

K.C.P.E FIRST TRIAL

STANDARD EIGHT 2021

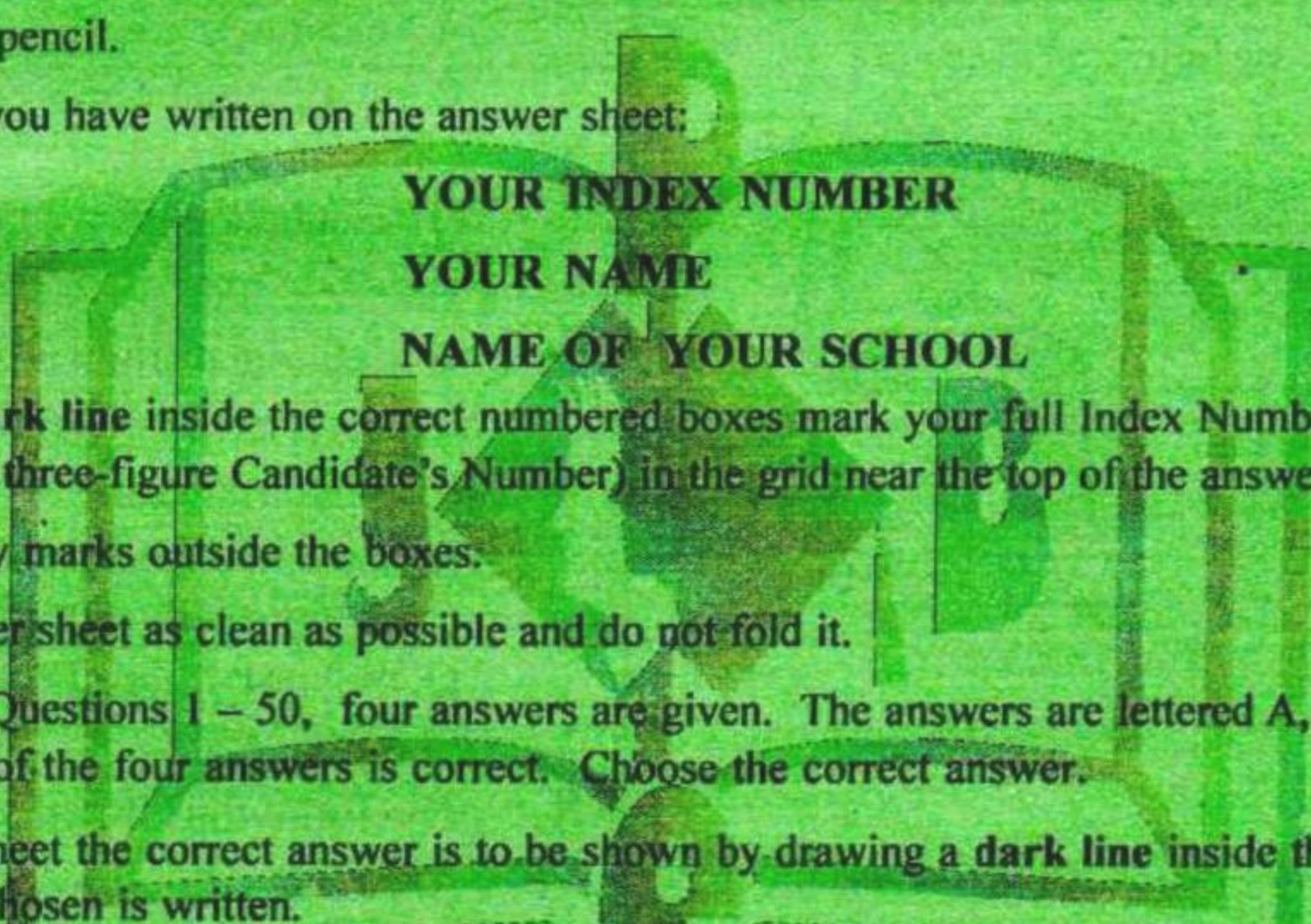
SCIENCE

Time: 1hr 40mins

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.
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 and D. In each case only **ONE** of the four answers is correct. Choose the correct answer.
10. On the answer sheet the correct 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:

- 14.** The process by which plants lose water to the atmosphere is called
- A. capillarity
 - B. diffusion
 - C. transpiration
 - D. evaporation

The correct answer is C (transpiration)

On the answer sheet:

4 A|B|C|D **14** A|B|C|D **24** A|B|C|D **34** A|B|C|D **44** A|B|C|D

In the second set, the box with the letter C 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.

