



JAZ-003-013303

Seat No. _____

M. Sc. (Biotechnology) (Sem. III) (CBCS)

(W.E.F. 2016) Examination

December - 2019

BT - 314 : Environmental Biotechnology

Faculty Code : 003

Subject Code : 013303

Time : $2\frac{1}{2}$ Hours]

[Total Marks : **70**

1 Answer briefly any **seven** of the following : **14**

- (i) Why do polycyclic aromatic hydrocarbons resist biodegradation ?
- (ii) What is a biosensor ?
- (iii) What are xenobiotic compounds ?
- (iv) What is bioremediation ?
- (v) What is carbon credit ?
- (vi) Enlist Green House gases.
- (vii) What is alpha biodiversity ?
- (viii) What is species conservation ?
- (ix) What is global warming ?
- (x) What is radio-activity ?

2 Answer any **two** of the following : **14**

- (i) Describe the applications of biosensors.
- (ii) Discuss microbial degradation of textile dyes.
- (iii) Discuss role of biotechnology in the treatment of industrial effluents.

3 Answer the following : **14**

- (i) Give an account of the use of mycorrhizae in reforestation.
- (ii) Describe types of biofertilizers citing suitable examples.

OR

3 Answer the following : **14**

- (i) Comment on bioremediation of radioactive wastes.
- (ii) Describe applications of microorganisms as biocontrol agents in agriculture.

4 Answer the following : **14**

- (i) Give an account of biological hydrogen generation.
- (ii) Compare significance of energy crops and microbes as sources of energy.

5 Comment on any **two** of the following : **14**

- (i) Gene bank
 - (ii) 6-15 countries
 - (iii) GMOs and biosafety
 - (iv) Ex-situ conservation.
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