

READ THESE INSTRUCTIONS CAREFULLY

1. You have been given this question paper and a separate answer sheet. The question paper contains 50 questions.
2. Do any necessary rough work in this paper.
3. When you have chosen your answer, mark it on the **ANSWER SHEET**, not in this question paper.

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 (ie. 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 Questions 1 - 50, four answers are given. The answers are lettered **A, B, C, 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

16. Which one of the following is **NOT** a storage pest?

A. Termites

B. Aphids

C. Weevils

D. Rodents

The correct answer is **B**

16. [A] [~~B~~] [C] [D]

In the set of boxes numbered **16**, the box with letter **B** printed in it is marked

11. Your dark line **MUST BE** within the box.

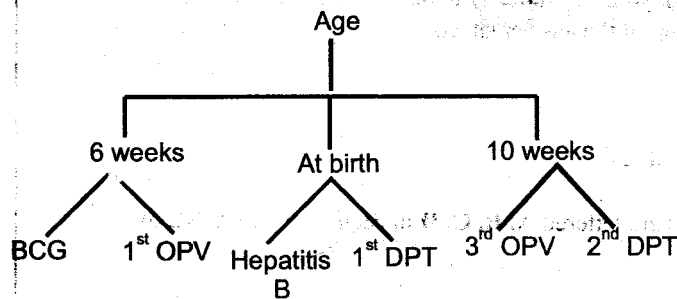
Which group below consists **only** of legal drugs in Kenya?

- A. Khat, alcohol, tobacco
- B. Bhang, cocaine, mandrax
- C. Tobacco, inhalants, miraa
- D. Cocaine, tobacco, bhang

Which one of the following is a **common** sign between symptomatic and incubation stages of HIV infection? At both stages

- A. the patient can transmit the virus knowingly
- B. the patient has AIDS
- C. signs and symptoms are visible
- D. a HIV test shows negative results.

The chart below shows immunisation schedule for infants.



Which pair of vaccines below are **not** all correctly classified?

- A. BCG and Hepatitis B
- B. 3rd OPV and 1st DPT
- C. Hepatitis B and 2nd DPT
- D. 1st DPT and 1st OPV.

Which one of the following is **not** an interdependence between plants?

- A. Habitat
- B. Shade
- C. Food
- D. Shelter

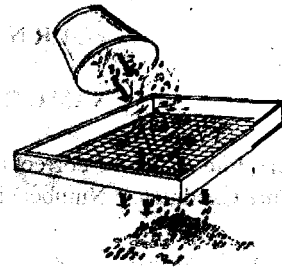
5. All the following plants have the same type of root **except**

- A. sweet potatoes
- B. banana
- C. mango
- D. irish potatoes.

6. Some pupils destroyed all the **anthers** in a certain flower before pollination. Which one of the following is **most** likely to take place after some time in the same flower?

- A. The ovary developed into a fruit
- B. Pollination did not take place
- C. Pollen tube did not develop
- D. The whole flower withered.

7. The diagram below shows a method of separating mixtures.



Which mixture below **cannot** be separated using the above method?

- A. Maize and millet
- B. Wheat flour and husks
- C. Rice and sand particles
- D. Sorghum and beans.

8. The following are signs and symptoms of a certain water-borne disease;

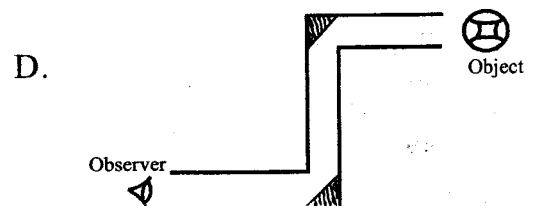
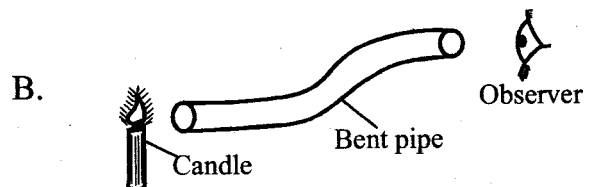
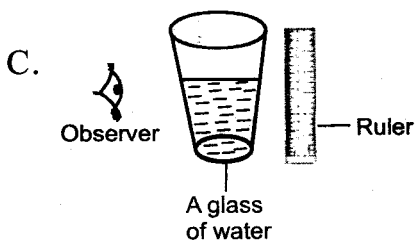
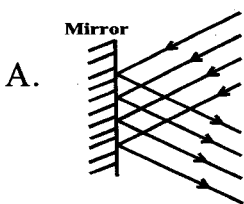
- i) Blood in urine
- ii) Fever
- iii) Diarrhoea or constipation

Which one of the following is the **best** method of preventing the above disease?

- A. Wearing protective clothing when handling stagnant water.
- B. Maintaining high standards of hygiene
- C. Vaccination against the disease during outbreak.
- D. Drinking boiled or treated water.

