Code No. : 2025
Subject Code : 01
Paper Code : 01

Time : 3 Hours | Maximum Marks : 100 | Total Pages : 4

Note : (1) Answer all questions. | (2) Time : 3 hours. | (3) Maximum Marks : 100

Part – I | Maximum Marks : 10 | Time : 30 Minutes

I. Choose the correct answer : 10 × 1 = 10

(1) Which of the following is a renewable source of energy?

(a) Coal (b) Petroleum (c) Solar energy (d) Natural gas

(2) The unit of electric current is

(a) Volt (b) Ohm (c) Ampere (d) Watt

(3) Which of the following is a conductor of electricity?

(a) Rubber (b) Plastic (c) Glass (d) Copper

(4) The process of changing a liquid into a gas at its surface is called

(a) Boiling (b) Evaporation (c) Condensation (d) Freezing

(5) Which of the following is a non-renewable source of energy?

(a) Wind energy (b) Solar energy (c) Coal (d) Hydroelectric power

(6) The SI unit of energy is

(a) Watt (b) Joule (c) Ampere (d) Volt

(7) Which of the following is a good conductor of heat?

(a) Wood (b) Plastic (c) Rubber (d) Iron

(8) The boiling point of water at sea level is

(a) 0°C (b) 50°C (c) 100°C (d) 212°C

(9) Which of the following is a source of light?

(a) Moon (b) Mirror (c) Sun (d) Table

(10) The device used to measure electric current is called

(a) Voltmeter (b) Ammeter (c) Galvanometer (d) Thermometer

Part – II | Maximum Marks : 20 | Time : 1 Hour

II. Answer any five questions briefly : 5 × 4 = 20

(11) Define energy and give two examples of its forms.

(12) What is the difference between a conductor and an insulator? Give one example of each.

(13) Explain the process of evaporation with an example.

(14) What is a renewable source of energy? Name any two renewable sources.

(15) Write the formula for electric current and explain each term.

(16) Why is copper used in electrical wires?

(17) Explain how a thermometer works.

(18) What is the SI unit of electric current? Who is it named after?

Part – III | Maximum Marks : 70 | Time : 2 Hours

III. Answer any seven questions in detail : 7 × 10 = 70

(19) Explain the different forms of energy with examples.

(20) Describe the process of boiling and compare it with evaporation.

(21) What are the advantages and disadvantages of using renewable sources of energy?

(22) Explain the working of a simple electric circuit with a diagram.

(23) Describe the properties of conductors and insulators.

(24) Explain the process of condensation and its importance in the water cycle.

(25) What is the difference between heat and temperature? Explain with examples.

(26) Describe the working of a galvanometer and its uses.

(27) Explain the conservation of energy with suitable examples.

(28) Write a note on the importance of electricity in daily life.

IV. Answer any two questions in detail : 2 × 15 = 30

(29) Explain the different methods of heat transfer with examples and diagrams.

(30) Describe the construction and working of a simple electric cell.

(31) Explain the water cycle in detail and its significance in nature.

(32) Discuss the environmental impact of using non-renewable sources of energy and suggest measures to reduce it.