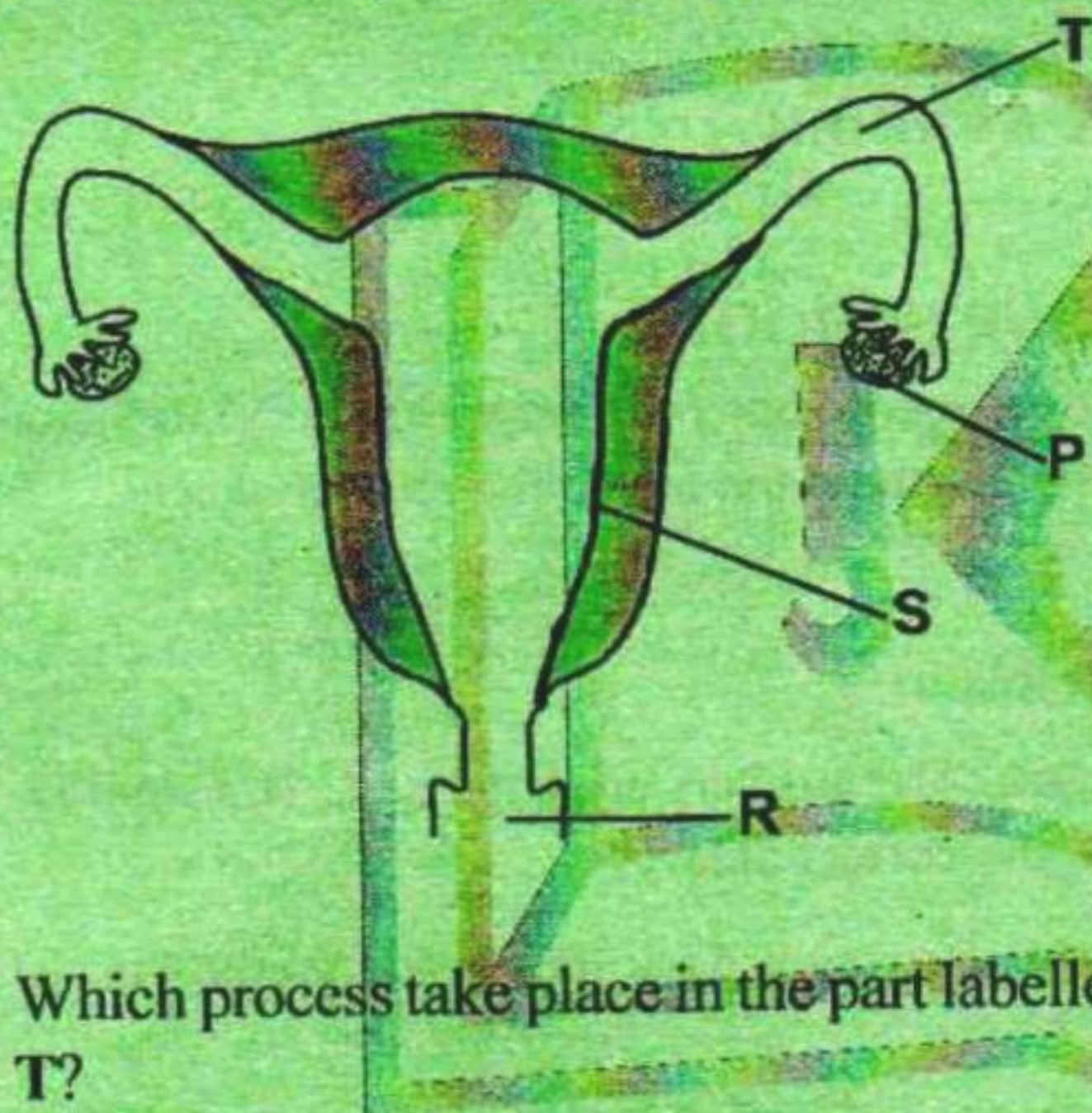
This question paper consists of 7 printed pages

Candidates should check the question paper to ensure that all the pages are printed as indicated and no questions are missing

1. The following are functions of the nose during breathing **EXCEPT**
- absorption of the air.
 - trapping dust.
 - moistening air.
 - warming air.

2. Cusps and ridges are present in
- premolars and canines
 - incisors and molars
 - molars and premolars
 - canines and incisors

3. The diagram below represents a female reproductive system.



Which process take place in the part labelled T?

- Egg formation.
 - Attachment of embryo.
 - Production of sex cells.
 - Fusion of sex cells.
4. Which one of the following physical changes take place in the boys **ONLY** during adolescence stage?
- Hips broaden.
 - Production of sperms.
 - Breast appears.
 - Increase in height and weight.

5. Which one of the following parts of digestive system is **CORRECTLY** matched with its function?

Parts	Functions
A. Small intestine	Absortion of mineral salt.
B. Mouth	Produce digestive juice.
C. Large intestine	Absorption of digested food
D. Rectum	Store digested food.

6. The first stage of HIV infection is known as
- window
 - symptomatic
 - asymptomatic
 - incubation

7. Which one of the following is an effect of HIV/AIDS to the nation?
- Loss of income.
 - Low self esteem.
 - Shame in the family.
 - School dropout.