9. Which method of food preservation below makes the bacteria inactive?
- Canning
 - Freezing
 - Salting
 - Drying
10. All the following are importance of water in a diet **except**
- helps in food absorption
 - helps in removal of waste products
 - water forms part of blood
 - prevents constipation.
11. Which one of the following is **not** a major protective food?
- Milk
 - Pumpkin
 - Mutton
 - Kales
12. On a very cold day, a boy covered himself with a blanket. The **main** function of the blanket was to
- provide him with warmth
 - produce enough heat
 - allow his body to generate heat
 - reduce heat loss from his body.
13. In between a burning jiko and a boy standing close to the jiko there is air. Heat from the jiko **mainly** reaches the boy through
- radiation only
 - convection only
 - conduction only
 - convection and radiation.
14. Which one of the following is **not** a reason for lighting a room?
- To improve safety
 - To provide warmth
 - To see clearly
 - To discourage pests.
15. In which of the following activities is water **least** conserved?
- Discharging treated sewage into water ways.
 - Providing shade to growing seedlings
 - Channeling rain water into a dam
 - Cultivating close to river banks.

16. Which set up below is used to investigate refraction of light?



17. A class four pupil placed a ball bearing and a metallic bowl on water. After the observation, the pupil concluded that

- A. size does not affect floating and sinking
- B. type of the material affects floating and sinking
- C. shape of an object affects floating and sinking
- D. weight does not affect floating and sinking.

18. The following are the steps to following when investigating if part of air supports burning.

- i) *Pour water into the basin*
- ii) *Cover the burning candle with a glass jar*
- iii) *Fix the burning candle at the bottom of the basin using wax*

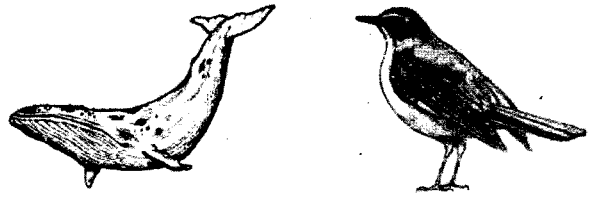
Which one of the following shows the **correct** procedure?

- A. iii, ii, i
- B. ii, iii, i
- C. i, ii, iii
- D. iii, i, ii

19. In which of the following is friction force **least** required?

- A. Running
- B. Flying a kite
- C. Cycling
- D. Digging

20. Which one of the following is **not** a common characteristic between the vertebrates drawn.



- A. They breathe through lungs
- B. They have constant body temperature
- C. They have internal fertilisation
- D. They lay eggs.

21. Ticks and tapeworms in livestock can both be controlled by

- A. deworming
- B. dipping
- C. practising rotational grazing
- D. spraying the livestock with acaricides.

22. Which one of the following farm animals can produce both beef and milk?

- A. Dairy cows
- B. Goats
- C. Sheep
- D. Poultry

23. The **best** method a person infected with tuberculosis can prevent the spread of the disease is by

- A. immunisation against the disease
- B. isolation and immediate treatment
- C. living in a well ventilated room
- D. drinking properly boiled milk.

24. Which one of the following is **not** a myth and misconception about HIV/AIDS?

- A. People living with HIV/AIDS are always thin.
- B. All people with HIV have AIDS
- C. HIV is caused by sexual intercourse
- D. HIV/AIDS weakens the body's immunity.

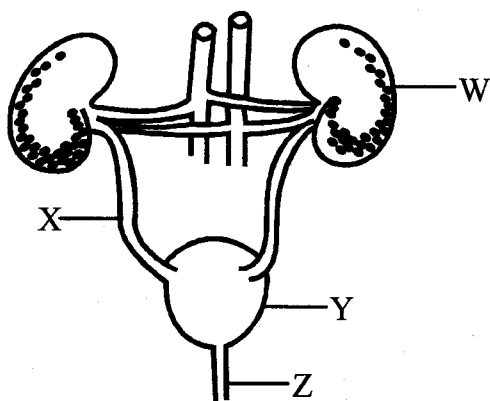
25. Which group of crops below are **correctly** classified?

- A. Oil crops - sunflower, coconut and cotton
- B. Cereals - maize, sorghum and peas
- C. Fibre crops - sisal, barley and cotton
- D. Tubers - onions, cassava and potatoes

26. Which one of the following is **not** a physical change in adolescent girls?

- A. Rapid body growth
- B. Hair grows on chest
- C. Pimples may appear on the face
- D. Hips broaden.

27. The diagram below shows the parts of the urinary system.



Which letter represents the part that produces urine?

- A. W
- B. Z
- C. X
- D. Y

28. Which blood vessel transports blood from the lungs to the heart?

- A. Pulmonary vein
- B. Aorta
- C. Pulmonary artery
- D. Venacava.

