



DOON UNIVERSITY, DEHRADUN
Mid Semester Examination, 2014, First Semester
M. Tech. (Environmental Technology)
Course: ETC 530 - Solid and Hazardous Waste Management

Time Allowed: 2 Hours

Maximum Marks: 30

SECTION: A (Answer in about max 100 words).

Attempt any **EIGHT** questions.

(Marks: 1.25 x 8 = 10)

1. Define P₂ and R₃ strategies for solid waste management.
2. In waste management and policy planning the role of stakeholders is very important. Taking this in account, identify major stakeholders involved in MSW management system in your home town/city.
3. Write names of major waste-to-energy technologies available worldwide.
4. What is composting and also mention optimum ranges of pH, moisture, temperature and C: N ratios required for solid waste composting.
5. What are the end products of aerobic and anaerobic composting?
6. What is integrated solid waste management (IWM) system also discuss the waste management hierarchy system.
7. Draw the flow of materials in MSW management system of Class-I and Class-II city in India.
8. Differentiate between Reuse and Recycling
9. Write names of industrial-scale waste-to-energy plants working in India.
10. Write about primary and secondary waste collection facilities in India cities.

SECTION: B (Answer in about 300 words).

Attempt **ALL** questions.

(Marks: 5 x 4 = 20)

1. "*Waste is environmental, social, economic and resource problem*". Elaborate the statement with suitable examples/case studies.
2. Elaborate the linkage between globalization and waste management.
3. Write purpose of Resource Conservation and Recovery Act (RCRA). Also discuss the changes in waste management hierarchy after implementation of this Law.
4. Discuss waste collection system in India.