

**General Science**

**Note:** Time allowed for Section-B and Section-C is 2 Hours and 40 minutes.

**SECTION-B**

**Q2:** Answer any **NINE** parts. Each part carries **FOUR** marks.

- i) Define static charges. Why are they called static?
- ii) What is meant by resistances? How resistors are connected in a circuit?
- iii) What is fermentation? Write the importance of fermentation in daily life.
- iv) What is meant by scientific nomenclature? Give examples.
- v) Name the four types of nitrogenous bases found in the DNA molecule?
- vi) Write the significance of mitosis?
- vii) Water is a precious resource. Elaborate the statement.
- viii) Describe the methods of reclamation of water.
- ix) What are the major effects of ozone depletion on the living organisms?
- x) What are the natural disasters? In which forms these are exhibited?
- xi) Why MRI is safer than CT scan?
- xii) Write the mechanism of cell phone calling?

**SECTION-C Marks: 24**

**Note:** Attempt any **THREE** questions. All questions carry equal marks.

- Q3:** (a) What is meant by polarization of charges? Write the effects of static charges.  
(b) What safety measures should be adopted to avoid hazards of electricity?
- Q4:** (a) Define chemical change. Recognize those characteristics which indicate that a chemical reaction has taken place.  
(b) Write the role of RNA as a carrier of information.
- Q5:** (a) What do you mean by potable water? Describe the implications of growing demand of water in the world.  
(b) Enlist the names of different layers of atmosphere.
- Q6:** (a) Define cell division. Differentiate between mitosis and meiosis.  
(b) How laser is used in different scientific processes.