8. The following are effects of drug abuse?
- Lack of concentration.
 - Truancy.
 - Impaired judgement.
 - Drug induced accidents.
 - Marital conflict.

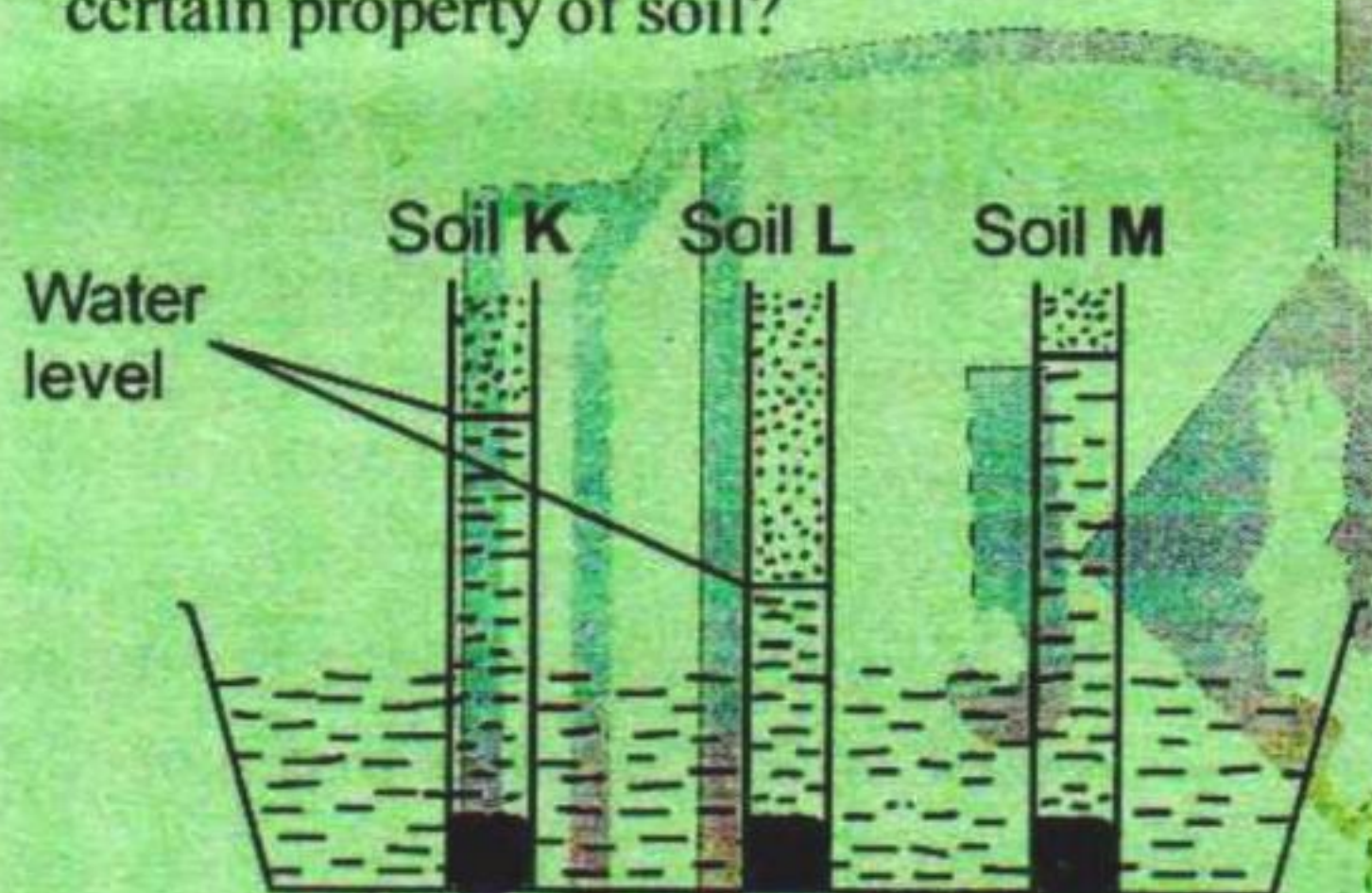
Which are the social effects of drugs?

- (i), (ii), (iii)
 - (i) and (iii)
 - (ii), (iv), (v)
 - (iii), (iv), (v)
9. Vaccines given at 10 weeks protect an infant against
- Diphtheria and Polio
 - Tuberculosis and Polio
 - Yellow fever and Measles.
 - Tetanus and Tuberculosis.

10. Which of the following is the **BEST** way of controlling the spread of tuberculosis?
- Observing proper sanitation.
 - Isolating the sick people.
 - Eating balanced diet.
 - Using preventive drugs.

11. Which one of the following component of soil improve its water holding capacity?
- Air
 - Living organism.
 - Humus
 - Mineral particles.

