INDIAN INSTITUTE OF TECHNOLOGY, KHARAGPUR

Mid-Spring Semester Examination, 2022-2023

Subject: Hazardous Waste Technology and Management Subject No.: CH62050

Time: 2 Hrs

Date: 16-02-2023(AN)

Instructions: Answer all Questions. Assume any missing data suitably.

- 1. What are the responsibilities of the occupier for management of hazardous and other wastes? Why secondary containment is necessary? Discuss in details [3]
- 2. Mention the regulations on Grant of authorization for managing hazardous and other wastes. How Storage of hazardous and other wastes is done as per HWM rules? Explain. [3 + 2 = 5]
- 3. How Packaging, Labelling, And Transport of Hazardous and Other Wastes is carried out? What is the Manifest system (Movement Document) for hazardous and other waste to be used and various color code [3 + 2 = 5]forms used? Explain.
 - 4. List the 10 chemical and allied process industries/processes generating hazardous wastes of your choice [3]
 - 5. What are the format of MANIFEST FOR HAZARDOUS AND OTHER WASTE as per regulations? Prepare a sample [3] manifest form.
 - 6. Why hazardous waste minimization is necessary? Explain the techniques used to minimize the hazardous waste generated in industries with example. [3]
- 7. Discuss the state-wise scenarios on availability of common hazardous waste treatment, storage and disposal facility. Give an account of processes generating hazardous waste as per Shedule-1 of hazardous waste disposal and management act. [3]
- What are the properties of hazardous waste? What are the routes of migration of hazardous wastes? Explain the mechanism of transport of hazardous waste to human health with a neat flow sheet. Discuss the impact of hazardous waste related diseases on human health and the their control methods used. [5]