



TARGETER KCPE PREDICTION ONE STANDARD EIGHT - YEAR 2021

SCIENCE

Time: 1 hour 40 mins

INSTRUCTIONS TO CANDIDATES (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 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 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, 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 of the following is the second stage of foetal development?
- A. Foetus
 - B. Embryo
 - C. Baby
 - D. Zygote

The correct answer is B.

On the Answer sheet:

14. [A] [B] [C] [D] 15. [A] [B] [C] [D] 16. [A] [B] [C] [D] 17. [A] [B] [C] [D]

In the set of boxes number 16, the box with letter B 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.

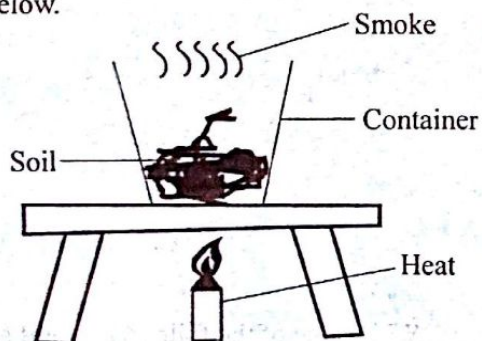
1. Clouds that are dark grey in colour
A. indicate fine weather.
B. have a flat base.
C. appear low in the sky.
D. look like bundles of cotton wool.

2. The following are advantages of soft water **except** one. Which one is it?
A. Less soap is used.
B. Does not contain minerals.
C. Lathers easily with soap.
D. Less energy is used when washing.

3. Soil pollution is caused by all the following **except**
A. treated sewage.
B. floods.
C. acid rain.
D. excess fertilizers.

4. Which among the following animals has scales on its body?
A. Newt
B. Lizard
C. Toad
D. Whale

5. Class four pupils set up an experiment as shown below.



Which component of soil were they investigating?

- A. Water and air.
B. Living organisms.
C. Organic matter.
D. Mineral salts.

6. Soil erosion depends on all the following factors **except**
A. the slope of the land.
B. type of soil in an area.
C. mineral content of the soil.
D. plant cover in an area.

7. Plants depend on each other for the following **except**
A. habitat
B. shelter
C. support
D. air

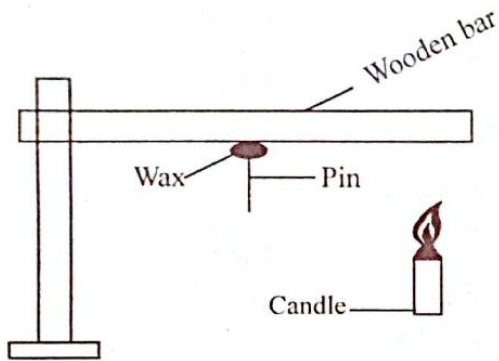
8. Which of the following mixtures can be separated by sieving?
A. Flour and maize grains.
B. Sand and water.
C. Sorghum and husks.
D. Beans and maize.

9. An insect pollinated flower has one of the following characteristics. Which one?
A. Has powdery pollen grains.
B. Produces nectar.
C. Has dull petals.
D. Produces many pollen grains.

10. Which pair of liquids will mix with milk and engine oil respectively?
A. Methylated spirit, diesel.
B. Cooking oil, water.
C. Ink, water.
D. Diesel, water.

11. Which of the following signs of ill health in livestock is **not** an immediate sign?
A. Coughing.
B. Stunted growth.
C. Blood in stools.
D. Rough coat.

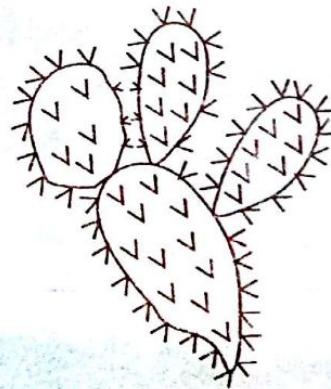
12. Class five pupils carried out the experiment below.



After sometimes the wax melted and the pin fell off. This was **mainly** because of

- A. conduction of heat.
 - B. radiation and convection of heat.
 - C. dispersion of heat.
 - D. convection of heat.
13. Which of the animals below is a herbivorous animal?
- A. Pig
 - B. Dog
 - C. Chimpanzee
 - D. Hippopotamus
14. Which method of food preservation below is **both** a modern and a traditional method?
- A. Refrigeration
 - B. Salting
 - C. Smoking
 - D. Use of low temperatures
15. Among the following examples of states of matter, which one does **not** have definite volume?
- A. Sand particles.
 - B. Water.
 - C. Smoke.
 - D. Ice.

