

Instructions: Read the question paper carefully. Write neatly and legibly with correct question numbers.

I. Choose the correct answer:

[10]

- a) Which of these is the smallest part of an object or substance:
i)molecule ii) crystal iii) residue iv)supernatant
- b) Seeds that are dispersed by water may have _____
i)fine hairs ii) hooks or spine iii) a fibrous outercoat iv) wing like structure
- c) The part of a flower that protects it in the bud stage is the:
i)petals ii) ovaries iii)sepals iv)stamens
- d) Which of these represents reproduction in plants?
i)stigma → stigma ii) anther → anther iii) stigma → anther iv) anther → stigma
- e) The process of excess sugar and fat in the diet might lead to:
i)malaria ii) anemia iii) obesity iv) diabetes
- f) The center of a bone has the:
i)cartilage ii) sponge iii) blood iv)marrow
- g) The bones in our body make up the _____system:
i)digestive ii) skeletal iii) excretory iv) nervous
- h) _____prevent the blood from flowing backward in veins:
i)Arteries ii)Capillaries iii)Valves iv)Atria
- i) Which of these statements is not true of gases:
i)they can be compressed ii) they can flow iii) they expand to fill all the space available
iv) they have a fixed volume
- j) Which of these reproduces using spores:
i)Bryophyllum ii) Mosquito iii) rose iv) Strawberry

II. Say if the statements are true or false. Correct the false statements:

[7]

- a) The human heart has four chambers.
- b) Muscles are fixed to the bones by joints.
- c) Iodine is the mineral necessary for maintaining healthy bones.
- d) The outermost whorl of a flower is made of sepals.
- e) The stem of ginger is an example of a tuber.
- f) Water is known as the universal solvent.
- g) Sea breeze blows at night.

III. Fill up the blanks:

[6]

- a) When oil and water are mixed together, the _____forms the lower layer.
- b) Blood helps to transport _____to all parts of the body.
- c) The kind of joint present in our hip is the _____.
- d) The _____ of the ovary contains the female reproductive cells.
- e) _____ part of the flower becomes the seed.
- f) _____ carries oxygen in the blood.

IV. Match the columns:

[6]

- | A | B |
|--------------|------------------------------------|
| a) Ventricle | i) make a seed germinate |
| b) Contract | ii) have wing like structures |
| c) Sprout | iii) agent of pollination |
| d) Sunbird | iv) are installed high up on walls |

e) Maple seeds

v) one of the two lower chamber of the human heart

f) Exhaust fans

vi) become shorter and smaller

V. Form similar pair of words:

[6]

- a) Calf bone and _____/Shin bone and tibia.
- b) Cross pollination and mango/ _____ and sunflower.
- c) Calyx and sepals/ corolla and _____
- d) Turmeric and _____/potato and tuber.
- e) Mango and seed/ moss and _____
- f) Finger and hinge joint/wrist and _____

VI. Answer in one word:

[5]

- a. Foods that are poor in nutrients _____.
- b. A state of being abnormally fat _____.
- c. Any thing that has mass and occupies space _____.
- d. The longest bone in the human body _____.
- e. A substance added to another that makes it impure _____.

VII. Name the following:

[4]

- a) Two fermented foods that Indians eat.
- b) Two yoga poses.
- c) Two food rich in vitamin B₃.
- d) Example of Immiscible liquids.

VIII. Answer in short (any 5):

[10]

- a) Shikha found a bucket of water had a layer of sawdust on it. Which method should she used to remove the sawdust and get clear water?
- b) How does an embryo in a seed get its nutrition during germination?
- c) How does a flower attract small insects and birds?
- d) Give some causes of high blood pressure.
- e) What are the functions of cartilage?
- f) Give two ways in which to keep the heart healthy.

IX. Long answer Question (any 3) :

[9]

- a) Describe how land breeze blows.
- b) Describe how animals help in seed dispersal.
- c) Give three characteristics each of flowers pollinated by wind and insects.
- d) Give four ways by which you can make your diet healthier.
- e) Exercise and a balanced diet can help to keep the bones and muscles healthy. Justify this statement.

X. Write difference between (any 3):

[6]

- a) Soluble and in soluble substances
- b) Sexual and asexual reproduction
- c) Self-pollination and Cross-pollination
- d) Androecium and Gynoecium

XI. Define the following:

[6]

- a) Fertilisation
- b) Vegetative reproduction
- c) crystals
- d) matter
- e) solution
- f) humidity

XII. Draw a well label diagram of (any 2):

[5]

- 1. Arrangement of particles in solid, liquid and gases.
 - 2. Structure of flower
 - 3. Structure of a seed.
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