



JAZ-003-1193003 Seat No. _____

**M. Sc. (Biotechnology) (Sem. III) (CBCS)
(W.E.F. 2016) Examination**

December - 2019

BT - 314 : Environmental Biotechnology

(Elective - 1)

Faculty Code : 003
Subject Code : 1193003

Time : $2\frac{1}{2}$ Hours] [Total Marks : 70

- 1 Answer any **seven** of the following : (each of 2 marks) 14

 - (1) What is the role of *Dienococcus* sp. in bioremediation?
 - (2) Define the term "biofertilizer."
 - (3) What are xenobiotic compounds?
 - (4) What is carbon credit?
 - (5) Enlist microbes important in hydrogen production.
 - (6) What is biogas? How is it produced?
 - (7) Which enzyme is responsible for the degradation of oil, and how?
 - (8) Name petroleum compounds that pollute environment.
 - (9) Enlist factors threatening biodiversity.
 - (10) What is bioremediation?

2 Answer any **two** of the following : (each of 7 marks) 14

 - (a) Write a short note on "biosensor."
 - (b) Describe how Biopesticides differ from chemical pesticides.
 - (c) Explain textile dye degradation by microbes.

3 Answer the following : (each of 7 marks) 14

 - (a) Write a note on microbial removal of heavy metals.
 - (b) How are Mycorrhizae useful in reforestation and afforestation?

OR

- 3** Answer the following : (each of 7 marks) **14**
- (a) Write a note on biofule.
 - (b) What is global warming? Enlist its impacts.
- 4** Answer the following : (each of 7 marks) **14**
- (a) Write a note on generation of energy by microbes.
 - (b) Write a note on past, present, and future impacts of global warming.
- 5** Answer any **two** of the following : (each of 7 marks) **14**
- (a) How does bacteria produce methane?
 - (b) Write a note on biodiversity management and protection.
 - (c) Write a note on the conservation of energy.
 - (d) Briefly describe radiowaste management.
-