

O. P. JINDAL SCHOOL, SAVITRI NAGAR
Annual Examination – (2023-24)

Class/Sec- VII/_____
Subject – Science
Name _____

MM – 80
Time- 3 hrs
Roll No. _____

Fifteen minutes extra will be given for reading the Question Paper.
General Instructions –

1. The Question Paper comprises of 6 sections A,B,C,D,E,F. There are 24 questions in the Question Paper. All the questions are compulsory.
 2. Section A, Q1 comprises of 12 MCQ type questions and carries 1 mark each.
 3. Section B, Q2 is of case-base type questions.
 4. Section C, Q3 is Assertion-Reason type question.
 5. Section D, Q4 to Q12 are very short answer type questions, carries 2 marks each.
 6. Section E, Q13 to Q21 are short answer type questions, carries 3 marks each.
 7. Section F, Q22 to Q24 are long answer type questions, carries 5 marks each.
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SECTION - A

Q1. Choose the correct option.

- (i) This process of transfer of heat in a liquid or gas is called
- (a) Radiation (b) Conduction (c) Convection (d) Compression
- (ii) Clinical thermometers normally have the temperature range
- (a) 35°C to 42°C (b) -10°C to 110°C (c) 28°C to 40°C (d) 42°C to 48°C
- (iii) Which of these is a physical change?
- (a) Photosynthesis (b) Respiration (c) Melting of wax (d) Digestion of food
- (iv) The process of depositing a layer of zinc on iron is called
- (a) Crystallisation (b) Galvanisation (c) Rusting (d) Solution
- (v) The two lower chambers of heart are called
- (a) Atria (b) Aorta (c) Ventricles (d) Atrium
- (vi) Which process helps the stem of plants conduct upward movement of water ?
- (a) Transpiration (b) Gravitation (c) Respiration (d) Frction

(vii) The pollen grains are found inside the

- (a) Pistil (b) Ovary (c) Stigma (d) Anther

(viii) Fertilised egg is called

- (a) Zygote (b) Embryo (c) Ovary (d) Baby plant

(ix) If the reflecting surface of a spherical mirror curves outward it is called a

- (a) Plane mirror (b) Concave mirror (c) Convex mirror (d) Lens

(x) In a plane mirror the image is always _____ the object.

- (a) Larger than (b) Same as (c) Smaller than (d) Inverted

(xi) In a forest, the tall trees look like a roof over the other plants is called a

- (a) Canopy (b) Understorey (c) Crown (d) Forest floor

(xii) Find odd one out.

- (a) Prevent flood (b) Prevent soil erosion (c) Balance gas (d) Food chain

SECTION -B

Q2. Read the paragraph and answer the following questions.

When we keep a cup of hot coffee on a table, the coffee gets cold and comes to the normal temperature. This happens because the heat energy flows from the hot coffee to its surrounding which is at a lower temperature. The heat energy flows till the coffee reaches the normal temperature. As a result, the coffee gets cooler and the temperature of the surrounding goes up.

Hold the handle of a pan on the flame, made of steel. After some time you can not hold it because heat transfers from the flame to the pan and from the pan to the handle.

(i) Which of these is the transfer of heat from hotter object to the cooler object?

- (a) Conduction (b) Convection (c) Radiation (d) All of them

(ii) When an object absorbs heat the temperature of that object

- (a) Increases (b) Decreases (c) Remains same (d) No change

(iii) Heat always flows from temperature

- (a) Higher to lower (b) Lower to higher (c) Colder to hotter (d) Remains same

(iv) Heat that flows from one object to another is a/an form of

- (a) Material (b) Energy (c) Medium (d) Temperature

(v) Which of these is a good conductor of heat?

- (a) Wood (b) Steel (c) Plastic (d) Both b & c

(vi) Transfer of heat from the flame to the handle is the process called

- (a) Conduction (b) Convection (c) Radiation (d) Both a & b

SECTION -C

Q3. A statement of Assertion is given by the corresponding statement of Reason. Choose the correct answer.

- (a) Assertion and reason both are correct and reason is correct explanation for assertion.
(b) Assertion and reason both are correct and reason is not correct explanation for assertion.
(c) Assertion is correct but reason is wrong.
(d) Assertion is wrong but reason is correct.

(i) Assertion – In an open drain the fats clog the soil pores reducing its effectiveness.

Reason – They can harden and block the path.

(ii) Assertion – The sludge is transferred to a separate tank where it is decomposed by the anaerobic bacteria.

Reason – The treated water is used for drinking.

SECTION -D

Q4. Define galvanisation. Why are the iron pipes we use in our homes to carry water galvanised?

