

**M. Sc. (Medical Biotechnology) Sem-IV (Choice Based Credit System) :  
SUMMER - 2019**

**SUBJECT: BIOMEDICAL WASTE AND ENVIRONMENT**

Day: **Sunday**  
Date: **21/04/2019**

**S-2019-1512**

Time: **10.00 AM TO 01.00 PM**  
Max. Marks: 60

**N.B.:**

- 1) **Q.NO.1** and **Q.NO.5** are **COMPULSORY**. Answer Any **TWO** from questions **NO.2, 3 and 4** and from **6, 7 and 8**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Answers to both the sections should be written in the **SAME** answer book.

**SECTION-I**

- Q.1** Attempt **ANY FIVE** of the following questions in brief **[10]**
- a) Write in brief classification of Environment.
  - b) What are biodegradable solids in BMW?
  - c) Justify the cold as stress.
  - d) Discuss infectious pollutants in medical waste.
  - e) Explain any four water borne diseases.
  - f) What are the sources of Environmental pollution?
- Q.2** Answer the following questions: **[10]**
- a) Describe the sources of Noise pollution and its effects on Human health.
  - b) Write the classification of Biomedical waste.
- Q.3** Explain the following: **[10]**
- a) Environmental problems in India.
  - b) Metabolic responses of microorganisms to hot water discharge.
- Q.4** Write short notes on **ANY TWO** of the following: **[10]**
- a) Control of radioactive waste
  - b) Incineration
  - c) Methanogenesis

**SECTION-II**

- Q.5** Answer the following: **[10]**
- a) Discuss the impact of infections waste on human health.
  - b) Describe the legislation and policies on health care waste management.
- Q.6** Answer **ANY TWO** of the following: **[10]**
- a) What are modern methods for handling biomedical waste?
  - b) Describe the disposal of hazardous waste.
  - c) Discuss the 3R principle with reference to biomedical waste
- Q.7** Write short notes on the following: **[10]**
- a) Deep-burial pit
  - b) Secured land fill
- Q.8** Answer the following: **[10]**
- a) Discuss about common treatment facilities in- site and off –site.
  - b) Discuss segregation approach for management of BMW.