

December 2022

MA (JMC) III SEMESTER

Waste Management in Daily Life (OES-301A)

Time: 3 Hours

Max. Marks:75

- Instructions:**
1. It is compulsory to answer all the questions (1.5 marks each) of Part -A in short.
  2. Answer any four questions from Part -B in detail.
  3. Different sub-parts of a question are to be attempted adjacent to each other.

**PART -A**

- Q1 (a) Define solid waste as per Solid Waste Management Rules 2016. (1.5)  
 (b) What are different ways for sorting of solid waste at home? (1.5)  
 (c) How can we reduce size and volume of waste? (1.5)  
 (d) Enlist different types of solid waste generated in your institute and put them in different categories. (1.5)  
 (e) Is landfilling a safe method for solid waste disposal? Give reasons for your answer. (1.5)  
 (f) What are the different diseases associated with improper waste handling? Elaborate one of them. (1.5)  
 (g) What are different steps involved in biogas formation? Explain (1.5)  
 (h) What do you understand by 5R's of waste reduction? Give examples (1.5)  
 (i) Write a short note on Kitchen garden. (1.5)  
 (j) Differentiate between rubbish and garbage (1.5)

**PART -B**

- Q2 (a) Give the classification of solid waste on the basis of sources and types. Make a diagram also to show the classification. Give suitable examples. (8)  
 (b) What are different methods for waste prevention and recycling at household and commercial level? Explain (7)
- Q3 (a) What are different methods for conversion of waste to energy? Explain by giving suitable examples. (8)  
 (b) Discuss in detail about composting of organic solid waste. Make suitable diagrams. (7)
- Q4 Explain the sorting and segregation of waste at source and its collection, storage and transport procedure in detail. (15)
- Q5 (a) What are different practices applied for safe disposal of solid waste? Make a neat and labelled sketch of a scientific landfill and explain the process in detail. (8)  
 (b) Write the role of an individual in proper management and disposal of solid waste. (7)
- Q6 (a) Discuss pyrolysis. What are different types of products formed? Also discuss its advantage and disadvantages. (8)  
 (b) Discuss open dumping and burning of solid waste. Explain the problems associated with these practices. (7)
- Q7 Discuss the methodology for the production of vermicompost. Also discuss the essential conditions for survival of the compost worms. (15)

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