12. The set up below was used to investigate a certain property of soil?



The soil with large air spaces is **LIKELY** to be represented by letter

- M
 - K and L
 - K
 - L
13. Which one of the following is an advantage of organic manure?
- Needed in small amount.
 - Improve soil structure.
 - Contain specific nutrients.
 - Has no weeds.
14. Which one of the following is a human factor that increase the rate of soil erosion?
- Mining
 - Slope of the land.
 - Type of the soil.
 - Amount of the rainfall.

15. In which of the following activities is friction **NOT** required?
- Skating
 - Writing
 - Swimming
 - Braking

16. Which of the following factor make a small piece of wood floats on water?
- Mass of material.
 - Shape of material.
 - Type of material.
 - Size of material.

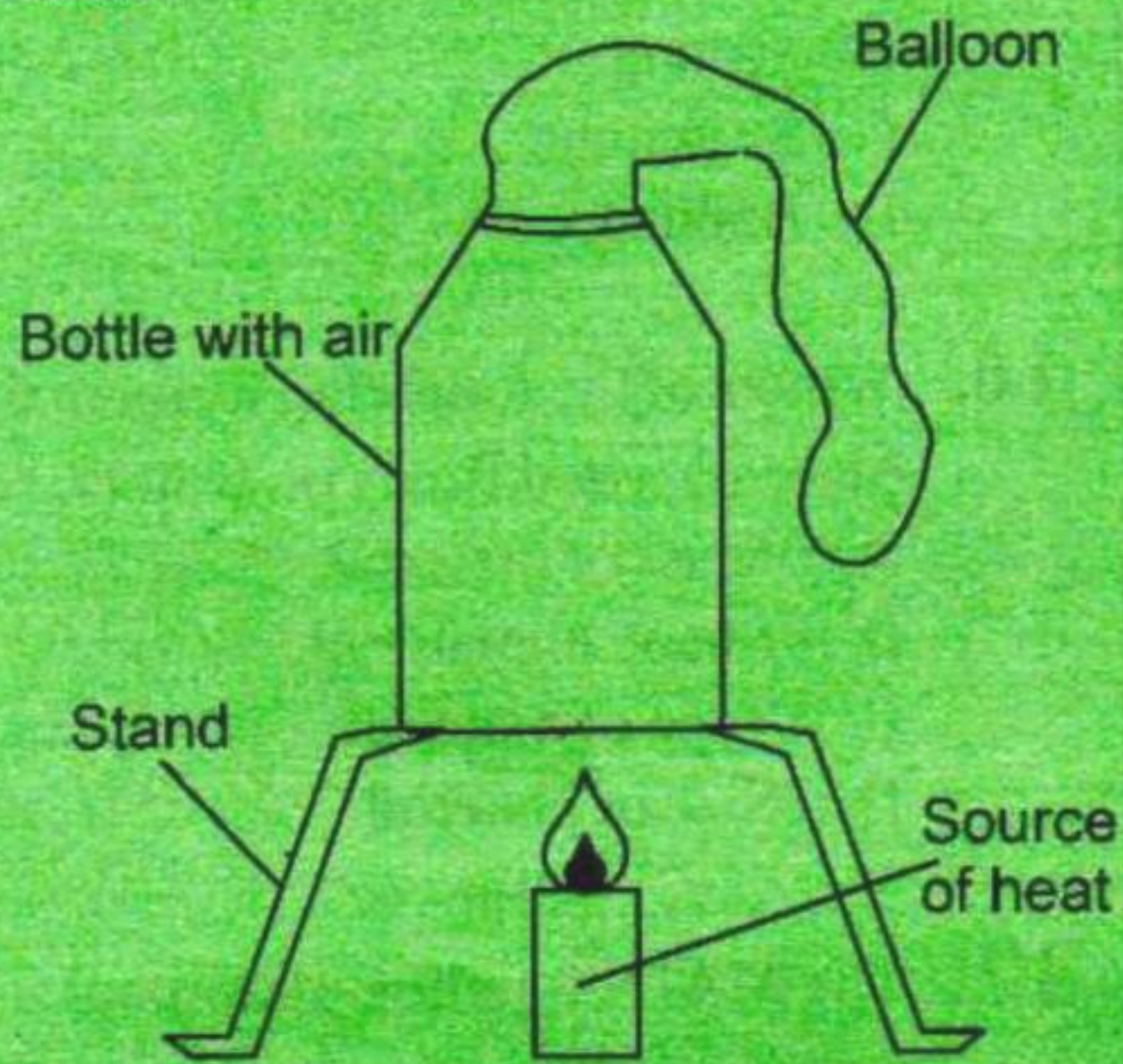
17. The **MAIN** function of mineral salts in the body is to
- make blood.
 - prevent dehydration.
 - prevent constipation.
 - maintain good health.

18. Which one of the following is **NOT** advisable when spraying with chemicals?
- Washing hands after spraying.
 - Spraying against the direction of winds.
 - Wearing a gas mask when spraying.
 - Spraying when the temperatures are low.

