

## K.C.P.E. PREDICTIONS

TIME: 1 HR 40 MINS

**STD 8**

### READ THESE INSTRUCTIONS CAREFULLY

1. You have been given this booklet and a separate answer sheet. The question booklet contains 50 questions.
2. Do any necessary rough work in this booklet  
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 only an ordinary pencil.
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 sheets 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.  
On the answer sheet the answer is to be shown by drawing a dark line inside the box in which the letter you have chosen is written.

### Example

#### In the Question Booklet:

9. Which of the following components of blood is involved in clotting after injury?

A. plasma    B. white blood cell    C. red blood cell    D. platelets

The correct answer is D

On the answer sheet

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

In the set of boxes numbered 9, 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.

## K.C.P.E PREDICTION ONE - SCIENCE 1 HR 40 MIN.

1. A plant with thin cuticle is **NOT** likely to have
  - A. air sacs
  - B. shallow roots
  - C. waxy leaf surface
  - D. silvery hairs.
  
2. In which one of the following simple machines is the effort distance equal to the load distance?
  - A. Ladder.
  - B. Flag post.
  - C. Stair case.
  - D. A road winding up a hill.
  
3. Which one of the following animals is **NOT** correctly matched with its way of movement?
 

Animal	Movement
A. Grasshopper	Leaping
B. Snail	Swimming
C. Caterpillar	Crawling
D. Bat	Flying
  
4. The tip of the thread-like structures on a maize plant shown by letter **X** is called \_\_\_\_
 



  - A. Style
  - B. Filament
  - C. Stigma
  - D. Anther
  
5. Which of the following are physical properties of soil?
  - A. Coarse and smooth.
  - B. capillarity and drainage.
  - C. Texture and water retention.
  - D. Rising up of water and smooth texture.
  
6. Which of the following animal is attacked by ticks, mites and lice?
  - A. Cattle.
  - B. Sheep.
  - C. Poultry.
  - D. Rabbits.
  
7. Which of the following is **NOT** an effect of livestock diseases?
  - A. Lower yields.
  - B. Reduced quality of the products.
  - C. Transmission of diseases to human beings.
  - D. Reduced yields.
  
8. Which one of the following constituents for livestock feeds are **correctly** matched with its source?
 

Constituent	Source
A. Proteins	Grass, molasses.
B. Vitamins	Lucern, fish meal.
C. Fats and oils	Green fodder, legume.
D. Carbohydrates	Molasses, maize germ.
  
9. Which one of the following groups of animals have scales and lay eggs?
  - A. Shark, chicken, snake.
  - B. Lizard, duck, newt.
  - C. Tilapia, shark, toad.
  - D. Snake, crocodile, salamander.
  
10. Which one of the following is the correct order of blood circulation in a human body.
  - A. Pulmonary artery → lungs → pulmonary vein → left auricle
  - B. Venacava → right auricle → left ventricle → pulmonary artery
  - C. Aorta → body → venacava → pulmonary vein
  - D. Pulmonary vein → left auricle → right auricle → aorta
  
11. The following are ways of maintaining simple tools
  - i) *Cleaning after use*
  - ii) *Sharpening simple tools*
  - iii) *Oiling*
  - iv) *Proper use of tools*
  - v) *Proper storage*
 Which of the above practices are for all simple tools?
  - A. i and iii
  - B. iii and ii
  - C. i and v
  - D. iv and v

12. Which one of the following types of soil erosion is **most likely** to eventually develop on the animal paths?

- A. Sheet erosion.
- B. Gully erosion.
- C. Splash erosion.
- D. Rill erosion.

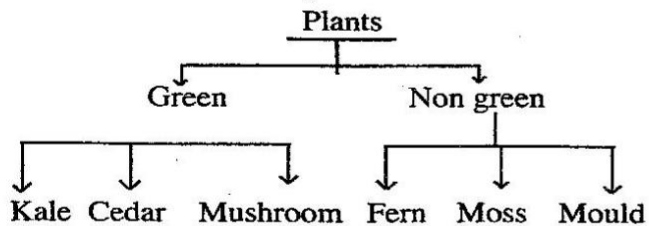
13. Which of the following practices will increase and reduce friction respectively?

