 43. A ball of wax floats in water due to its;

- A. shape C. material
- B.weight
- D. size
- 44. A nail was suspended near a source of heat as shown below.



Source of heat

The nail felt hot after sometimes because heat was transmitted through;

- A. radiation and conduction
- B. convection
- C. convection and radiation
- D. radiation only
- 45. During the incubation stage of HIV, infection, the victim is likely to:
 - A. test positive and show no signs
 - B, test negative and have no signs
 - C. test positive and show signs
 - D. test positive and look very weak
- 46. Which one of the following characteristics of matter is common in both water and flour?
 - A. Definite shape
- B. Indefinite shape
- C. Definite size
- D. indefinite mass
- 47. Which one of the following is not an example of force?
 - A. Gravity
- B. Magnetism
- C. Friction
- D. Mass
- 48. Which one of the following physical changes are correctly grouped?

Girls

Boys

- A. Broadening of shoulders Wet dreams
- B. Menstural flow
- Breaking of voice
- C. Wet dreams
- Broadening of hips
- D. Attraction to opposite sex Pimples on the face
- 49. Cumulus clouds do not;
 - A, form at high attittudes
 - B. have a flat base
 - C. appear dark grey in colour
 - D. look like bundles of cotton wool
- 50. All the following are rotational methods of grazing except;
 - A. tethering
- B. herding
- C. strip-grazing
- D. paddocking

SCIENCE - 04/8/21