19. The first step in obtaining sugar from a mixture of sugar solution and pieces of iron is
- filtering
 - picking
 - use of a magnet
 - evaporation.

20. Substances that have definate volume and shape are
- solids and liquids
 - liquids only
 - liquids and gases
 - solids only

21. The diagram below show a set up that can be used to investigate the effect of heat on matter.



The effect investigated is

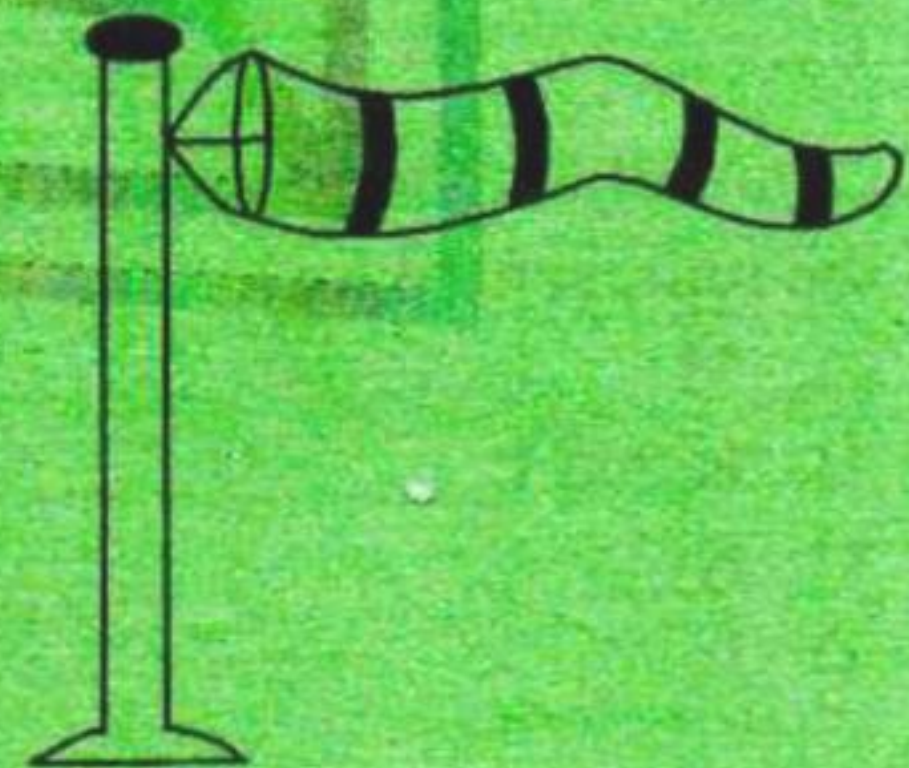
- A. solids expand when heated.
 B. gases change state on heating.
 C. gases expand when heated.
 D. solids change state when heated.
22. In which of the following are both materials **CORRECTLY** grouped as non magnetic and magnetic?
- | Non magnetic | Magnetic |
|----------------|------------|
| A. Staple pin | Iron wire |
| B. Copper wire | Steel wool |
| C. Zinc | Wood |
| D. Razor blade | Aluminium |
23. Which one of the following is the use of gas that cover approximately 21% of the environment?
- A. Making electric bulb.
 B. Breathing.
 C. Making food in plant.
 D. Fire extinguisher.

24. During a science lesson, pupils collected small pins and big iron wire and placed them on the water. Which factor that affect, sinking and floating were they investigating?
- A. Shape of the material.
 B. Size of material.
 C. Mass of material.
 D. Type of material.

25. In the solar system, Mars is found between
- A. Earth and Jupiter
 B. Mercury and Neptune
 C. Saturn and Neptune
 D. Venus and Uranus

26. The clouds that are dark grey in colour are **NOT LIKELY** to
- A. appear low in the sky.
 B. be mountainous in shape.
 C. bring heavy rainfall.
 D. look like bundles of cotton wool.

27. Which one of the following statement is **TRUE** about weather instrument shown below?



- A. It is a windvane.
 B. It point the direction the wind is blowing to.
 C. Measure one aspect of weather.
 D. It only measure the direction of wind.
28. Which one of the following is an animal that lay fertilized eggs and has a varying body temperature?
- A. Bat
 B. Spiny ant eater
 C. Snake
 D. Dove

