The West Bengal University of Health Sciences M.Sc. in Medical Microbiology Part-I February-March, 2023 Examination

## Subject : Research Methodology and Environmental Sciences

Full Marks : 100

Time : 3 hrs.



Attempt all questions

Choose the most appropriate answer of the following :

- What are the roles of biomedical research in the practicing field of healthcare professionals?
  Briefly state how to review a research article to enhance knowledge.
  4+6
- What is ecological pyramid? Prescribe the various types of ecological pyramids with suitable examples.
  2+8
- Differentiate between renewable and non-renewable resources. Mention the role of human in conservation of energy resources citing examples.
  4+6
- 4. What are the broad types of epidemiological studies? Explain how would you plan for an epidemiological study to investigate a research problem.
- 5. What do you mean by Randomized Controlled Trial? What are its advantages over and above the conventional empirical observations? What is Randomization? 4+4+2
- 6. What are the various types of biodiversity? 'India is a mega-diversity nation' Justify. 4+6
- 7. What is photochemical smog? How is it formed? Briefly discuss its health impacts. 2+2+6
- Define urban waste and classify it. Illustrate the pathways of sustainable urban waste management.
  2+2+6
- Mention different types of air pollutions. What are the global impacts of water pollution and how we can prevent it?
   4+3+3
- 10. What are the various watershed management practices? State its benefits and limitations.

4+3+3

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