16. The **main** reason why mothers are advised to feed their infants on breast milk is because breast milk
- A. is easy to digest.
 - B. is free from diseases.
 - C. boosts the infants immunity.
 - D. is wholesome at right temperature.
17. Which one of the following manures releases nutrients fast into the soil for plants?
- A. Farm yard manure.
 - B. Compost manure.
 - C. Green manure.
 - D. Urea.
18. All the following excretory products are removed by the skin **except**
- A. excess water.
 - B. excess salts.
 - C. lactic acid.
 - D. carbon dioxide.
19. The diagram below represents a plant that is able to grow in a dry habitat.



Which one of the following is **not** an adaptive feature found in the above plant?

- A. Green stem for making food.
- B. Thick waxy cuticle on the stem.
- C. Succulent stem for storing water.
- D. Has thin leaves to make food.

20. Which group below consists of **only** diseases that are immunisable?

- A. Whooping cough, Tuberculosis, Bilharzia
- B. Measles, Tetanus, Malaria.
- C. Yellow fever, Tuberculosis, Diphtheria.
- D. Cholera, Malaria, Poliomyelitis

21. Which one of the following pairs of plants is **correctly** matched with the type of root system?

Tap root

- A. Grass
- B. Blackjack
- C. Coconut
- D. Kales

Fibrous root

- A. Maize
- B. Cabbage
- C. Acacia
- D. Onions

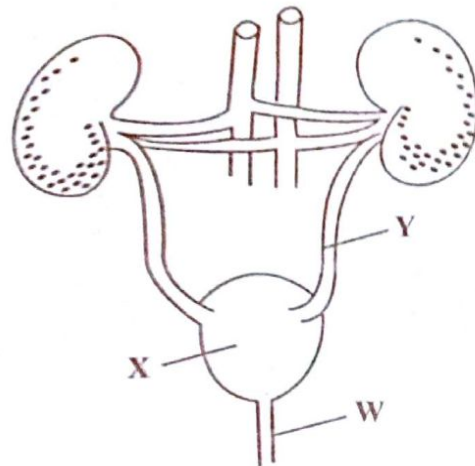
22. In a food chain green plants represent the

- A. primary consumers.
- B. secondary consumers.
- C. primary producers.
- D. tertiary consumers.

23. Which one of the following livestock parasites attacks the liver and lungs of livestock?

- A. Liverfluke
- B. Tapeworms
- C. Lungworms
- D. Hookworms

24. The diagram below shows an excretory system in human being.



The parts labelled W, X and Y respectively are:

- A. Kidney, bladder, urethra
- B. Urethra, kidney, ureter
- C. Ureter, bladder, urethra
- D. Urethra, bladder, ureter

25. Three of the following are all illegal drugs. Which one is **not**?

- A. Bhang
- B. Alcohol
- C. Cocaine
- D. Heroin

26. Soil conservation is done through the following ways **except** one. Which one?

- A. Mulching.
- B. Planting trees.
- C. Ploughing across the contours.
- D. Not burning vegetation cover.

27. The **crop pest** that cuts the stems of seedlings is called

- A. cutworm
- B. aphids
- C. weevil
- D. stalkborer

28. A person in the incubation stage of HIV infection will show
- signs and test negative.
 - no signs and test negative.
 - signs, symptoms and test positive.
 - no signs, no symptoms and test positive.

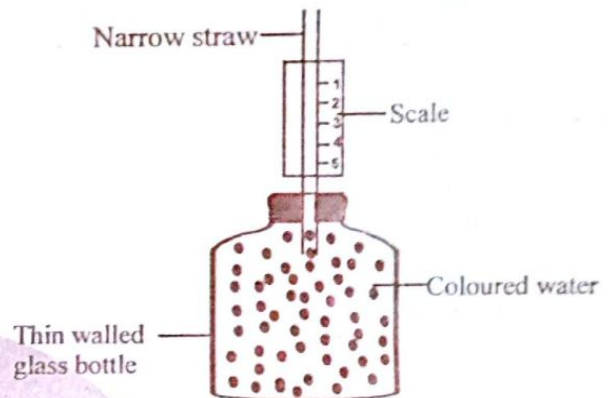
29. A bird that has flat serrated beak is likely to feed on
- nectar
 - grains
 - filtering foods from water
 - flesh

30. Educating masses is away of controlling the spread of HIV and AIDS. It can be carried out through all the following ways **except**
- public rallies.
 - job interviews.
 - seminars.
 - weddings.

31. Which group of animal feeds below provides livestock with mineral salts **only** when fed?
- Green fodder and honey.
 - Bonemeal and salt lick.
 - Bran and molasses.
 - Fish meal and lucern.