- A. Use of rollers and greasing.
- B. Making the surface rough and oiling.
- C. Oiling and use of treads.
- D. Use of treads and making the surface rough.

14. Which one of the following is a reason for including food rich in iron in an expectant mother's diet?

- A. To make strong bones and teeth.
- B. To prevent infections for the unborn.
- C. To make blood for the foetus.
- D. To replace blood lost during birth.

15. The chart below represents a simple classification of plants.



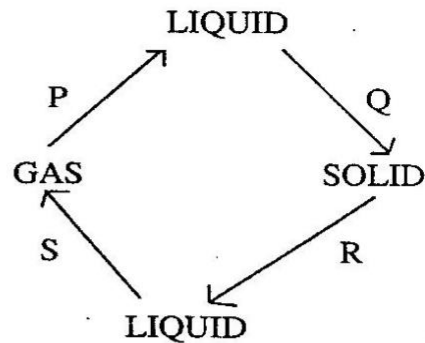
Which plants are **wrongly** classified?

- A. Fern, mushroom and moss.
- B. Cedar, mushroom and moss.
- C. Mould, kale and cedar.
- D. Fern, moss and mould.

16. Which one of the following is **NOT** an importance of lighting a house

- A. Safety
- B. Sleeping well
- C. Discouraging pests
- D. Reading comfortably

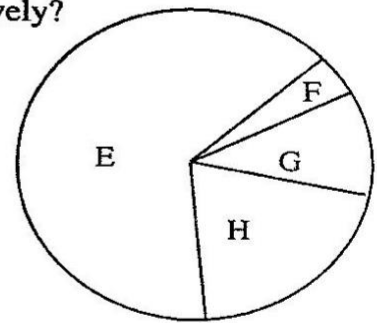
17. The diagram below shows processes P, Q, R and S which bring about changes of state of matter.



Which two processes absorb heat from the surrounding

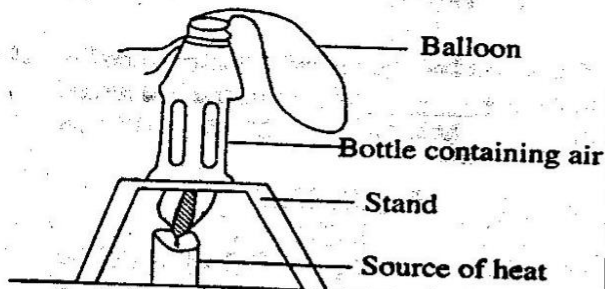
- A. Q and R
- B. P and Q
- C. P and S
- D. R and S

18. Which of the following shows the percentage of the components of air in the atmosphere that are used by seeds for germination and fire extinguishing respectively?



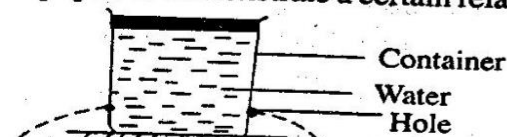
- A. H and F
- B. E and G
- C. F and H
- D. H and G

19. The diagram below shows a set-up that can be used to investigate expansion and contraction of gases.



Which of the following conclusions was made if the source of heat was removed after some time?

- A. Gases expand when heated.  
 B. Solid change state when heated.  
 C. Gases contract when cooled.  
 D. Solids expand when heated.
20. Which pair of plants stores food in the same part?  
 A. Carrot and cassava.  
 B. Irish potato and cassava.  
 C. Carrot and sugarcane.  
 D. Cassava and onion.
21. The first step of separating a mixture of sugar solution and pieces of aluminium foil is  
 A. dissolving  
 B. evaporation  
 C. filtering  
 D. using a magnet.
22. The diagram below was set-up by std four pupils to demonstrate a certain relationship.



The set-up demonstrates that

- A. pressure in liquids increases with depth  
 B. pressure in liquids is exerted on two sides  
 C. pressure in liquids is equal at the same depth  
 D. pressure in liquids is equal at all depths.

