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NY—203—2023

FACULTY OF SCIENCE

M.Sc. (Second Year) (Fourth Semester) EXAMINATION

NOVEMBER/DECEMBER, 2023

(New/CBCS Pattern)

BIOTECHNOLOGY

Paper BT-XVI

(Environmental Biotechnology)

(Monday, 11-12-2023)

Time : 2.00 p.m. to 5.00 p.m.

Time—Three Hours

Maximum Marks—75

N.B. :— (i) All questions are compulsory.

(ii) Draw a well labelled diagram wherever necessary.

1. Describe global environmental problems and their impact in biotechnological approaches for management. 15

Or

Write a nitrogen cycle with microorganisms involved in it.

2. Describe biofuels with advantages and disadvantages. 15

Or

Write notes on :

(a) MEOR

(b) Bioemulsifiers.

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3. Write short notes on : 15

- (a) Aquatic habitats
- (b) Air pollution.

Or

What is pollution ? Write a detailed note on water pollution, its sources, control of water pollution and its effects on humans and animals.

4. Describe bioremediation of contaminated soils and wastelands. 15

Or

Write notes on :

- (a) Trickling filter
- (b) Rotating discs.

5. Write short notes on (any *three*) : 15

- (a) Hydrocarbons
- (b) Carbon cycle
- (c) Activated sludge
- (d) Need for water management
- (e) Energy flow.

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