

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

Bachelor of Science (Environmental Sciences) (Sem.-5)

SOLID AND HAZARDOUS WASTE MANAGEMENT

Subject Code : BSEN508-20

M.Code : 92597

Date of Examination : 04-01-2023

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. **SECTION-A** is **COMPULSORY** consisting of **TEN** questions carrying **TWO** marks each.
2. **SECTION-B** contains **FIVE** questions carrying **FIVE** marks each and students have to attempt any **FOUR** questions.
3. **SECTION-C** contains **THREE** questions carrying **TEN** marks each and students have to attempt any **TWO** questions.

SECTION-A

1. Write briefly :

- Why has solid waste become a major problem in urban areas?
- What are the major strategies for waste minimization?
- List **any four** categories of waste and their sources.
- What are the types of plastic waste?
- List **any two** hazardous wastes originating from domestic sources.
- What are the different types of biomedical wastes commonly dealt in a health centre?
- How are the sharps disposed of in biomedical waste management?
- What is meant by upcycling?
- Differentiate between Compositing and Vermi-composting.
- What is E-waste? Why is it important?

SECTION-B

2. Explain the standard protocol for solid waste sampling for characterization.
3. Discuss the colour coding system for biomedical waste collection as per BMW rules 2016.
4. Explain and contrast between Pyrolysis and Plasma Pyrolysis.
5. Explain the environmental impacts of plastic waste.
6. What is meant by '*Circular Economy*'? Discuss its importance in urban solid waste management.

SECTION-C

7. Congratulations! You have been appointed as a solid waste management consultant for your town. Plan and propose an integrated solid waste management system for the town. Assume basic data required appropriately.
8. Critically assess the suitability of "*Incineration*" as a solid waste disposal method. Discuss the major environmental impacts of incineration.
9. **Discuss the salient provisions of:**
 - (a) E-waste (Handling and Management) rules, 2016
 - (b) Plastic Waste Management Rules, 2016.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.