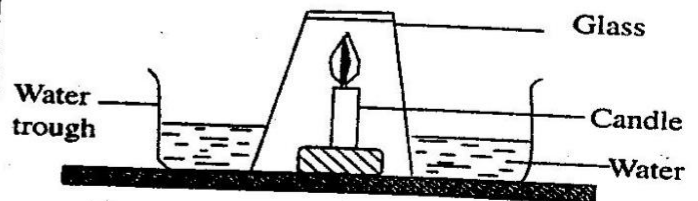
23. Which one of the following diseases is caused by lack of minerals and vitamins?  
 A. Kwashiorkor.  
 B. Marasmus.  
 C. Anaemia.  
 D. Rickets.

24. The diagram below shows the positions of fulcrum, effort and load in a lever.



Which one of the following pairs of levers has the same arrangement as that of the lever shown above?

- A. Crowbar and clawhammer.  
 B. Crowbar and spade.  
 C. Wheelbarrow and spade.  
 D. Claw hammer and wheelbarrow.
25. The following are some characteristics of soil.  
 i) Coarse particle  
 ii) Good drainage  
 iii) Low capillarity  
 The characteristics are for  
 A. Clay soil only  
 B. Sand and loam soil  
 C. Clay and loam soil  
 D. Sand soil only.
26. The diagram below was set during a science practical lesson.



- The set-up was used to demonstrate that  
 A. air occupies space  
 B. air expands when heated  
 C. air contracts when cooled  
 D. part of air is used in burning.

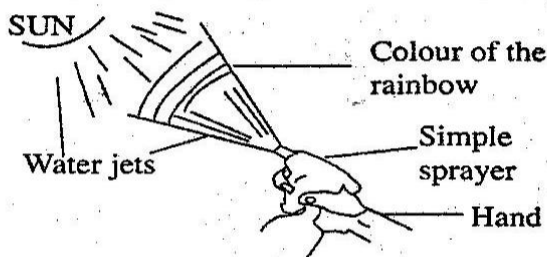
27. Which one of the following is added to the compost heap to provide nutrients for the bacteria that bring about decomposition?

- A. Water.
- B. Manure.
- C. Topsoil.
- D. Woodash.

28. In which one of the following practices is water re-cycled?

- A. Collecting rain water from the roof.
- B. Constructing dams for irrigation.
- C. Treating dirty water.
- D. Using used water from the kitchen for irrigation.

29. The set-up below was used to investigate a certain property of light.



Which one of the following property is being investigated?

- A. Reflection.
- B. Refraction.
- C. Making a rainbow.
- D. Apparent bending.

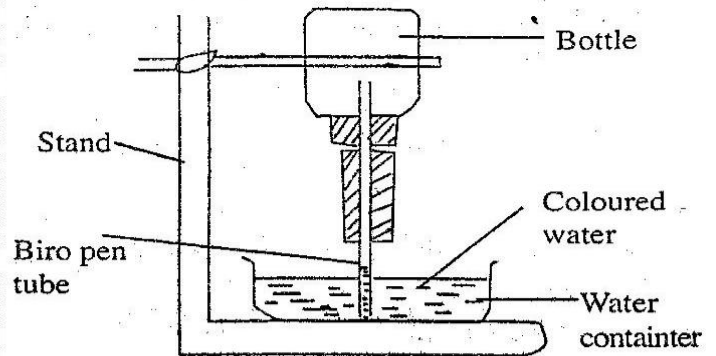
30. Which one of the following food is correctly matched to its group?

Food	Food group
A. Sinsim, groundnuts, green bananas	Energy giving
B. Carrots, yellow vegetables, eggs	Body building
C. Chapati, green bananas, millet	Protective
D. Ripe bananas, cassava, milk	Body building

31. Which one of the following is NOT an importance of water in the diet?

- A. Cools the body.
- B. Helps to prevent constipation.
- C. Helps in making blood.
- D. Helps in the digestion of food.

32. The set up below shows an air thermometer.



Which one of the following statements is correct about the instrument?