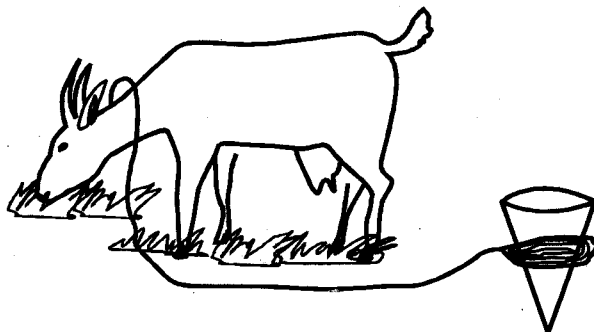
29. Which type of teeth is one **not** likely to use when eating sugarcane?

- A. Incisors
- B. Molars
- C. Premolars
- D. Canines

30. Which type of manure is prepared from all forms of organic waste?

- A. Farmyard manure
- B. Green manure
- C. Compost manure
- D. Artificial manure

31. The diagram below shows a way of grazing animals.



Which statement is **false** about the above method of grazing?

- A. It can best be used with few livestock
- B. The livestock can only feed on pasture
- C. It helps in controlling livestock parasites
- D. It is a type of rotational grazing.

32. In which part of the digestive system is water absorbed?

- A. Mouth
- B. Stomach
- C. Large intestine
- D. Small intestine

33. Which one of the following substances does **not** have indefinite shape?

- A. Ice
- B. Water
- C. Oxygen
- D. Smoke

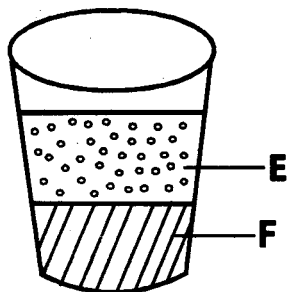
34. Which of the following instruments is used to compare the quantity of matter in objects?

- A. Spring balance
- B. Beam balance
- C. Kilograms
- D. Newtons

35. The gravitational pull in an object is equivalent to its

- A. mass
- B. inertia
- C. friction
- D. weight.

36. Two liquids were mixed in a container as shown below.



Liquid E and F are **most** likely to be _____ and _____ respectively.

- A. water, kerosene
- B. milk, methylated spirit
- C. methylated spirit, petrol
- D. petrol, milk

37. What is the percentage of the gas that is used by some green plants to make protein?

- A. 0.03%
- B. 0.97%
- C. 21%
- D. 78%

38. Which one of the following is **not** a major component of the environment?

- A. Water
- B. Animals
- C. Light
- D. Soil

39. The following are all signs and symptoms of marasmus **except**

- A. wrinkled skin
- B. severe loss of weight
- C. sores at the corner of the mouth
- D. almost all the muscles disappear.

40. All the following materials are required when modelling the solar system **except**

- A. bottle tops
- B. manila paper
- C. thorns
- D. plasticine.

41. The arrow of a windvane was seen pointing towards the direction of the sunset. From which direction was the wind blowing?

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

42. Which type of soil is **correctly** matched to its characteristics in the table below?

	Clay	Sand
A.	Largest particles	Makes shortest ribbons
B.	Spreads easily when dry	Sticks when wet
C.	Has poorest capillarity	Retains a lot of water
D.	Cracks when dry	Has best drainage

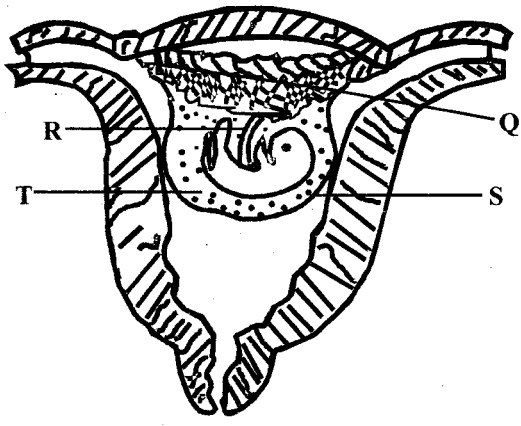
43. All the following animals live in soil **except**

- A. ants
- B. moth
- C. millipede
- D. slug.

44. Which one of the following is **not** a storage pest?

- A. Mite
- B. Weaver bird
- C. Mole
- D. Weevil

45. The diagram below shows the development of the foetus in the womb.



Which letter represents the part that is **correctly** matched to its function?

- A. T - allows for free movement of the foetus
- B. Q - protects the foetus from injuries
- C. R - prevents direct contact of blood
- D. S - facilitates transfer of food nutrients.

46. Which one of the following sources of electricity is **odd**?

- A. Bicycle dynamo
- B. Wind - driven turbines
- C. Solar panels
- D. Petrol - driven generators.

47. Which lever below has effort between load and fulcrum?

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

48. Which one of the following is **not** a use of water in the farm?

- A. Watering plants
- B. Cooling parts of machines
- C. Washing farm tools
- D. Keeping some farm animals.

49. Which material below is a poor conductor of electricity?

- A. Rubber band
- B. Pin
- C. Razor blade
- D. Staples

50. Which one of the following is **not** a commercial feed?

- A. Maize germ
- B. Pollard
- C. Molasses
- D. Desmodium.