29. Which one of the following method of grazing is important to the farmer in controlling parasites?

- A. Paddocking
- B. Herding
- C. Stall feeding
- D. Zero grazing

30. Which one of the following animals is **CORRECTLY** matched by its product?

Animal	Product
A. Goat	Mutton
B. Sheep	Mohair
C. Cow	Eggs
D. Pig	Milk

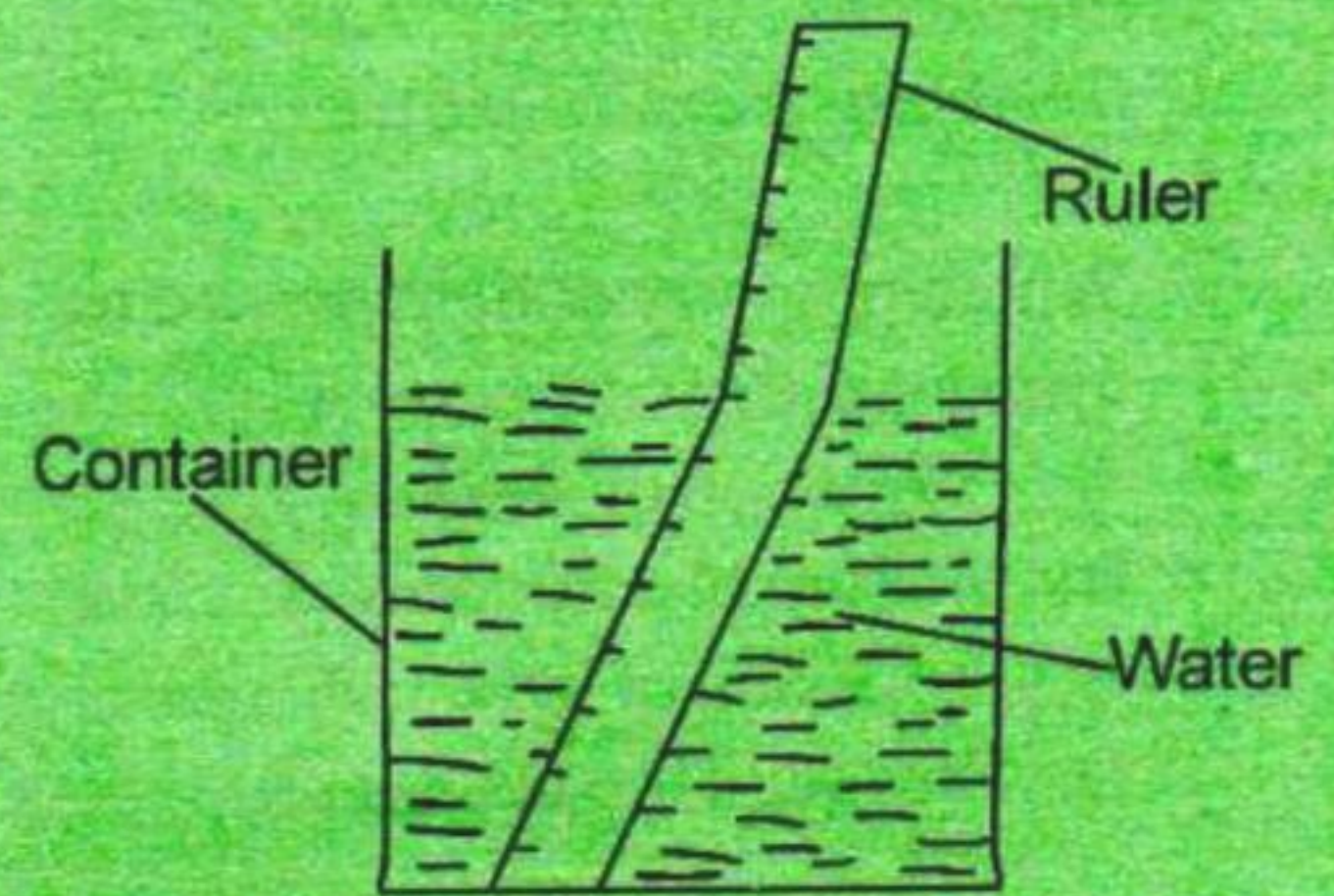
31. Which of the following animal feeds provide animal with energy?

- A. Lucern
- B. Fish meal
- C. Desmodium
- D. Sweet potato vines

32. Which one of the following is an effect of parasites on livestock?

- A. Robust growth.
- B. Increased production.
- C. Good health.
- D. Irritation.

33. During a science lesson, pupils put a ruler in a transparent container with water as shown below.



Which property of light were they investigating?

- A. Bouncing of light.
- B. Bending of light.
- C. How light travel.
- D. Splitting of light.

34. A card with word **BOARD** written on it was placed in front of a mirror. Which one of the following shows how would appear in the mirror?

- A. **BOARD**
- B. **DRAOB**
- C. **ORAOD**
- D. **BOARD**

35. Which of the following pairs of the processes require increase in temperature?

- A. Condensation and freezing.
- B. Melting and expansion.
- C. Contraction and condensation.
- D. Evaporation and freezing.

