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MBS 456

II Semester M.Sc. Degree Examination, September/October 2022

MICROBIOLOGY

Microbial Biotechnology

Time : 3 Hours

Max. Marks : 70

I. Write short notes on **any five** of the following :

(5×3=15)

- 1) Heterologous protein
- 2) PHB.
- 3) Functional Foods.
- 4) Copyrights.
- 5) Peptide vaccines.
- 6) Catabolite repressor.
- 7) Structural Genes.

II. Write notes on **any five** of the following :

(5×5=25)

- 8) Baculovirus gene expression system.
- 9) L-ascorbic acid synthesis
- 10) Criteria for Microbial patenting.
- 11) Environmental Protection Act.
- 12) Single Cell Protein.
- 13) cDNA.
- 14) Production of monoclonal antibodies.

III. Answer **any three** of the following :

(3×10=30)

- 15) Describe the role of regulatory promoters for gene expression in *Bacillus Subtilis*.
 - 16) Explain screening and production of Streptomycin.
 - 17) Write an account on various sources, isolation and applications of Probiotics.
 - 18) Discuss the procedures to obtain a patent for biotechnological inventions.
 - 19) Elaborate the techniques involved in the production of any two genetically engineered food and their applications.
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