



# KCPE EXAMINER SERIES 2021 PREDICTION TWO Standard Eight

## SCIENCE

Time: 1 hour 40 minutes

### READ THESE INSTRUCTIONS CAREFULLY

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

### HOW TO USE THE ANSWER SHEET

- Use only an ordinary pencil
- Make sure that you have written on the answer sheet:
  - YOUR INDEX NUMBER
  - YOUR NAME
  - NAME OF YOUR SCHOOL
- By drawing a dark line inside the correct number (i.e. school code number and the three-figure number of the answer sheet) in the grid near the top of the answer sheet.
- Do not make any mark outside the box.
- Keep the sheet as clean as possible.
- For each of the questions 1-50 answer a question are lettered A,B,C,D each case only ONE of the four answers is to be chosen.
- On the answer sheet the correct answer is shown by drawing a dark line inside the box in which the letter has been written.

**Example** Animals that feed on plants **ONLY** are called \_\_\_\_\_.

- In The Question
14. Answer
- A. omnivorous
  - B. carnivores
  - C. herbivorous
  - D. omnivorous

The correct answer is **D** on the answer sheet:

El, notelto I %rein, El nsnteno, El lires«et, Ens«cro|

- Your dark line **MUST** be written in the box
- For each question **ONLY ONE** box is to be marked in each set of four boxes.

**PR 002**

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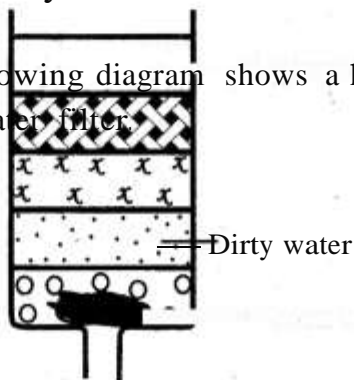
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TURNOVER

*Ex2021R2/Scie 8*

- The following are ways in which soil gets polluted. Which one is **not**?
  - Mining activities
  - Poor agricultural methods
  - Oil spillage
  - Discharge of treated sewage
- Which of the following human activities increases soil erosion?
  - Growing Napier grass on slopy areas
  - Stall grazing
  - Planting trees
  - Burning bushes
- All the following are carnivorous plants **except**:-
  - pitcher plant
  - sundew
  - aloe vera
  - cobra lily

- The following diagram shows a home-made water filter.



X

→ Cotton wool

Which substance is placed at the part marked x?

- The following are signs of unhealthy crops. Which one is **not**?
  - Spots and streaks
  - Stunted growth
  - Discoloration of leaves
  - Reduced quality products
- Which of the following is **not** located in the dermis layer of the skin?
  - Blood vessels
  - Oil glands
  - Sweat glands
  - Sweat pores
- Which of the following is **not** used in a water filter?
  - Fine sand
  - Charcoal
  - Pebbles
  - Coarse sand

7. Which of the following statements about birds and reptiles is **not true**?
- A. They both have internal fertilization
  - B. They both lay eggs
  - C. They are both vertebrates
  - D. They are both warm blooded
8. Which of the following pests is **likely** to attack crops when they are in a nursery bed?
- A. Stalkborers
  - B. Cutworms
  - C. Weaver birds
  - D. Rodents
9. Plants that grow in dry areas are called xerophytes. Which of the following is **not** one of such plants?
- A. Water lily
  - B. Cactus
  - C. Marram grass
  - D. Acacia

10. The diagram below shows a simple circuit that was used by a Std 8 pupil to investigate a certain concept about electricity.

B. Cooking oil and milk C. Water and cooking oil D. Spirit and water

Coated  
wire

What are the energy transformations in the set up above?

- A. Chemical-» electrical -» electro magnetic
- B. Electrical -» electro → magnetic kinetic
- C. Chemical → electrical » kinetic
- D. Electrical -» kinetic -» chemical

11. All of the following are ways of conserving water. Which one is **not**?

- A. Harvesting rain water
- B. Recycling water
- C. Practising proper hygiene
- D. Using water sparingly

12. Liquids that mix together are called miscible liquids. Which of the following liquids are miscible?

- A. Petrol and spirit

13. The following are signs and symptoms of a certain communicable disease

- i) *Frequent and prolonged coughs*
- ii) *Coughing of blood at times*
- iii) *Body becomes pale, thin and weak,*
- iv) *Chest pains*

The above signs and symptoms are of:-  
A. malaria  
B. tuberculosis  
C. typhoid  
D. whooping cough

14. Which method of grazing is characterised by use of movable fences?  
A. Strip grazing  
B. Tethering  
C. Rotational grazing  
D. Zero grazing

15. Which one of the following substances dissolves in rain water to form acid rain?

- A. Smoke and fog
- B. Sulphur dioxide and carbon dioxide
- C. Soot and dust
- D. Carbon monoxide and sulphur dioxide

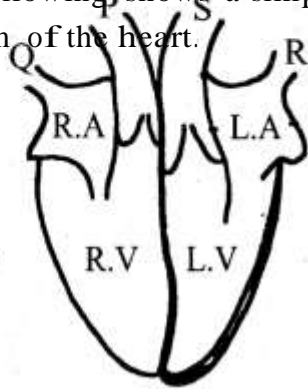
16. Which of the following plants **does not** have a tap root system?

