

O. P. JINDAL SCHOOL, SAVITRI NAGAR
HALF-YEARLY EXAMINATION, 2025– 2026

Class/ Sec – VIII/

MM – 80

Subject – Science

Time – 3 hours

Name - _____

Roll No. _____

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

1. This Question paper comprises of 5 sections A, B, C, D, E .
2. There are 24 questions in the Question Paper.
3. Section A, Q1 comprises of 12 MCQ type questions and each carries 1 mark.
4. Section B, Q2 & Q3 are of case-based type question, each carries 4 marks.
5. Q4 is Assertion/Reason type question, carries 2 marks.
6. Section C, Q5 to Q12 are very short-answer type questions and each carries 2 marks.
7. Section D, Q13 to Q21 are short-answer type questions and each carries 3 marks. 6. Section E, Q22 to Q24 are long-answer type questions and each carries 5 marks.

(SECTION – A)

Q1. Choose the correct answer

- i. Loosening and turning of the soil is known as-

(a) Tilling	(b) Broadcasting	(c) Transplantation	(d) Manuring
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- ii. Sowing the seeds manually is known as-

(a) Ploughing	(b) Broadcasting	(c) Tilling	(d) weeds
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- iii. The process of conversion of sugar into alcohol is called-

(a) Nitrogen fixation	(b) Molding	(c) Fermentation	(d) Infection
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- iv. The following is an antibiotic -

(a) Sodium	(b) Streptomycin	(c) Alcohol	(d) Yeast.
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- v. What is the common name of petroleum?

(a) Blue gold	(b) Yellow gold	(c) Black gold	(d) Diesel
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- vi. Wind, sun and hydropower are-

(a) Renewable	(b) Non-renewable	(c) Synthetic sources	(d) Expensive sources
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- vii. Burning of LPG at home is an example of-

(a) Slow combustion	(b) Rapid combustion
(c) Spontaneous combustion	(d) Explosion

(1)

viii. The first national park in India is-

(a) Bandipur national park (b) Kaziranga national park
(c) Jim Corbett national park (d) Satpura national park.

ix. The gas produced in the working of soda-acid type fire extinguisher is

(a) Carbon dioxide (b) Oxygen
(c) Sulphur dioxide (d) Hydrogen

x. A species found only in one particular place is known as-

(a) Endemic (b) Vulnerable (c) Endangered (d) Extinct

xi. Tyres have cut grooves in them -

(a) To increase friction (b) To decrease friction.
(c) To make them look attractive (d) To save rubber

xii. In liquids, the pressure-

(a) Increases with depth (b) Decreases with depth
(c) Remains same at all depths (d) Sometimes decreases

(SECTION – B)

Q2. Read the given passage and answer the questions:

A great variety of plants and animals exist on earth. They are essential for the well-being and survival of mankind. To preserve biodiversity, to prevent extinction of endangered species, and to maintain ecological balance in nature, wildlife and forests should be conserved. Habitat is a place in environment where an organism lives. Today, a major threat to survival of these organisms is deforestation. We know that deforestation means clearing of forests and using that land for other purposes. Trees in the forest are cut for many purposes. Some natural causes of deforestation are forest fires and severe droughts. The answer to deforestation is reforestation. Reforestation is restocking of the destroyed forests by planting new trees. The planted trees should generally be of the same species which were found in that forest. We should plant at least as many trees as we cut. Reforestation can take place naturally also.

(i) A place in environment where an organism lives is:

(a) Home (b) Resort (c) Habitat (d) Reservoir

(ii) Wildlife and forests should be conserved:

(a) To preserve biodiversity. (b) To prevent extinction of endangered species.
(c) Maintain ecological balance in nature. (d) All of the above.

(iii) Deforestation takes place by:

(a) Human activities (b) By natural calamities
(c) Both (a) and (b) (d) None of these

(iv) Restocking of the destroyed forests by planting new trees is called:

(a) Deforestation (b) Afforestation (c) Reforestation (d) none of these

Q3. Read the given passage below and answer the given question:

In a game of volleyball, players often push the moving ball to their team mates to make a winning move. Sometimes the ball is returned to the other side of the court by pushing or smashing it. In cricket, a batsman plays his or her shot by applying a force on the ball with the bat.

(i) What kind of force is applied by a batsman on a ball while hitting it?

(a) Magnetic Force (b) Muscular Force (c) Frictional Force (d) Gravitation Force

(ii) Force can be defined as:

(a) Work done (b) Energy to do work (c) Push or Pull (d) Push only

(iii) In the volleyball game, what changes force brought about on the volleyball?

(a) Change in direction of motion (b) Change in shape

(c) Change in state of motion (d) Both (a) and (c)

(iv) The SI unit of force is-

(a) Newton (b) Ampere (c) Pascal (d) Ohm

Q4. In the question given below are two statements labelled as Assertion (A) and

Reason (R). In the context of the question which of the following is correct?

