

O. P. JINDAL SCHOOL, SAVITRI NAGAR
Annual Examination – (2022-2023)

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 32 questions in the Question Paper. All the questions are compulsory.
 2. Section A, Q1 to Q8 comprises of 8 MCQ type questions and carries 1 mark each.
 3. Section B, Q9 & Q10 are of case-base type questions.
 4. Section C, Q11 is Assertion-Reason type question.
 5. Section D, Q12 to Q20 are very short answer type questions, carries 2 marks each.
 6. Section E, Q21 to Q29 are short answer type questions, carries 3 marks each.
 7. Section F, Q30 to Q32 are long answer type questions, carries 5 marks each.
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SECTION - A

Choose the correct option.

Q1. This process does not require material medium to transfer heat.

- (a) Radiation (b) Conduction (c) Convection (d) Compression

Q2. Laboratory 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

Q3. From which place do birds migrate in winter?


- (a) Deserts (b) Rainforests (c) Polar regions (d) Equator

Q4. The centre of a cyclone is a _____ area.

- (a) Calm (b) Fast wave (c) Stormy (d) Harsh

Q5. In aerobic respiration glucose is broken down by the use of

- (a) Alcohol (b) Oxygen (c) Fructose (d) Carbon dioxide

Q6. See the symbol and identify the electric component. 

- (a) Electric bulb (b) Switch (c) Wire (d) Electric cell

Q7. If the reflecting surface of a spherical mirror curves outward it is called a

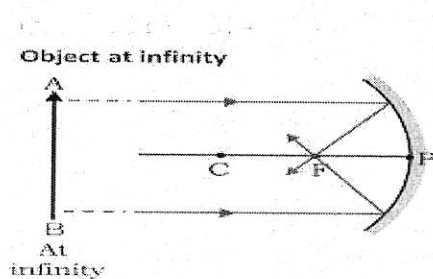
- (a) Plane mirror (b) Concave mirror (c) Convex mirror (d) Lens

Q8. It stops soil from getting eroded.

- (a) Forest (b) Ocean (c) Desert (d) Air

SECTION -B

Q9. Look at the diagram and answer any four questions.



(i) Identify the mirror.

- (a) Convex (b) Concave (c) Plane (d) Coloured

(ii) Where is the image formed?

- (a) Infinity (b) Near Focus (c) At Focus (d) No image

(iii) The size of the image formed by this mirror is,

- (a) Small size (b) Large size (c) Point size (d) Same as the object

(iv) An image formed by the above mirror is,

- (a) Virtual (b) Real (c) Incident (d) No image is formed

(v) This mirror is used in

- (a) Microscopes (b) Torches (c) Dental mirrors (d) All of these

Q10. Read the following paragraph and answer any four questions.

Plants eat decomposed soil material for nutrition, and plant-eating animals eat decayed soil material for survival. For sustenance and survival, predators consume the lower species in the food chain. When live organisms die, they decompose and become part of the soil, where they can be devoured by plants once more. In this way, the cycle continues to exist. Plants and animals are reliant on each other for reproduction in addition to food. Pollen is carried between flowers by bees, air, other animals for examples. Pollination aids in the reproduction of several plants. Apart from pollination, different animals help in plant reproduction by acting as carriers of seeds. For their survival, it is important that plants grow over a sufficient area.

(i) In a food chain producers are eaten by the

- (a) Decomposers (b) Plants (c) Compost (d) Consumers

(ii) Decomposed soil materials provide nutrition to the

- (a) Producers (b) Consumers (c) Bacteria (d) All of these

(iii) What is influenced by the plants and animals both, in forests?

- (a) Balance in nature (b) Soil erosion (c) Species (d) Decaying material

(iv) What among these helps in pollination in plants?

- (a) Soil (b) Climate (c) Air (d) Rainfall

(v) Who among these act as agents of seed dispersal ?

- (a) Bees (b) Animals (c) Soil (d) Heat

SECTION -C

Q11. A statement of Assertion is given by the corresponding statement of Reason. Choose the correct answer.

(i) **Assertion** – When something is heated it expands.

Reason – Cooling something is the same as taking away heat from it.

(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 statement.

