

**A-1027**

**Total Pages : 3**

**Roll No. ....**

**ENSE-655/EVS-604**

**M.Sc. ENVIRONMENTAL SCIENCE (MSCES)**

**(Clean Technologies)**

**3rd Semester Examination, Session December 2024**

**Time : 2:00 Hrs.**

**Max. Marks : 70**

*Note :- This paper is of Seventy (70) marks divided into Two (02) Sections 'A' and 'B'. Attempt the questions contained in these Sections according to the detailed instructions given therein. Candidates should limit their answers to the questions on the given answer sheet. No additional (B) answer sheet will be issued.*

**Section-A**

**(Long Answer Type Questions)      2×19=38**

*Note :- Section 'A' contains Five (05) Long-answer type questions of Nineteen (19) marks each. Learners are required to answer any two (02) questions only.*

1. Define the terms “Environment” and “Technology”.  
Discuss the effects of technology on Environment.
2. Define In-situ remediation technology. Discuss about some In-situ remediation technologies.
3. Describe the process of waste water treatment.
4. Give a detail account of Physico-chemical remediation techniques for metal-polluted water and soil.
5. What do you understand by ECOSAN ? Describe about reuse of ECOSAN products.

### **Section–B**

**(Short Answer Type Questions)**      4×8=32

**Note :-** Section ‘B’ contains Eight (08) Short-answer type questions of Eight (08) marks each. Learners are required to answer any *four* (04) questions only.

1. Define the Sustainability. Write about sustainability issues in India.
2. Write note on followings :
  - (a) Incineration
  - (b) Biofiltration

3. Write about natural and enhanced attenuation.
4. Discuss the process of sludge management.
5. What do you understand by phytomanagement ?  
Describe its uses in environmental management.
6. Differentiate between municipal, agricultural and industrial solid waste.
7. Write a note on “Green Chemistry”
8. Give a note on Microbial fuel cell technology.

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