

**SPECTRA PRACTICE PAPER (2025-2026)****CLASS-VII<sup>th</sup>****SUBJECT: SCIENCE****DURATION: 3 HRS.****M MARKS:80****General Instruction:**

1. This question paper consists of 38 questions. All questions are compulsory
2. The paper is divided into five sections – A, B, C, D, and E

**Section A****It consists of 20 questions each of 1 mark**

Choose the correct option.

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|-----|--|---|
| 1.  | Which of the following is not a physical change?<br>a) Melting of ice b) Burning of paper c) Dissolving sugar in water d) Boiling of water | 1 |
| 2.  | The green pigment present in leaves is called:<br>a) Hemoglobin b) Chlorophyll c) Xylem d) Phloem  | 1 |
| 3.  | Which part of the plant conducts food?<br>a) Root b) Phloem c) Xylem d) Leaf   | 1 |
| 4.  | The process of conversion of water vapor into water is called:<br>a) Condensation b) Evaporation c) Freezing d) Melting                    | 1 |
| 5.  | Which gas is necessary for photosynthesis?<br>a) Oxygen b) Nitrogen c) Carbon dioxide d) Hydrogen  | 1 |
| 6.  | The hardest natural substance found on Earth is:<br>a) Gold b) Diamond c) Iron d) Graphite   | 1 |
| 7.  | Which of these is an omnivore?<br>a) Lion b) Cow c) Crow d) Goat   | 1 |
| 8.  | Acid present in vinegar is:<br>a) Citric acid b) Acetic acid c) Lactic acid d) Formic acid   | 1 |
| 9.  | Which of the following is a renewable source of energy?<br>a) Coal b) Petroleum c) Solar energy d) Natural gas                             | 1 |
| 10. | The motion of a pendulum is:<br>a) Circular b) Oscillatory c) Linear d) Rotatory   | 1 |
| 11. | Which of these is used to measure temperature?<br>a) Barometer b) Thermometer c) Hygrometer d) Speedometer                                 | 1 |
| 12. | Soil erosion can be prevented by:<br>a) Deforestation b) Overgrazing c) Afforestation d) Flooding  | 1 |
| 13. | The SI unit of force is:<br>a) Newton b) Joule c) Pascal d) Watt   | 1 |
| 14. | Iron nails rust due to:<br>a) Oxygen only b) Carbon dioxide c) Water and oxygen d) Nitrogen  | 1 |
| 15. | Which part of the digestive system absorbs nutrients?<br>a) Mouth b) Stomach c) Small intestine d) Large intestine                         | 1 |
| 16. | Which of the following is a non-metal?<br>a) Iron b) Copper c) Carbon d) Silver  | 1 |
| 17. | Lightning is caused by:<br>a) Friction b) Electric discharge c) Pressure d) Heat   | 1 |
| 18. | Wool is obtained from:<br>a) Goat b) Camel c) Sheep d) All of these  | 1 |

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	<p>(a) Both A and R are true, and R is the correct explanation of A.</p> <p>(b) Both A and R are true, but R is not the correct explanation of A.</p> <p>(c ) A is true but R is false.</p> <p>(d ) A is false but R is true.</p>	
19.	<p>Assertion (A): Chlorophyll helps plants to prepare food.</p> <p>Reason (R): Chlorophyll absorbs sunlight energy for photosynthesis.</p>	1
20.	<p>Assertion (A): Burning of wood is a chemical change.</p> <p>Reason (R): Because it produces new substances such as ash and gases.</p>	1
	<p style="text-align: center;"><b><u>Section - B</u></b>  <b><u>It consists of 4 questions each of 2 marks</u></b></p>	
21.	Define nutrition. Name the two modes of nutrition.	2
22.	Why are roots important for a plant?	2
23.	Define friction. Write one harmful effect of friction.	2
24.	Write two differences between physical and chemical changes	2
25.	What is the difference between biodegradable and nonbiodegradable materials?	2
	<p style="text-align: center;"><b><u>Section - C</u></b>  <b><u>It consists of 6 questions each of 3 marks</u></b></p>	
26.	Explain the process of photosynthesis with the help of an equation.	3
27.	How does rainwater cause soil erosion? Suggest two preventive measures.	3
28.	What are the differences between conductors and insulators? Give one example of each.	3
29.	Explain how shadows are formed.	3
30.	Define acid, base, and neutral substances with one example each.	3
31.	How does forest help in maintaining the water cycle	3
	<p style="text-align: center;"><b><u>Section - D</u></b>  <b><u>It consists of 4 questions each of 5 marks</u></b></p>	
32.	Explain the process of digestion in humans with a neat labeled diagram of the digestive system.	5
33.	What are the three types of heat transfer? Explain each with examples.	5
34.	What is respiration? Explain the difference between aerobic and anaerobic respiration.	5
35.	Describe various components of soil. Write any two properties of humus.	5

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36.	<p style="text-align: center;"><b><u>Section - E</u></b>  <b><u>It consists of 3 questions each of 4 marks</u></b></p> <p><b><u>Case Study Questions :</u></b>  A farmer noticed that his crops are not growing well. The soil was dry and eroded after heavy rainfall.  Answer the following:  (a) What type of soil erosion might have occurred?  (b) Suggest two ways to prevent soil erosion.  (c) How does afforestation help in soil conservation.</p>	<p>1 1 2</p>
37.	<p>Ravi's torch stopped working even after replacing the batteries. The bulb was fine.  Answer the following:  (a) What could be the possible reason for the torch not working?  (b) Draw a simple circuit diagram showing battery, switch, and bulb.  (c) Define a closed circuit.</p>	<p>1 1 2</p>
38.	<p>During summer, water evaporates quickly from open containers.  Answer the following:  (a) Which process is involved here?  (b) Mention any two factors that affect the rate of evaporation.  (c) Write two everyday uses of evaporation.</p>	<p>1 1 2</p>
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