(i) **Assertion:** In summer, the frequency of watering is lower.

Reason: It is due to the increased rate of evaporation of water from the soil and the leaves

(a) Both A and R are true and R is the correct explanation of A.

(b) Both A and R are true and R is not the correct explanation of A.

(c) A is True but R is False.

(d) A is False but R is true

(ii) **Assertion:** Coal and petroleum are refined to produce various useful products.

Reason: Winnowing separates different components from these fossil fuels.

(a) Both A and R are true and R is the correct explanation of A.

(b) Both A and R are true and R is not the correct explanation of A.

(c) A is True but R is False.

(d) A is False but R is true

(SECTION – C)

Q5. Why are viruses considered to be link between living organisms and nonliving things?

Q6. Define the term fossil fuel. Name two fossil fuels.

(3)

Q7. What is harvesting? What are the methods to harvest the crops?

Q8. If wheat is sown in the kharif season, what would happen? Explain.

OR

Explain how soil gets affected by the continuous plantation of crops in a field.

Q9. A force of 100 N is applied on an area of 4 m^2 . Find pressure being applied on the area.

Q10 What is the similarity between electrostatic and magnetic forces?

OR

What is contact force? Give two examples of contact force.

Q11. Why does a matchstick catch fire when rubbed on the rough surface of the box?

Q12. What are the two factors on which the force of friction depends?

(SECTION – D)

Q13. Identify the following micro-organisms:

- (i) I live in every kind of environment, and inside your gut.
- (ii) I make bread and cakes soft and fluffy.
- (iii) I live in the roots of pulse crops and provide nutrients for their growth.

Q14. Radhey prefers to go to school by pooling car. On other occasions he like to opt for Public transport rather than private transport. For short distances, he walks or uses bicycle.

- (i) What are the benefits of carpooling?
- (ii) Which mean of transport do you think is best for short distances?
- (iii) How on our end we can reduce the consumption of fossil fuels?

Q15. Sourav was heating oil to fry potato chips. The cooking oil all of a sudden caught fire. He took water to pour on the fire to extinguish it. But meanwhile his mother came and Switched off the gas and covered the wok completely with a plate.

- (i) Do you think pouring water to the burning oil would have worked? Why?
- (ii) Do you think what Sourav's mother had done is right? Why?
- (iii) Can you suggest other ways in which we can stop fire due to burning oil?

Q16. What are weeds? How can we control them? Write any two methods.

OR

Explain how fertilizers are different from manure.

Q17. The burning of fossil fuels causes air pollution. Explain.

OR

List any three steps to conserve the resources.

Q18 Explain why the walls of a dam are thicker near the bottom than at the top.

(4)

Q19. (i) Explain why objects moving in fluids must have special shapes.

(ii) Why are lubricants applied between the moving parts of a machine?

Q20 Imagine that friction suddenly vanishes. How would life be affected? List three such situations.

Q21. Many people in world find it status symbol of wearing and keeping leather clothes and leather articles with them. Even Shahtoosh shawls made of an endangered species of antelope are also in greater demand and highly priced.

(i) Do you think we must use leather items for just show off?

(ii) What is endangered species?

(iii) Can you name an extinct species which was exploited for its meat?

(SECTION – E)

Q22. (i) Explain how deforestation associated with global warming.

(ii) Explain reforestation.

(iii) Differentiate between wildlife sanctuary and Zoo.

OR

(i) What do you mean by migration? Write the causes of migration of birds.

(ii) How recycling and saving of papers does related to deforestation?

Q23. Explain different layers of flame with a well-labelled diagram.

OR

What are ideal fuels? How is LPG a better fuel than wood? (Four ways)

Q24. (i) What precautions must be taken while taking antibiotics?

(ii) Observe the diseased plant of bhindi (Okra) and answer the given questions.



(a) Write the name of the disease.

(b) Name the causative agent of this disease?

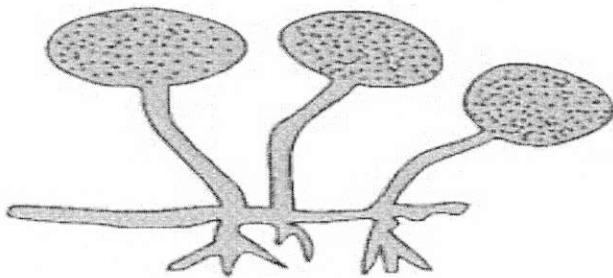
(c) How does the disease spread from one plant to another?

(d) Name any two plant diseases and the microbes that cause them.

(5)

OR

Q24 (i) What are pathogens? Give two examples
(ii) Observe the Figure and answer the following questions.



(a) Name the microorganism and the group to which it belongs.
(b) Name the food item on which the organism grows.
(c) Does it grow well in dry or in moist conditions?
(d) Is it safe to eat infected bread?
