



21-12-2015

DOON UNIVERSITY, DEHRADUN
Final Semester Examination, 2015, First Semester
M. Tech. (Environmental Technology)
ETC 530: Solid & Hazardous Waste Management

Time Allowed: 2 Hours

Maximum Marks: 50

SECTION: A (Answer in about max 300 words).

Attempt **ALL** questions.

(Marks: $7 \times 5 = 35$)

1. Describe solid waste screening and size reduction methods in detail.
2. Write short notes (Any TWO):
 - a. Magnetic separation
 - b. Eddy current devices
 - c. RDF
3. Write short notes (Any TWO):
 - a. Rotary kiln incinerator
 - b. Hazardous waste storage facility design criteria
 - c. Hazardous waste coding and labelling system
4. Write short notes (Any TWO):
 - a. Stages of landfill of operation and chemical evolution
 - b. Geotextile materials
 - c. Waste compatibility in co-disposal operations
5. Describe solid and hazardous waste treatment methods (Any Two):
 - a. Precipitation
 - b. Solidification and stabilization
 - c. Case study: Solid waste management practices in Mysore city

SECTION: B (Answer in about 1000 words).

(Marks: = 15)

1. Describe municipal solid waste incinerator in details – draw a diagram of unit operation and discuss the air cleaning in details also write shot note on residue disposal option.
Give a short note on current environmental issues pertaining to incineration technology.