



HM-003-013303

Seat No. _____

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

May / June – 2017

BT-315 : Environmental Biotechnology (Elective)

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) What is Environmental Impact Assessment ?
- (ii) Why are plastics resistant to biodegradation ?
- (iii) Enlist mechanisms by which PGPR promote plant growth.
- (iv) What is renewable energy ?
- (v) Enlist the limitations of biopesticides.
- (vi) What is global warming ?
- (vii) Define biodiversity.
- (viii) What is conservation of biodiversity ?
- (ix) What is carbon footprint ?
- (x) Which are the most important environmental heavy metals ?

2 Answer any two of the following : 14

- (i) Give an account of biodeterioration of leather.
- (ii) Describe applications of biosensors in environment monitoring.
- (iii) Discuss microbial remedies for oil spills.

3 Answer the following : 14

- (i) Give an account of mycorrhizae in reforestation.
- (ii) Discuss bioremediation of radioactive wastes.

OR

- 3** Answer the following :
- (i) Describe the importance of phosphate-solubilizing microbes as biofertilizers.
 - (ii) Discuss various microbes used as biopesticides.
- 4** Answer any **two** of the following : **14**
- (i) Discuss the effects of heavy metals on microbes and higher organisms.
 - (ii) Describe various schemes to reduce carbon emissions.
 - (iii) Describe alternative energy sources.
- 5** Write short notes on any **two** of the following : **14**
- (i) Species concept
 - (ii) Biodiversity and Agriculture
 - (iii) Habitat destruction
 - (iv) Endangered Species Management.
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