36. Which one of the following **DOES NOT** produce electricity?

- A. Batteries
- B. Bicycle dynamo
- B. Solar drier
- D. Solar panel

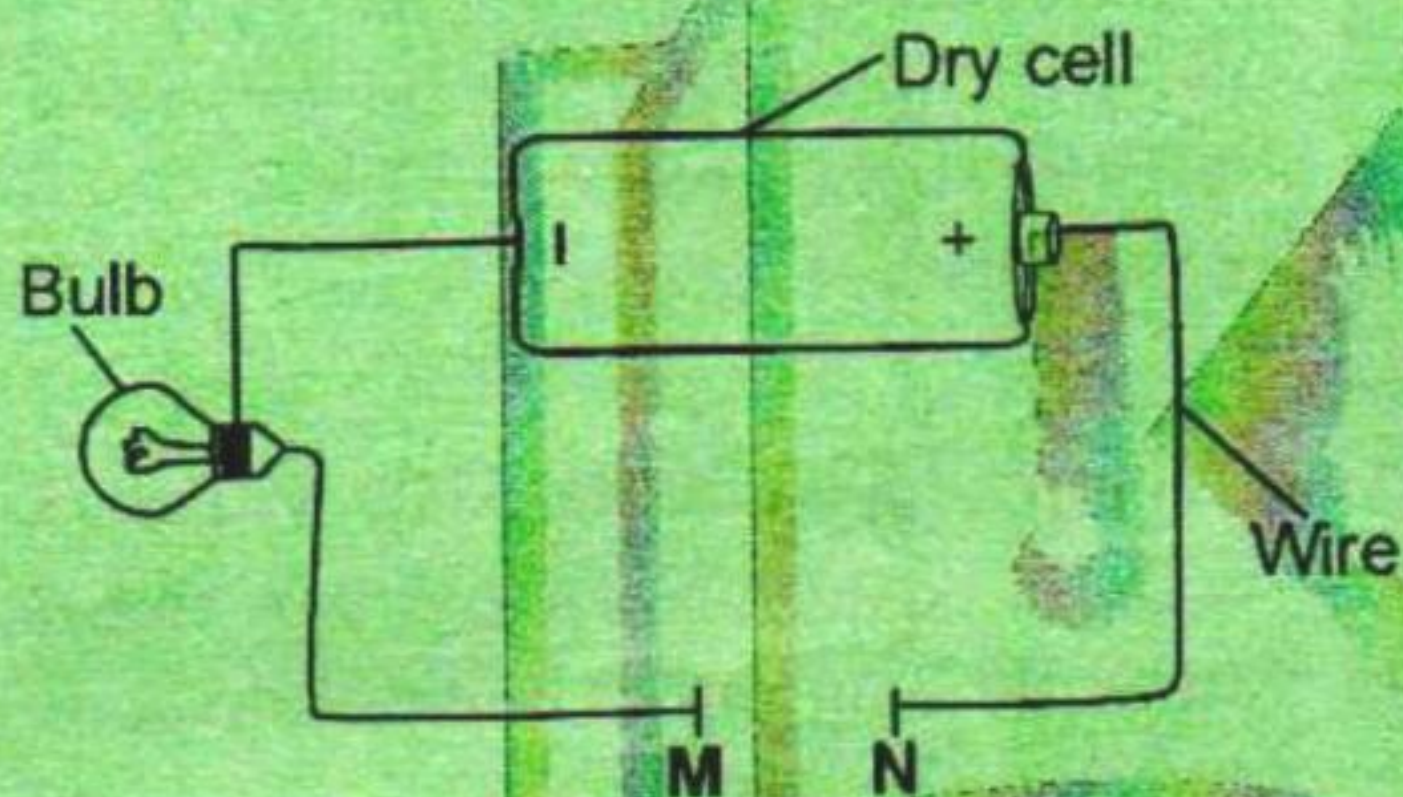
37. The following materials were used to investigate a certain property of light.

- (i) Water
- (ii) Mirror
- (iii) Basin
- (iv) White manilla paper

Which property of light was being investigated?

- A. Formation of shadow.
- B. Making of a rainbow.
- C. Reflection of light.
- D. How light travels.

38. The diagram below shows a set up to investigate good and poor conductor of electricity.



Which one of the following material placed at point M, N will make the bulb light?

- A. Hair strand
- B. A piece of wood
- C. Glass rod
- D. Steel wool

39. Which one of the following are MAJOR living component?

- A. Animal and plants.
- B. Sound and building.
- C. Air and soil.
- D. Animal and air.

40. Plants that grow in water get oxygen from the

- A. air
- B. water
- C. soil
- D. plants

41. A child who feel dizzy and has pale fingernail should be fed in food rich in

- A. protein
- B. carbohydrates
- C. iron
- D. vitamins

42. Which one of the following statement DOES NOT describe dietary fibre?

- A. Has no nutritional value.
- B. Mainly found in vegetables and fruits.
- C. Prevent body from dehydration.
- D. Helping in emptying bowel.

43. Which of the following list consist of a balanced diet?

- A. Maize, rice, fish
- B. Spinach, apple, beans
- C. Fish, eggs, meat
- D. Pork, kales, chapati

44. The following are methods of preserving food.

- (i) Smoking
- (ii) Canning
- (iii) Salting
- (iv) Drying
- (v) Use of honey

Which of the methods preserve food by removing moisture?

