

JK LAKSHMIPAT UNIVERSITY, JAIPUR

INSTITUTE OF ENGINEERING AND TECHNOLOGY

End Term Examination (Regular/Backlog), April-May 2016

B. Tech (CIVIL) Engineering, Semester-VI



Roll No.....

COURSE CODE: Hazard & Solid Waste Management;
(621)

Time: 3 hours

Max. Marks: 100

Instructions to students:

1. Do not write anything other than your roll number on question paper.
2. Assume suitable data wherever required and mention it clearly.
3. Writing appropriate units, nomenclature, and drawing neat sketches/schematics/ flow chart wherever, required are an integral part of the answer.

Q.1A Objective type multiple choice questions (10 questions @ 1 mark)

10

- i. Hammering process is useful for
A. reduce the size of waste B. reduce the size of metal waste
C. for plastic waste D. none
- ii. Waste which is generated from chemical industries after the specific treatment of these waste which method will prefer for disposal of these waste
a. landfill b. landfill and incineration c. aerobic digestion d. none
- iii. Mass Refused Diesel Fuel is ?
a. Reuse diesel fluid b. mass refused derived fuel c. mass reused derived fuel
d. none
- iv. In solid waste LDPE material is represents for ?
a. recyclable plastic b. plastic c. both a& b d. none
- v. Hospital waste is disposed by
A. incineration method B. steam treatment C. landfill D. none
- vi. Density classification method used for
a. separate dust particle b. separate light metal c. separate paper & plastic
d. both a & c
- vii. All food chain well explained on the basis of
a. producer b. consumers c. bacteria d. none
- Viii. Air classification system used to separate solid waste
A. light fraction B. heavy fraction C. both a & b D. metal material
- ix. Biomedical waste may be disposed of by
a. landfilling b. incineration c. biotransformation d. none
- x. Hazard is define as
a. fatal effect on human life b. toxic effect on environment c. reactivity of substance d. both a & b

Q.2 Short answer type questions (4 questions @ 2.5 marks)

10

- 1 Write short note on leachate of solid waste.
- 2 Write short note on ecosystem of earth .

3	Draw the flow chart of pyrolysis of solid waste.	
4	Write short note on phosphate cycle on water.	
Q.3A	Discuss your view how you make safe your environment	05
Q.3B	Explain the Sulphur biogeochemical cycle.	05
Q.4A	Explain the whole process how we can get the energy from waste materials.	05
Q.4B	Write short note on food web and food chain of ecosystem.	05
Q.5A	Explain the whole process of commingled waste separation & treatment with flow chart	05
Q.5B	Discuss the Refused Diesel Fuel incinerator for MSW.	05
Q.6A	Energy is important component for any ecosystem explain it with suitable example.	05
Q.6B	Draw the flow chart for yard waste	05
	OR	
Q.6B	Discuss the various solid waste on the basis of major sources	05
Q.7A	Draw the tentative solid waste collection system and transportation system of your area or city	05
Q.7B	Why the landfill practices for least preferable method for solid waste worldwide.	05
	OR	
Q.7B	Explain separation and processing of metal canes from solid waste	05
Q.8A	Explain the various stage of bio transformation of MSW.	10
Q.9A	Discuss the Mass burn incineration for solid waste .	10
Q.9B	Explain the haul container system for MSW transportation in your city	10
	OR	
Q.9B	Explain the structure and function of an ecosystem	10