Reg. No. | | | | | | | | | |

BSCBTV 354

Credit Based VI Semester B.Sc. Examination, September 2022
(2020 – 21 and Earlier Batches)
BIOTECHNOLOGY
Environmental Biotechnology

Time : 3 Hours Max. Marks : 80

Instruction : *Draw labelled diagrams* ***wherever*** *necessary.*

PART – A

1. Write brief notes on **any ten** of the following. **(2×10=20)**
   a) Define Environmental Biotechnology.
   b) Define Environmental pollution.
   c) Define BOD.
   d) Mention any two pollution indicator organisms.
   e) Give any two renewable sources of energy.
   f) Define biopesticides.
   g) What are xenobiotics ?
   h) Write any two causes of acid rain.
   i) What is *In situ* bioremediation ?
   j) Mention any two uses of energy gardens.
   k) Expand CRZ.
   l) Define MIC.

PART – B

Write **any four full** questions choosing **one** from **each** Unit. **(4×15=60)**

Unit – 1

2. a) Write a note on photo chemical smog.
   b) Explain the causes of eutrophication.
   c) Explain the carbon cycle in detail. **(4+4+7)**

OR

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3. a) Write a note on biomagnification.
   b) Explain soil pollution and its control measures.
   c) Give an account on green house effect. **(3+5+7)**

Unit – 2

4. a) Write a note on phyto remediation.
   b) Explain in detail activated sludge system.
   c) Discuss composting and its applications. **(4+4+7)**

OR

5. a) Write a note on land-farming.
   b) Explain the microbial influenced corrosion and its remedies.
   c) Give detailed account on biological treatment of liquid wastes. **(3+5+7)**

Unit – 3

6. a) Write a non-conventional sources of energy.
   b) Give an account on Pongamia.
   c) Explain biogas production in detail. **(4+4+7)**

OR

7. a) Write a note on biomass energy.
   b) Give an account on wind and tidal energy and its utilization.
   c) Explain the process of bioethanol production. **(3+5+7)**

Unit – 4

8. a) Write a note on degradation paper.
   b) Give an account on CRZ.
   c) Describe the biofertilizer with suitable example. **(4+4+7)**

OR

9. a) Write a note on GMO.
   b) Give an account on degradation of cellulose.
   c) Elaborate the *Bacillus thuringiensis* as biopesticide. **(3+5+7)**
