

M.Sc. (Part-I) (Environmental Science) (NEP Pattern) Semester-I
NEP-42 / PMENVT02 - Paper-II : Chemical Aspects of Environmental Science

P. Pages : 1

Time : Three Hours



GUG/W/24/15095

Max. Marks : 80

Notes : 1. All questions are compulsory and carry equal marks.

1. Explain Lambert's law and Beer's law. **16**

OR

- a) Explain in brief valency. **8**
- b) Discuss emulsions in detail. **8**

2. Explain solubility of gases in water. Add a note on radionuclides. **16**

OR

- a) Briefly explain unsaturated and saturated hydrocarbons. **8**
- b) Describe green chemistry for sustainable future. **8**

3. Explain Physicochemical characteristics of water. **16**

OR

- a) Discuss ionic product of water. **8**
- b) Briefly explain hydrolysis of metal ions. **8**

4. Discuss weathering of rocks in details. **16**

OR

- a) Briefly explain major soil types of India. **8**
- b) Write an explanatory note on NPK in soil. **8**

5. a) Write a brief note on standardization. **4**

b) What is redox reaction? **4**

c) Draw a neat sketch of Eh-pH diagram. **4**

d) Draw a neat sketch of soil profile. **4**
