

**B.Sc. 3<sup>rd</sup> Semester (Honours) Examination, 2020 (CBCS)**

**Subject: Environmental Science**

**Paper: CC 7**

**(Green Chemistry and Environmental Applications)**

Time: 3 Hours

Full Marks: 60

*The figures in the margin indicate full marks.  
Candidates are required to give their answers in their own words*

1. Answer *any six* of the following:

5×6 = 30

- i) Describe the properties of polyurethane.
- ii) State the principles of green chemistry.
- iii) Why hydrogen peroxide be considered as a green oxidizing agent?
- iv) Write down basic principle of XRF.
- v) How are fluorocarbons produced?
- vi) Write a short note on electrodialysis and reverse osmosis.
- vii) Compare the conventional and green synthesis of paracetamol.
- viii) What are the advantages of biodegradable polymer and biodiesel?

2. Answer *any three* of the following:

10×3 = 30

- i) What is the green aspect of wastewater treatment using microalgae?
- ii) State the principle and types of gas chromatography.
- iii) Which is the best antiknock compound and why?
- iv) Describe the integrated pest management system.
- v) How does HPLC work and what are the benefits and applications of HPLC?