(d) Assertion is wrong but reason is correct statement.

(ii) Assertion – If you stir something cooking in a pan with a metal spoon, the end you hold soon becomes too hot.

Reason – Conduction causes heat flow through a substance without the movement of the substance itself.

(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 statement.

(d) Assertion is wrong but reason is correct statement.

(iii) Assertion – Heat of the sun travels to the earth without the help of a material medium.

Reason – Material mediums do not allow heat to travel in it.

(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 statement.

(d) Assertion is wrong but reason is correct statement.

(iv) Assertion – Land breeze blows to the sea and occurs at night.

Reason – The air above the sea becomes warmer than that of land after sunset and rises up.

(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 statement.

(d) Assertion is wrong but reason is correct statement.

SECTION -D

Q12. Why is it better to wear lighter shaded clothes in summer?

Q13. Why is a city warmer than the surrounding rural areas?

Q14. Write two adaptations of elephants to survive in tropical rainforests.

Q15. Write two impacts of earthquakes in our lives.

Q16. How does a cyclone occur?

Q17. Why does the respiration rate increase after doing exercise?

Q18. Draw lungs of a human being and show the trachea and diaphragm.

Q19. Describe the job of xylem and phloem in plants.

Q20. Draw two circuit diagrams to show by the condition

(i) a bulb glows

(ii) a bulb does not glow.

SECTION -E

Q21. Define (i) Climate

(ii) Hibernation

(iii) Polar regions

Q22. How does a thunderstorm develop?

Q23. How does oxygen from the air in the lungs reach the cells?

OR

How does a fish breathe? Explain with a diagram.

Q24. Draw and label schematic diagram of blood circulation in human beings.

Q25. What are the components of blood? Explain any two of them.

Q26. Sketch the reproductive parts of a flower and explain each.

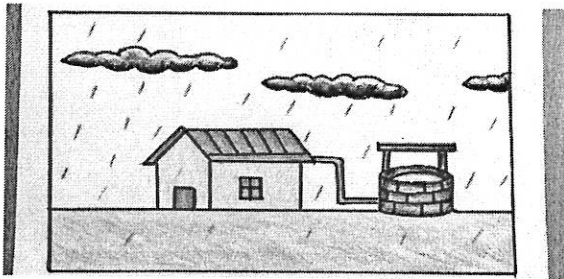
OR

Draw and label zygote formation in a flower.

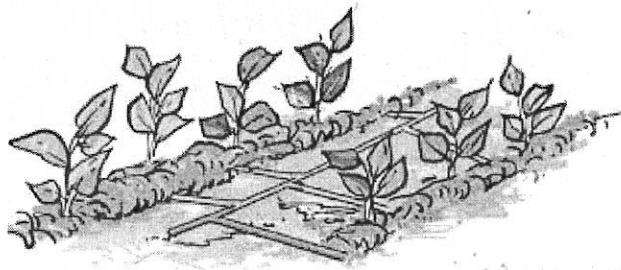
Q27. What is a convex lens? Draw a diagram to show the image formed by it.

Q28. Identify each diagram and write one use of it.

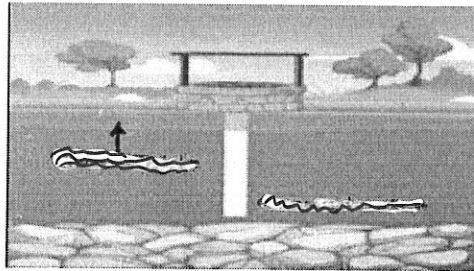
(i)



(ii)



(iii)



Q29. Explain why there is no waste in forests.

OR

Draw and label interrelationship among plants, soil and decomposers in a forest.

SECTION -F

Q30. What is asexual reproduction? Explain any three ways by which asexual reproduction occurs.

OR

What is pollination? Describe the types of pollination with two examples of plants each in which the kind of pollination occurs.

Q31. How does an electric bell work? Explain it with its diagram.

OR

Draw and explain an electromagnet. Also write two uses of it.

Q32. Describe scarcity of water and explain how pollution, overuse and deforestation cause it.

OR

What is depletion of water label? Explain all the factors that are responsible for it.