- A. (i) and (ii)
- B. (iii) and (v)
- C. (ii) and (iv)
- D. (iv) and (iii)

45. Which one of the following simple tool has effort between the head and fulcrum.

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

46. The following activities are carried out when making an improvised beam balance but not in the correct order.

- (i) Fix the stand and the arm to the base.
- (ii) Make a base, a stand and the arm.
- (iii) Suspend the arm to find balance point and mark.
- (iv) Suspend the tins on both sides of the arm.

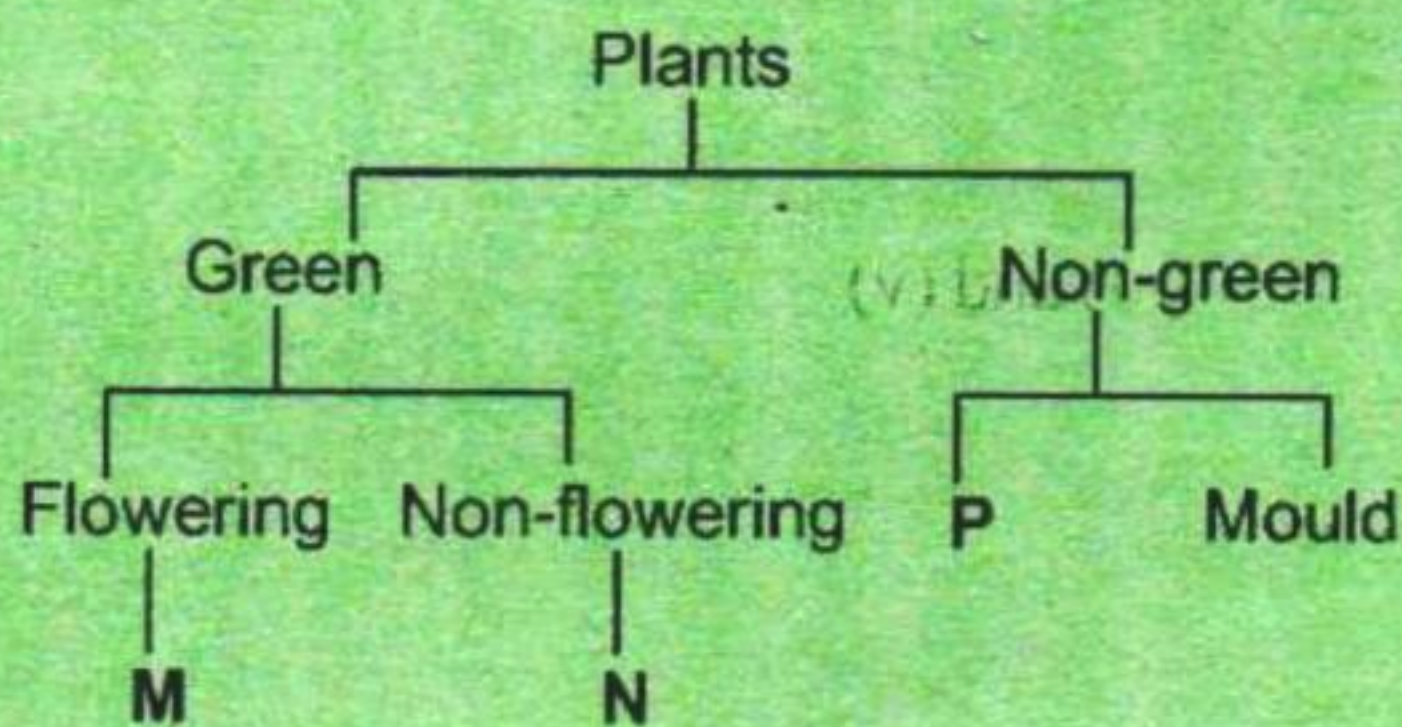
Which one of the following is the **CORRECT** order of the activities?

- A. (iii), (iv), (ii), (i)
- B. (ii), (iii), (i), (iv)
- C. (iii), (ii), (iv), (i)
- D. (i), (ii), (iii), (iv)

47. Which one of the following activities will lead to the spread of waterborne diseases?

- A. Sleeping under untreated mosquito net.
- B. Irregular vaccination.
- C. Poor handling of food eaten raw.
- D. Draining stagnant water around the homestead.

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



Which one of the following plants are correctly represented by M, N and P?

- A. Bean, mushroom, bracket tree.
- B. Algae, sunflower, greengram.
- C. Maize, onions, penicillium.
- D. Sisal, moss, yeast.

49. During a science walk pupils observed a plant with thorn on the branches and produced yellow fruits. Which plant had they observed.?

- A. Thorn apple
- B. Black jack
- C. Sodom apple
- D. Wandering jew

50. Which one of the following is a characteristic of insect pollinated flower?

- A. Large in size.
- B. Dull petals.
- C. Loosely attached pollen grains.
- D. Feathery long styles.