

General Instructions :

Read the following instructions very carefully and strictly follow them :

- (i) This question paper comprises **15** questions. **All** questions are compulsory.
- (ii) This question paper is divided into **three** sections – **A, B** and **C**.
- (iii) **Section A** – Questions No. **1** to **7** are short answer type questions. Each question carries **2** marks.
- (iv) **Section B** – Questions No. **8** to **13** are also short answer type questions. Each question carries **3** marks.
- (v) **Section C** – Questions No. **14** and **15** are case-based questions. Each question carries **4** marks.
- (vi) Internal choices have been provided in some questions. Only one of the alternatives has to be attempted.

SECTION A

- 1. (a) Write the molecular formula of the following carbon compounds :
 - (i) Methane
 - (ii) Propane
- (b) Carbon compounds have low melting and boiling points. Why ? 2
- 2. The electrons in the atoms of two elements X and Y are distributed in three shells having 1 and 7 electrons respectively in their outermost shells.
 - (a) Write the group numbers of these elements in the Modern Periodic Table.
 - (b) Write the molecular formula of the compound formed when X and Y combine with each other.
 - (c) Which of the two is electropositive ? 2
- 3. (a) Which of the following flowers will have higher possibility of self-pollination ?
Mustard, Papaya, Watermelon, Hibiscus
- (b) List the two reproductive parts of a bisexual flower. 2
- 4. Which one of the two multicellular organisms — Spirogyra and Planaria reproduces by regeneration and why ? Give an example of any other organism which can also reproduce by the same process. 2



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