

ED-645

M.Sc. 3rd Semester Examination, March-April 2021

BIOTECHNOLOGY

Paper - XII

Environmental Biotechnology

Time : Three Hours][Maximum Marks : 80[Minimum Pass Marks : 16

Note : Answer all questions. All questions carry equal marks.

1. Describe major types of pollution and their methods for measurement.

OR

Write notes on the following :

(a) Issues of environment

(b) Air pollution and its control through biotechnology

2. Describe microbiology of waste water treatment.

OR

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(Turn Over)

(2)

Write notes on the following:

- (a) Anaerobic digestion
- (b) Source of water pollution
- (c) Chemical method of waste water treatment
- (d) Activated sludge
- **3.** What are GMOs and describe their impact on environment ?

OR

Write short notes on any **two** of the following :

- (a) Biodegradation of cellulose, lignin and hydrocarbon
- (b) Xenobiotics
- (c) Treatment of waste water of distillery
- (d) Bioremediation
- **4.** Describe biopesticides and their role in integrated pest management.

OR

Write short notes on any **two** of the following :

- (a) Global environmental problems
- (b) Solid waste management
- (c) IPR and patent
- (d) Role of National Organization in Biotechnology

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(Continued)

(3)

- 5. Write short notes on the following :
 - (a) Environment : Basic concepts
 - (b) Oxidation ditches
 - (c) Antibiotic industries
 - (d) Trade secrets

OR

Write short notes on the following:

- (a) Major issues of environment
- (b) Up flow anaerobic sludge blanket reactors
- (c) Treatment of waste water of tannery industries
- (d) Trademark copyright

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180

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