

DAV BR PUBLIC SCHOOL
SESSION 2023-24
Sample Paper Annual Examination
Class: VII **Subject: Science**

Time Allowed: 2hrs

MM: 50

GENERAL INSTRUCTIONS:

1. All questions are compulsory.
2. Question no. 1 to 8 are very short answer type questions carrying 1 mark each. Question no. 9-11 are short answer type question carry 2 marks each.
3. Question no. 12-14 are short answer type questions, carrying 3 marks each.
3. Question no. 15 to 17 are case study based questions, carrying 4 marks each.
4. Question no. 18 to 20 are long answer type questions, carrying 5 marks each.

QI. ANSWER THE FOLLOWING VERY SHORT ANSWER TYPE/OBJECTIVE TYPE QUESTIONS.

1. Seeds of madar get dispersed by
a) water b)wind c)insects d)animals
2. The blood vessels having thick elastic walls are called
a) arteries b)veins c)capillaries d)atria
3. Name the four main components of blood.
4. Name two animals whose fleece is used for making woollen fibres.
5. An acid, that contributes to sour taste of some fruits, is
a) hydrochloric acid b) sulphuric acid c) citric acid d) nitric acid
- 6) The heating effect of electric current was discovered by
a) Galileo Galilei b) James Joule c) Albert Einstein d) Michael Faraday
- 7) Name the device used for protecting tall buildings from lightning strikes.
- 8) In which direction does the transfer of heat normally takes place?

QII) ANSWER THE FOLLOWING SHORT ANSWER TYPE QUESTIONS. (2MARKS EACH)

- 9) What is electrical discharge. How does it happen?
- 10) Draw a well labelled diagram of life cycle of silk moth.
- 11) Differentiate between plasticity and cohesion.

QIII) ANSWER THE FOLLOWING SHORT ANSWER TYPE QUESTIONS. (3MARKS EACH)

- 12) State the three effects of heat and give one example of it.

13) Write the use of following adaptative feature- (Any one use)

- a) Sucker pads of Red eyed frog
- b) Long prehensile tails of monkeys.
- c) Large beak of Toco Toucan.

14) Write the steps involved in the production of wool from sheep.

QIII) ANSWER THE FOLLOWING CASE STUDY BASED QUESTIONS. (4MARKS EACH)

15) Raj lives in an area where on and off water scarcity is there. He gave a thought to the problem and planned to get a solution. He decided to harvest rainwater in his village.

He made efforts to convince the people of his area, built some drainage system and water tanks where rainwater could be collected. The reason he gave for water scarcity is that, though 97 percent of the earth's surface is covered with water, only 0.03 percent is available as fresh water.

- (a) Name few structures he might have built to save water.
- (b) Name the two main methods by which rain water harvesting can be done.
- (c) Define water scarcity.

d) How much percentage of water is available as fresh water on earth?

16) Light is a form of energy which induces sensation of vision to our eyes. It becomes visible when it bounces off on surface and hits our eyes. Regular reflection takes place through a smoothed polished surface. The mirror outside the driver side of vehicles is usually a spherical convex mirror and printed on such a mirror is usually a warning "Vehicles in this mirror are closer than they appear."

- a) Name the type of spherical mirror used outside the driver side of a vehicle.
- b) What is the reason for this warning written on the mirror?
- c) Draw a ray diagram showing the image formation in such kind of mirror.
- d) When does light become visible?

17) Prof Ahmad asked children to pick up leaves from the forest floor and observe them under a hand lens. They found tiny mushrooms over the decaying leaves. They also saw an army of tiny insects, millipedes, ants and beetle on them. They were wondering how these organisms live there. Prof Ahmad explained that apart from these animals which are easily seen, there are several organisms and micro-organisms that live in the soil. Paheli wondered what mushroom and other micro-organisms eat. Prof Ahmad replied that they feed upon the dead plant and animal tissues and convert them into a dark colored substance called humus. The micro-organisms which convert the dead plants and animals to humus are known as decomposers. These micro-organisms play an important role in the forest. Soon, Paheli removed some dead leaves and discovered under them a layer of humus on forest floor. The presence of humus ensures that the nutrients of the dead plants and animals are released into the soil. From there, these nutrients are again absorbed by the roots of the living plants. "What happens if an animal dies in the forest?" Sheila asked. Tibu replied the dead animals become food for vultures, crows, jackals and insects." In this way, the nutrients are cycled. So, nothing goes waste in a forest.

1) Under a.....the children observed the leaves.

- (a) Torch
- (b) Microscope
- (c) Hand lens
- (d) Hand

2) They found.....over the.....

- (a) Tiny mushrooms, decaying leaves
- (b) Fruits, leaves
- (c) Ant, leaves
- (d) Fruit, Ant

3) The nutrients in the soil are absorbed by which part of the plant?

- (a) Roots
- (b) Shoot
- (c) Stem
- (d) Leaves

4) What are decomposers?

18) Describe an activity to show that solutions of salts, in water, can conduct electricity.

19) Draw a neat labelled diagram of Electric bell and explain it's working.

20) Draw a neat labelled diagram of the structure of a flower and label any five parts.