

HDY-003-1133004

Seat No. _____

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

November / December - 2017

BT-314 : Environmental Biotechnology - I (Elective)

Faculty Code: 003 Subject Code: 1133004

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

- 1 Answer the following: (Any Seven out of Ten, each of 14 02 marks)
 - (1) What is Microbial degradation?
 - (2) What is bioremediation?
 - (3) What is aforestation?
 - (4) What are radioactive wastes?
 - (5) What is reforestation?
 - (6) Define the term "Biodiversity".
 - (7) What are recalcitrant compounds?
 - (8) Enlist different bacteria useful to clean-up oil spill.
 - (9) Enlist the impacts of pollutants on environment.
 - (10) What is biomagnification?
- 2 Answer the following: (Any Two out of Three, each of 14 07 marks)
 - (a) How would you remove oil spills and grease deposits from environment using microbes?
 - (b) Write a short note on "Bio pesticides".
 - (c) What are Biofertilizers? Discuss.

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| 3 | Ans | swer the following: | 14 |
|---|---|---|----|
| | (a) | Write a note on "Application of mycorrhizae in reforestation". | |
| | (b) | Discuss molecular mechanisms of radiation resistance in microbes. | |
| | | OR | |
| 3 | Ans | swer the following: | 14 |
| | (a) | Discuss how Dienococcus sp. is useful in bioremediation of radioactive wastes". | |
| | (b) | Write a note on Biogas production. | |
| 4 | Answer the following: | | 14 |
| | (a) | What is conservation of energy? Discuss. | |
| | (b) | What is global warming? Discuss its future impacts. | |
| 5 | Answer the following: (any two out of four, each of 07 marks) | | 14 |
| | (a) | How would you manage and protect endangered species? Discuss your ideas and give innovative suggestions. | |
| | (b) | Write a note on "Biodiversity" | |
| | (c) | Discuss factors threatening biodiversity. | |

(d) What are the effects on heavy metals in food chain?