- A. Acacia
- B. Beans
- C. Coconut
- D. Mango

17. The following are changes that boys and girls undergo during adolescence. Which one is common in **both** boys and girls?

- A. Menstrual flow begins
- B. Wet dreams
- C. Broadening of shoulders
- D. Production of sex cells

18. The following shows a simplified diagram of the heart.



- Which of the following is **true** about the diagram above?
- A. **R** is the main vein
  - B. **Q** is the main vein
  - C. **P** and **S** are veins
  - D. **P** is the main vein
19. The following are animal parasites. Which one affects all domestic animals including human beings?
- A. Mites
  - B. Tse tse flies
  - C. Ticks
  - D. Louse
20. The following are ways of conserving energy. Which one **does not** involve using energy sparingly?
- A. Using vehicles with low fuel consumption
  - B. Using public transport whenever possible
  - C. Walking for short distances
  - D. Using solar panels to light the house

21. The following are stages during the reproduction process. Which one takes place **last**?
- A. Implantation
  - B. Ovulation
  - C. Parturition
  - D. Fertilization
22. Which of the following is **not** a way of dealing with domestic waste?
- A. Using local authority services
  - B. Converting the waste into compost manure
  - C. Depositing in pit latrines
  - D. Using exchange programmes
23. The following are adaptations of plants that grow in wet areas. Which one helps the plants to float on water?
- A. Thin cuticle
  - B. Large flat leaves
  - C. Leaves with a waxy or hairy upper surface
  - D. Flexible stems
24. All the following simple machines use the principle of inclined planes **except:-**
- A. a single fixed pulley
  - B. a road winding up a hill
  - C. a stair case
  - D. a ladder
25. The following are advantages of using manure to add nutrients to the soil. Which one is **not**?
- A. It binds the soil particles together
  - B. It is environmental friendly
  - C. It contains specific crop nutrients

D. It results in high growth rate of plants

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*Ex2021PR2/Scie 8*



26. Which of the following mixtures can be separated by use of a magnet?

- A. Iron and steel
- B. Copper and iron
- C. Copper and aluminum
- D. Flour and saw dust

27. The following are effects of HIV. Which one affects the individual?

- A. Low agricultural production
- B. Sadness in the family
- C. Lowering of self esteem
- D. Children lack parental care

28. The following are problems associated with the teeth. Which one can be cured by taking food rich in vitamin C?

- A. Tooth decay
- B. Tooth cavities
- C. Bad smell or bad breath
- D. Bleeding gums

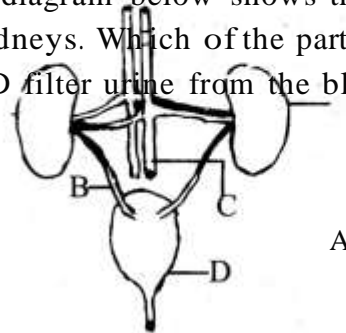
29. The following are effects of taking a certain drug

- i) *Difficulties in breathing*
- ii) *Vomiting*
- iii) *Drowsiness*
- iv) *Memory loss*

Which drug causes these effects?

- A. Miraa
- B. Alcohol
- C. Heroine
- D. Bhang

30. The diagram below shows the structure of kidneys. Which of the parts A,B,C and D filter urine from the blood?



- A.C
- B.D
- C.A
- D.B

31. Three of the following are feeding adaptations in herbivorous animals **except**:-

- A. the presence of a toothless gap in the lower jaw
- B. the presence of a hard pad
- C. the teeth are well spaced in the jaws
- D. molars and premolars grow throughout the animals's life

32. Which of the following is **not** a way in which simple machines make work easier?

- A. Changing the direction of force
- B. Reducing the work to be done
- C. Decreasing the force applied
- D. Increasing the speed at which work is done

33. The following shows a feeding relationship in a certain habitat.

Grass — grasshoppers —chicken -> hawks

What is likely to happen if grasshoppers are suddenly decreased in number?

