

2021

ENVIRONMENTAL SCIENCE— HONOURS

Paper : DSE-B-2

(Solid Waste Management)

Full Marks : 50

The figures in the margin indicate full marks.

*Candidates are required to give their answers in their own words
as far as practicable.*

- 1. Answer *any five* questions:** 2×5
- (a) Name two green techniques for waste management.
 - (b) What is pyrolysis?
 - (c) Distinguish between corrosivity and reactivity.
 - (d) What do you mean by Common Biomedical Waste Treatment Facility (CBMWTF)?
 - (e) Name the toxic components present in e-waste.
 - (f) Mention two physical properties of Municipal Solid Wastes.
 - (g) What is biocompost?
- 2. Write short notes on the following *any two*:** 5×2
- (a) Waste hierarchy
 - (b) Microbial reductive dehalogenation
 - (c) Basel Convention
 - (d) Refuse Derive Fuel (RDF).
- 3. Answer *any three* questions:** 10×3
- (a) Discuss three different waste to energy conversion processes. Distinguish between hazardous and non hazardous industrial wastes. 6+4
 - (b) Landfill can cause ground water pollution.—Justify the statement. Discuss storage, and transportation techniques for municipal solid wastes. 4+(3+3)
 - (c) Discuss three stages of Effluent Treatment Plant. How does solid wastes can affect the water quality? 6+4

Please Turn Over

- (d) Discuss on yellow categories of biomedical wastes along with their treatment options. Why chemical treatment is required for some specific categories of biomedical wastes? 8+2
- (e) Describe 4Rs of Waste Management. Comment on the basic features of Plastic Waste (Management and Handling) Rule, 2011. 5+5
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