Q5. Write one difference between physical and chemical change with one example each.

Q6. Carbon dioxide + Lime water \rightarrow _____ + _____

Q7. What are blood vessels? Write two functions of them.

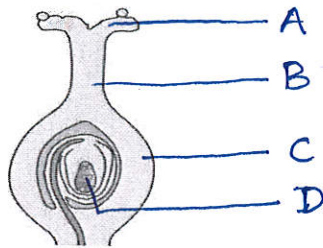
OR

Q7. What helps to excrete the waste-water from the body? Name the main waste product here.

Q8. Why is blood needed by all parts of the body?

Q9. Differentiate between self pollination and cross pollination..

Q10. Label the four parts of the diagram.



Q11. Give one use each of a concave and convex mirror.

Q12. The distance between you and your image in a plane mirror is 6m. If you move 2m towards the mirror, find the distance between you and your image.

SECTION -E

Q13. What three things do you observe in a chemical reaction?

Q14. Draw and label the human excretory system.

Q15. What is vascular tissue? Describe its two main functions.

OR

Q15. Describe three components of blood.

Q16. Match the following.

- | | |
|------------------------------|----------------------------------|
| (a) Unisexual flower | Pollination |
| (b) Fertilisation | Pumpkin, Gourd |
| (c) Innermost part of flower | Fusion of male and female gamete |
| (d) Transfer of pollens | Reproductive part of plant |
| (e) Stem cutting | Pistil |
| (f) Flower | Rose, sugarcane |

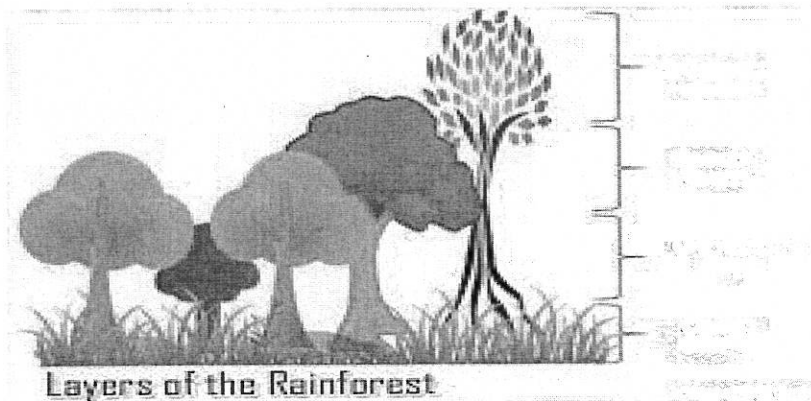
Q17. What is a real and virtual image? Which mirror does produce a virtual image always?

OR

Q17. What is a convex lens? Draw any one diagram to show the image formed by it.

Q18. (i) Draw a food chain.

(ii) Name the four layers of forest.



Q19. List out your role as a good citizen in managing waste water. (three ways)

Q20. How is sludge treated? Explain in details.

OR

Q20. Define (i) Aeration (ii) Sanitation (iii) Bio-gas

Q21. Describe the steps involved in getting clarified water from waste-water?

SECTION -F

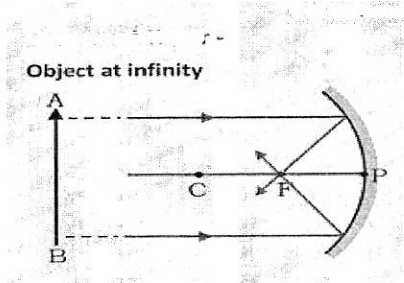
Q22. What is asexual reproduction? Explain any three ways by which asexual reproduction occurs.

OR

Q22. (i) Define unisexual flower and bisexual flower with one example each.

(ii) Explain any three ways of dispersal of seeds.

Q23. Look at the diagram and answer the following.



- (i) Name the mirror.
- (ii) Write the kind of image formed by the mirror when object is at infinity.
- (iii) Where is the image formed here?
- (iv) What is 'F'?
- (v) How is its reflecting surface? (Curved inward/outward)

Q24. "Forest is a dynamic entity, full of life and vitality". Explain briefly with five major points.

OR

Q24. X, Y and Z are three types of organisms which are found in a forest. X eats both plants and animals, Y eats up dead animals while Z breaks down the body of the dead animals into simpler substances

- (a) What is the name of organism Z? Write one example of Z.
- (b) What kind of animal is X? Give one example of it.
- (c) What is the name of organism Y? Write one example of Y.
- (d) How is Z beneficial for the environment?
- (e) In which layer of forests does X live?