- A. When the temperature rises the level of water in the tube drops.
- B. It uses the principal that liquids expand when heated.
- C. The tube should be wide enough for accurate results.
- D. The water level in the trough rises when the temperature drops.

33. In which one of the following stages of HIV infection does the person look healthy but tests positive?

- A. Symptomatic.
- B. Full blown.
- C. Window.
- D. Asymptomatic.

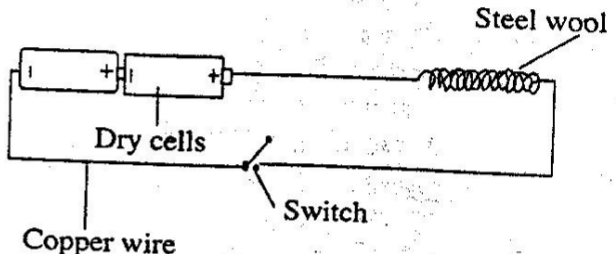
34. Which one of the following parts of the human digestive system does breakdown of food by digestive juices start and end respectively?

- A. Mouth and stomach.
- B. Stomach and large intestine.
- C. Mouth and small intestine.
- D. Stomach and small intestine.

35. The following are ways of managing industrial wastes except?

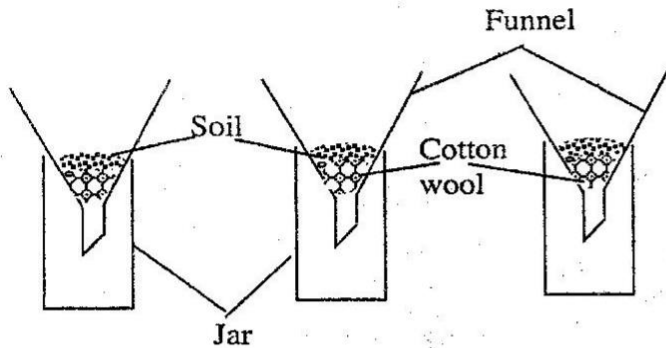
- A. Converting waste into compost manure.
- B. Re-using.
- C. Recycling.
- D. Incineration.

36. When hard water is used for washing, the dissolved salts mix with soap to form?  
 A. Fur.  
 B. Lather.  
 C. Scum.  
 D. Scale.
37. The following are effects of drug abuse.  
 i) *Addiction*  
 ii) *Impaired judgement*  
 iii) *Truancy*  
 iv) *Marital conflicts*  
 v) *Lack of concentration*  
 vi) *drug induced accidents*  
 Which are social effects only?  
 A. i, ii, vi  
 B. iii, iv, vi  
 C. i, iii, iv  
 D. iii, iv, v
38. The smallest and the largest planets respectively are?  
 A. Jupiter and mercury.  
 B. Venus and Jupiter.  
 C. Jupiter and Venus.  
 D. Mercury and Jupiter.
39. Which of the following liquid with form one layer when mixed?  
 A. Kerosine and cooking oil.  
 B. Fresh milk and kerosene.  
 C. Water and cooking oil.  
 D. Kerosine and water.
40. Which one of the following consist of substances that have no definite shape but have a definite mass?  
 A. Ink, cooking oil, ice.  
 B. Oxygen, chalk, ashes.  
 C. Flour, chalk dust, soil.  
 D. Toothpaste, kerosine, air.
41. Below are characteristics of clouds. Which are correctly placed?  

