

M.Sc. (Part - I) (Environmental Science) (CBCS Pattern) Semester - I
PSENV T01 / PSCENV T01 - Paper-I : Environmental Chemistry

P. Pages : 1

Time : Three Hours



GUG/S/23/11158

Max. Marks : 80

- Notes : 1. All questions are compulsory and carry equal marks.
2. Illustrate the answers with suitable diagrams and examples.

1. Discuss Beer's and Lambert's law in detail. **16**
- OR**
- a) Explain chemical potential and chemical equilibria. **8**
- b) Discuss primary and secondary standards. **8**
2. Discuss saturated and unsaturated hydrocarbons with examples. **16**
- OR**
- a) Briefly explain buffering in water system. **8**
- b) Explain the solubility of gases in water. **8**
3. Discuss chemical characteristics of water in brief. **16**
- OR**
- a) Explain hydrolysis of metal ions. **8**
- b) Describe Eh-pH diagram. **8**
4. Discuss in brief the chemical properties of soil. **16**
- OR**
- a) Explain NPK in soil. **8**
- b) Discuss the role of micronutrients in soil. **8**
5. a) Explain absorption and adsorption. **4**
- b) What is green chemistry? Explain it. **4**
- c) Give the sources and uses of water. **4**
- d) Explain soil profile with a neat sketch. **4**
