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BTH 501

Third Semester M.Sc. Degree Examination, December 2018

BIOTECHNOLOGY

(CBCS)

Microbial Biotechnology

Time : 3 Hours

Max. Marks : 70

PART – A

Write short notes on **any ten** of the following (**not exceeding 1 page each**). **(10×2=20)**

1. a) Ti Plasmid.
- b) L-lysine.
- c) SCP.
- d) Frankia.
- e) Dextran.
- f) Transformed products.
- g) Trichoderma as a biocontrol agent.
- h) Sauerkraut.
- i) Thiamine.
- j) Azotobacter.
- k) Enzyme immobilization.
- l) Invertase.

PART – B

Write explanatory notes on **any five** of the following (**not exceeding 3 pages each**). **(5×6=30)**

2. Mycorrhiza as biofertilizer.
3. Genetic transformation in Aspergillus.
4. Purification of microbial protease and invertase.
5. Biogas production.
6. Bacillus thuringiensis as a biopesticide.
7. Cultivation of Oyster mushrooms.
8. Bacterial cellulose and its importance.

P.T.O.



PART – C

Answer **any two** of the following (**not** exceeding **7** pages **each**). **(2×10=20)**

9. Discuss the importance and microbial production of glutamic acid.
 10. Discuss the uses and microbial production of amylases.
 11. Give a detailed account on waste utilization to generate biofuels.
 12. Discuss plant growth promoting rhizobacteria.
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