32. Which one of the following parasites does **not** attack pigs?
- Louse
 - Flea
 - Mite
 - Ticks

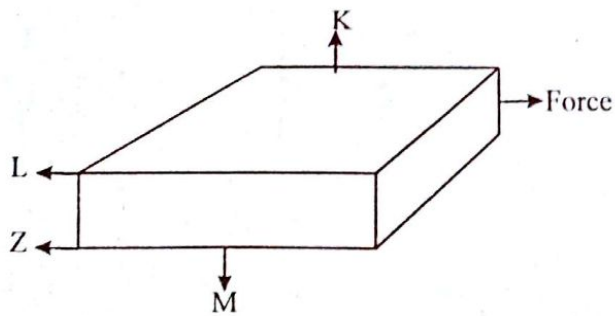
33. The diagram below shows a weather instrument made by std. 5 pupils.



The weather instrument did **not** function well because

- they used a scale reading from top to bottom.
 - they used a narrow straw.
 - they used a thin walled glass bottle.
 - they used coloured water.
34. Which of the following transformation of energy occurs in the electromagnet?
- Electrical → Magnetic → Chemical → Heat
 - Chemical → Electrical → Magnetic → Light
 - Chemical → Electrical → Electromagnet
 - Electrical → Chemical → Magnetic
35. A machine
- reduces the amount of work.
 - increases effort used.
 - makes work easier.
 - increases the amount of work done.

36. A class 7 pupil tried to push a box towards the direction shown by force.



Which arrow shows the direction of friction force?

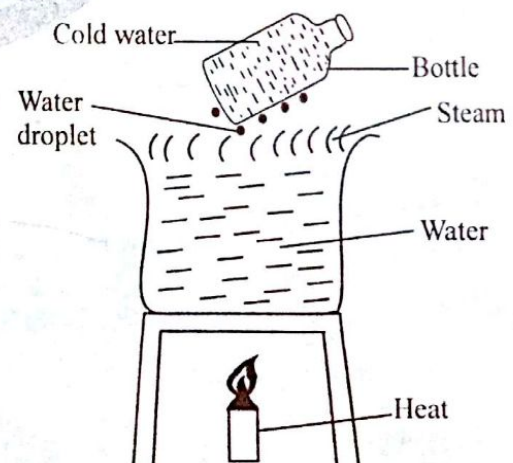
- A. M
B. Z
C. L
D. K
37. The following animals have same way of movement **except**
- A. flea
B. ladybird
C. wasp
D. butterfly
38. In which of the following processes is energy **correctly** classified under renewable and non-renewable?
- | <u>Renewable</u> | <u>Non-renewable</u> |
|------------------|----------------------|
| A. Wind | Charcoal |
| B. Coal | Petrol |
| C. Natural gas | Firewood |
| D. Biogas | Diesel |
39. Which of the following is **not** a symptom of food poisoning?
- A. Fever
B. Pain in joints
C. Diarrhoea
D. Vomiting

40. Which one of the following is **not** an effect of livestock diseases?
- A. Lower yields.
B. Red iced quality of products.
C. Stunted growth.
D. Transmission diseases to human beings.

41. Which one of the following is **not** an air pollutant?
- A. Burning tyres.
B. Sewage effluents.
C. Vehicle exhaust fumes.
D. Industrial gases.

42. During breathing out
- A. diaphragm flattens.
B. lungs expand.
C. ribs move upwards and outwards.
D. diaphragm becomes dome shaped.

43. The diagram below shows a set up made by std. 5 pupils.



The process investigated is

- A. evaporation
B. condensation
C. convection
D. freezing

44. Which pair of activities below requires streamlining of the body to reduce friction?
- A. Swimming and flying.
 - B. Reproduction and flying.
 - C. Feeding and swimming.
 - D. Reproduction and feeding.
45. The implantation of the foetus takes place in the
- A. fallopian tube.
 - B. uterus.
 - C. vagina.
 - D. oviduct.
46. The two gases that dissolve in water to make acid rain are:
- A. Sulphur dioxide and carbon dioxide.
 - B. Carbon monoxide and nitrogen.
 - C. Sulphur dioxide and nitrogen.
 - D. Oxygen and carbon dioxide.
47. To get extra iron, an expectant mother should feed on
- A. ugali
 - B. spinach
 - C. potatoes
 - D. bananas
48. The two liquids that can be used as lubricants are
- A. engine oil and grease.
 - B. diesel and grease.
 - C. petrol and diesel.
 - D. engine oil and petrol.
49. When an arrow of a windvane points to the East, the wind must be blowing from
- A. East
 - B. West
 - C. North
 - D. South
50. Which of the following animals is a herbivore?
- A. Chimpanzee
 - B. Zebra
 - C. Pig
 - D. Tiger