

M.Sc Sem-3 Examination

504

Env Science (Env Biotech)

November-2024

Time : 2-30 Hours]

[Max. Marks : 70

Instructions: All Questions carry equal marks
Attempt all Questions

- | | | |
|-------|--|----|
| Q I | Explain the use of environmental biotechnology to improve environment. Name five Environmental Buzzwords and explain them in detail along with an example. | 14 |
| | OR | |
| Q I | A. Explain the concept of Genetic engineering in environmental management. | 7 |
| | B. Write a note on concept of environmental biotechnology along with its objectives. | 7 |
| Q II | Explain the concept of bio-absorption: factors affecting bio absorption and limitations of bio absorption. | 14 |
| | OR | |
| Q II | A. Describe the technique of bioleaching in detail. | 7 |
| | B. Explain in-situ and ex-situ bioremediation. | 7 |
| QIII | Explain Aerobic vs. anaerobic degradation, testing of biodegradability and Bio-oxidation of phenolic compounds. | 14 |
| | OR | |
| Q III | A. Enlist different kinds of pesticides and explain its merits and demerits. | 7 |
| | B. Write a note on different environmental clean-up technologies. | 7 |
| Q IV | What is remote sensing ?Enlist and explain applications of remote sensing. | 14 |
| Q IV | A. Describe the process of electromagnetic remote sensing and its key stages. | 7 |
| | B. Give a brief account on types of Satellites Used in Remote Sensing | 7 |
| Q V | Attempt any 7 out of 12 Short questions (two marks each) | 14 |
| 1 | Define: phytoremediation and Microbial Bioremediation. | 2 |
| 2 | State the full form of CDM and EMR. | 2 |
| 3 | Name microorganism involved in bioremediation. | 2 |
| 4 | Ramsar Convention took place in which year? State the country where it was organised. | 2 |
| 5 | What were the key features of Convention on Biological Diversity. | 2 |
| 6 | State the main objective of Kyoto Protocol. | 2 |
| 7 | Which convention aimed to ensure that international trade in wild animals and plants does not threaten their survival. | 2 |
| 8 | Define: adsorption with an example. | 2 |
| 9 | Explain the term: Genetic Engineering. | 2 |
| 10 | What is raster data in remote sensing ? | 2 |
| 11 | State the difference between reuse and recover. | 2 |
| 12 | What is GIS? State its use. | 2 |