

Register Number.....

M.TECH., DEGREE EXAMINATIONS: NOV/DEC 2012

Third Semester

BIO TECHNOLOGY

BTY565: Environmental Biotechnology

Time: Three Hours

Maximum Marks: 100

Answer All Questions:-

PART A (10 x 2 = 20 Marks)

1. Define symbiosis.
2. Give two advantages of environmental monitoring.
3. Define flocculation.
4. Define BOD₅.
5. Define xenobiotics.
6. List the advantages of phytoremediation.
7. What is the hazard associated with hospital waste?
8. What are the disadvantages in vermicompositing?
9. What are third generation biofuels?
10. To which category do BGA belong (prokaryotes or eukaryotes)?

PART B (5x14=70 Marks)

11. a) Describe about the various types of interactions among soil microbes.

(OR)

- b) Explain about the ecological adaptations.

12. a) Explain in detail about activated sludge treatment process.

(OR)

- b) Discuss the working principle of trickling filter in waste water.

13. a) Explain about the degradation of petroleum based wastes.

(OR)

- b) Define surfactants. Explain its role in pollutant removal.

14. a) Write short notes on (i) Pharmaceutical industrial waste management (7)
(ii) Composting (7)

(OR)

b) Explain the various steps involved in the treatment of dairy industry waste water.

15. a) Write short notes on (i) Microbial polymer production (7)
(ii) Bio-plastic technology (7)

(OR)

b) Discuss about biofuels and the disadvantages associated with biodiesel.