- A. Grass will decrease
- B. Hawks will eat grasshoppers
- C. Chicken would decrease
- D. Hawks will decrease

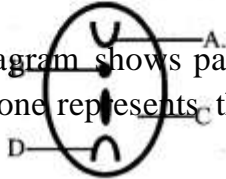
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*E2021R2/Scie 8*

34. What is the principle behind the working of a rain gauge?

- A. Liquids occupy space
- B. Liquids have mass
- C. Air is in motion
- D. Liquids expand

35. The diagram shows part of a bean seed. Which one represents the microphyle?



- A.C
- B.A
- C.B
- D.D

36. Which of the following sexually transmitted diseases is the **odd** one out?

- A. Chancroid
- B. HIV/AIDS
- C. Gonorrhoea
- D. Syphilis

37. The following are facts about hard water. Which one is **false**?

- A. Hard water cause clogging of pipes
- B. Hard water bleaches white clothes
- C. Hard water causes furring in kettles
- D. Hard water forms scum with soap

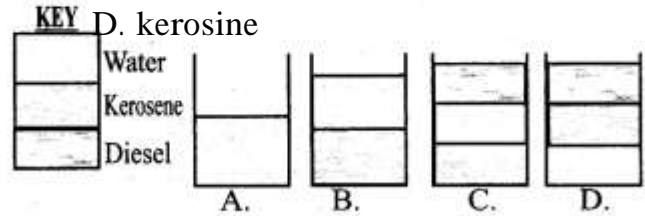
38. All of the following substances contains chemical energy **except:-**

- A. food

B. dry cells

C. dynamo

D. kerosine



39. Std 7 pupil from Newlight Primary School mixed three liquids: Kerosene, diesel and water. Which of the following shows the results that they got if the liquid were in equal amounts?
- B. cholera
  - C. malaria
  - D. typhoid

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40. Which of the following is the **best** way of controlling HIV/AIDS among the unmarried people?

- A. Being faithful to one's spouse
- B. Having only one sexual partner
- C. Abstinence from sex
- D. Use of condoms

41. All of the following substances are transported by plasma **except**:

- A. carbon dioxide
- B. oxygen
- C. food materials
- D. urea

42. A Std 6 girl had the following symptoms

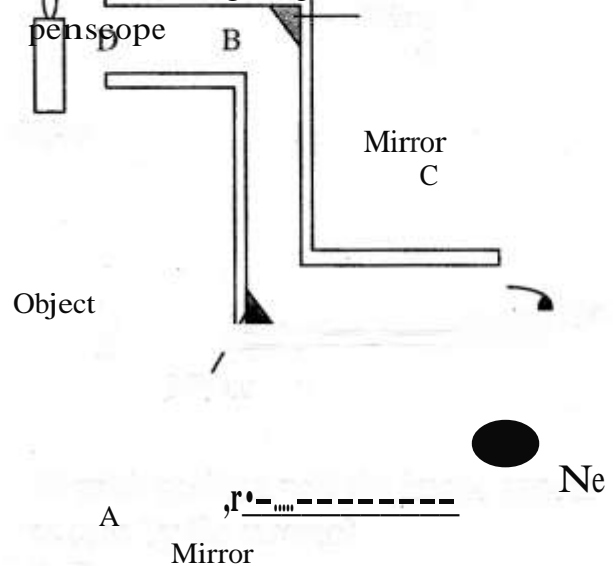
- i) *Violent vomiting*
- ii) *Diarrhoea*
- iii) *Severe stomach ache*
- iv) *Fever*
- v) *Feeling weak and dizzy*

The girl was **likely** to be suffering from:

- A. food poisoning

43. The following are ways of increasing friction force. Which one is **not**?
- Increasing the mass
  - Streamlining the object
  - Making the surfaces rough
  - Deepening treads
44. The following are advantages of breast milk. Which one is the **main** one?
- It allows the mother and the child to bond
  - It is always found in the correct form
  - It boosts the baby's immunity
  - The milk is free from disease causing germs
45. The following are functions of roots in a plant. Which is performed by all the roots?
- Supporting the plant
  - Storage of food
  - Breathing
  - Absorption of water
46. Which one of the following is a storage pest?
- Aphid
  - Maize stalk borer
  - Weevil
  - Flea

47. The following diagram shows a



At what position will the image appear as seen by the viewer?

- B
  - A
  - D
  - C
48. Which of the following methods of weed control is the **most** effective?
- Slashing
  - Digging them out
  - Use of chemicals
  - Mulching
49. When two balloons are rubbed together using the same material, what will happen to them when they are brought close to each other?
- They will repel
  - They will attract then repel
  - They will attract
  - Nothing will happen

50. All the following are sources of current electricity. Which one is **not**?

A. Geothermal wells

B. Lightning

C. Diesel generators

D. Solar batteries

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