



# BRAINWARE UNIVERSITY

Term End Examination 2023-2024

Programme – MBA(HM)-2022

Course Name – Hospital Waste Management

Course Code - MBAHM302

( Semester III )

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Full Marks : 60

Time : 2:30 Hours

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

## Group-A

(Multiple Choice Type Question)

1 x 15=15

1. Choose the correct alternative from the following :

(i) Choose among the following options which is the flow of Bio-Medical Waste from its generation to final disposal?

- |  |  |
|--|--|
| a) Generation, segregation, storage, transportation, treatment, and disposal | b) Generation, transportation, segregation, storage, treatment, and disposal |
| c) Generation, storage, segregation, transportation, treatment, and disposal | d) Generation, storage, transportation, segregation, treatment, and disposal |

(ii) Identify among the following which department generates Bio-medical Waste in a healthcare facility, mainly consisting of used sharps?

- |                               |                                |
|-------------------------------|--------------------------------|
| a) Dental clinic              | b) Outpatient department (OPD) |
| c) Inpatient department (IPD) | d) Diagnostics                 |

(iii) identify from the following options: Cytotoxic and expired drugs are disposed of by

- |                 |                          |
|-----------------|--------------------------|
| a) Dumping      | b) Autoclave             |
| c) Incineration | d) Chemical disinfection |

(iv) What does the poor disposal of bio medical waste cause?

- |                        |                     |
|------------------------|---------------------|
| a) Infectious diseases | b) Medical issues   |
| c) Allergies           | d) All of the above |

(v) Identify from the following options: If the waste generated is hazardous, generators should obtain \_\_\_\_\_.

- |                          |                      |
|--------------------------|----------------------|
| a) Manifest              | b) Permit            |
| c) Identification number | d) Chemical analysis |

(vi) What is the recommended method for the final disposal of Bio-medical Waste?

- |                    |                            |
|--------------------|----------------------------|
| a) Landfill burial | b) Incineration            |
| c) Composting      | d) Flushing down the drain |

(vii) What is Bio-medical Waste?

- |   |                                  |
|---|----------------------------------|
| a) Waste generated in households            | b) Waste generated in industries |
| c) Waste generated in healthcare facilities | d) Waste generated in schools    |

- (viii) Choose from the following options : What is the importance of proper waste management in the dental clinic department of a healthcare facility?  
 a) Enhancing infection control  
 b) Reducing energy consumption  
 c) Promoting waste recycling  
 d) Ensuring patient confidentiality
- (ix) Identify which of the following is not true about Microwave irradiation technique  
 a) it is an effective treatment in sterilizing the infected , disposable waste  
 b) The waste in this technique is first shredded and then humidified and irradiated  
 c) This is an inexpensive system  
 d) It requires good operational and maintenance control
- (x) Identify: What is the importance of proper waste management in the operating theater department of a healthcare facility?  
 a) Ensuring surgical success  
 b) Promoting waste reduction  
 c) Enhancing patient recovery  
 d) Maximizing healthcare revenue
- (xi) What are the major aims of Bio-medical Waste Management? (Choose all that apply) A) Reducing occupational hazards B) Protecting public health C) Ensuring regulatory compliance D) Encouraging waste hoarding  
 a) A,B  
 b) A,B,C  
 c) B,C,  
 d) A,C
- (xii) Identify among the following which is the primary purpose of the World Health Organization (WHO) guidelines on waste management in healthcare facilities?  
 a) Reducing healthcare costs  
 b) Enhancing patient comfort  
 c) Promoting sustainable practices  
 d) Minimizing infection risks
- (xiii) What are the major sources of infectious Bio-medical Waste? (Choose all that apply) A) Hospitals B) Research labs C) Dental clinics D) Shopping malls  
 a) A  
 b) A,B,C  
 c) A,B  
 d) B,C
- (xiv) What is the primary purpose of the Biomedical Waste Management Rules, 1998?  
 a) To promote healthcare research  
 b) To reduce the generation of waste  
 c) To regulate the safe handling and disposal of biomedical waste  
 d) To encourage waste export
- (xv) What is the importance of proper Bio-medical Waste Management? (Choose all that apply) A) Preventing disease transmission B) Minimizing environmental pollution C) Maximizing waste production D) Reducing healthcare expenses  
 a) A,B,D  
 b) A,B,C  
 c) C  
 d) B,C

### Group-B

(Short Answer Type Questions)

3 x 5=15

2. Discuss the role of the World Health Organization guidelines in promoting sustainable waste management practices in healthcare facilities. (3)
3. Examine the importance of personal protective equipment , training, and adherence to protocols (3)
4. Explain the concept of Hospital-acquired infections. (3)
5. Provide an example of waste that falls under the category of Expired Pharmaceuticals. (3)
6. What are the advantages of Chemical disinfection in Bio medical waste management? (3)

OR

What is the treatment and disposal procedure of Waste sharps Including metals? (3)

### Group-C

(Long Answer Type Questions)

5 x 6=30

7. Write a brief note on bio medical waste collection and segregation. (5)
8. Illustrate the key steps involved in the transportation of bio-medical waste within a hospital. (5)
9. Examine the potential environmental impacts of improper biomedical waste management. (5)
10. Describe the concept of a secured landfill for the disposal of healthcare waste (5)
11. Describe the role of regulatory bodies in enforcing the Biomedical Waste Management and Handling Rules. (5)
12. Explain the wet thermal technology used in healthcare waste management. (5)

**OR**

What is Waste Assessment Strategy? (5)

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