



Name :
Roll No. :
Invigilator's Signature :

CS/MHA/SEM-2/MHA-204/2012

2012

BIO-MEDICAL WASTE MANAGEMENT

Time Allotted : 3 Hours

Full Marks : 70

The figures in the margin indicate full marks.

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

GROUP – A

(Multiple Choice Type Questions)

1. Choose the correct alternatives for any *ten* of the following:

$10 \times 1 = 10$

 - i) schedules are found in the Bio-Medical Waste (Management & Handling) Rules, 1998.
 - a) Ten
 - b) Seven
 - c) Six
 - d) Five.
 - ii) Category No. 7 of Bio-Medical Waste (Management & Handling) Rules, 1998, is
 - a) animal waste
 - b) liquid waste
 - c) solid waste
 - d) none of these.
 - iii) Management of Radioactive waste should be undertaken as per the guidelines of
 - a) Ministry of Health and Family Welfare
 - b) Pollution Control Board
 - c) Bhaba Atomic Research Centre (BARC).



- iv) No untreated bio-medical waste shall be kept or stored beyond a period of
- a) 36 hours
 - b) 24 hours
 - c) 72 hours
 - d) 48 hours.
- v) Anatomical waste includes
- a) placenta
 - b) contaminated with blood & body fluid
 - c) needle
 - d) all of these.
- vi) Source reduction of waste can be done by
- a) good operating practices
 - b) selecting material substitution
 - c) improved inventory control
 - d) all of these.
- vii) PVC stands for
- a) Polyvinyl chloride
 - b) Polyvinyl cycle
 - c) Polio Vaccine Category
 - d) None of these.
- viii) Materials which may be recycled are all except
- a) Glass
 - b) Aluminum
 - c) X-ray film
 - d) Earthen pot.
- ix) Pre-treatment of waste is required for
- a) to disinfect the waste
 - b) to reduce the bulk of waste
 - c) to make waste unrecognisable
 - d) all of these.



- x) Combustion efficiency (CE) of incinerators shall be at least
- | | |
|-----------|------------|
| a) 75.00% | b) 85.00% |
| c) 95.00% | d) 99.00%. |
- xi) Microwave treatment shall not be used for
- | | |
|---------------|----------------------|
| a) cytotoxic | b) radioactive waste |
| c) body parts | d) all of these. |
- xii) Reduction of microbiological contamination to a safe level is
- | | |
|------------------|---------------------|
| a) disinfection | b) disposal |
| c) sterilization | d) decontamination. |

GROUP – B

(Short Answer Type Questions)

Answer any *three* of the following. $3 \times 5 = 15$

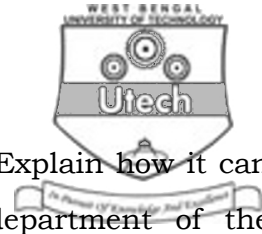
2. Training for Biomedical waste management.
3. Categories of biomedical waste with examples.
4. On-site Treatment of Biomedical waste in the hospital.
5. Steam Sterilization in the hospital.

GROUP – C

(Long Answer Type Questions)

Answer any *three* of the following. $3 \times 15 = 45$

6. What is Common Regional Facility ? Discuss the functions of the facility in the Healthcare Industry. Explain why these facilities are getting importance now-a-days in the health care sectors. $2 + 8 + 5$



7. What is Standard Operating Procedure ? Explain how it can be effectively utilized in the various department of the hospital for biomedical waste management. 3 + 12
 8. What is pre-treatment of waste ? What are the processes of pre-treatment ? Discuss the various criteria for selecting appropriate medical waste treatment technologies. 2 + 4 + 9
 9. Assume that you are recently appointed as a manager of a newly launched 100 bed "Tulip Hospital" at Durgapur and given responsibility to prepare a biomedical waste management programme (BMWMP) for your hospital. Show how you will prepare this BMWMP involving all the areas of waste management.
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