<b>Nimbus</b>	<b>Cumulus</b>
A. White in colour	Dark grey in colour.
B. Rain bearing	Appear like bundles of cotton.
C. High in the sky	Low in the sky.
D. Has flat base	Mountainous in shape.
42. During a science lesson. Pupils in class eight set up an experiment as shown below.
- 
- The diagram shows a rectangular circuit. On the left side, two dry cells are connected in series, with the positive terminal of the top cell connected to the positive terminal of the bottom cell. A switch is connected to the positive terminal of the bottom cell. A wire labeled 'Copper wire' connects the switch to a coil of 'Steel wool'. The other end of the steel wool coil is connected back to the negative terminal of the top cell.
- What were the energy transformation in the experiment?  
 A. Chemical  $\rightarrow$  Electrical  $\rightarrow$  Light  $\rightarrow$  Heat  
 B. Chemical  $\rightarrow$  Light  $\rightarrow$  Heat  $\rightarrow$  Electrical  
 C. Chemical  $\rightarrow$  Heat  $\rightarrow$  Light  $\rightarrow$  Electrical  
 D. Chemical  $\rightarrow$  Electrical  $\rightarrow$  Heat  $\rightarrow$  Light
43. A card with the number 567 written on it was placed in front of a mirror. Which of the following shows how the numbers appear in the mirror?  
 A. 567  
 B. 702  
 C. 702  
 D. 702
44. Which one of the following sources of electricity will pollute the environment?  
 A. Petrol driven generators.  
 B. Geothermal driven generators.  
 C. Bicycle dynamo.  
 D. Solar panel.

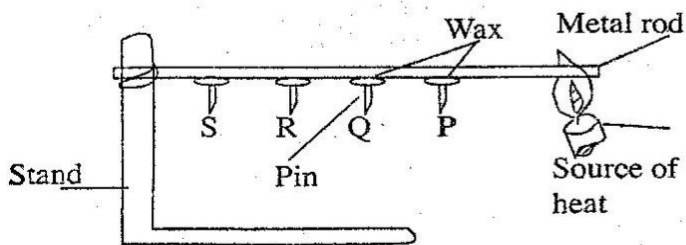
45. Which of the following best describes the term environment?  
 A. Where living organisms obtain food.  
 B. The home of living organisms.  
 C. The surrounding of a living organism.  
 D. Where human beings live.

46. Std 5 pupils set up the experiment on soil as shown below.



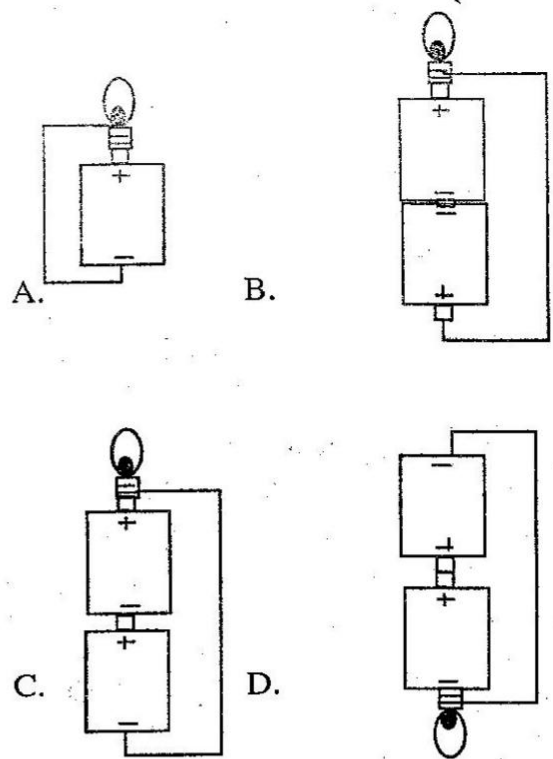
For the pupils to make the correct conclusion about soil drainage. Which of following **need not** be the same?

- A. Cotton soil.  
 B. Size of the soil particles.  
 C. Funnels.  
 D. Time.
47. The diagram below was set-up to investigate the transfer of heat in matter.



- Pin 'P' dropped first due to \_\_\_\_  
 A. conduction and convection  
 B. convection  
 C. radiation  
 D. conduction.

48. In which of the following circuits will the bulb light?



49. Which of the following diseases is a child immunized against at 6<sup>th</sup> and 14<sup>th</sup> week after birth?  
 A. Whooping cough, Diphtheria, Polio.  
 B. Polio, Measles, Tetanus.  
 C. Yellow fever, Diphtheria, Measles.  
 D. Tuberculosis, Tetanus, Polio.
50. Which one of the following changes takes place during adolescence in girls only?  
 A. Pimples may appear on the face.  
 B. Release of sex cells.  
 C. Menstrual flow starts.  
 D. Chest and shoulders broaden.