# Reg. No.

# **MBS 506**

### III Semester M.Sc. Degree Examination, December 2018 MICROBIOLOGY (CBCS-PG-CGPA) Microbial Biotechnology

Time : 3 Hours

- I. Answer **any three** of the following :
  - 1) Explain the role of various promoters in recombinant protein production.
  - 2) Give a detailed note on probiotics and functional foods.
  - 3) Explain the role of microorganisms in production of Biofuel.
  - 4) Elaborate on Good Manufacturing Practices and Good Laboratory Practices in Biotechnological research.
  - 5) What are monoclonal antibodies ? How are they produced ?
- II. Answer any five of the following :
  - 6) Quality Assurance.
  - 7) Biogas from liquid waste.
  - 8) Microbial production of aromatic amino acids.
  - 9) Prokaryotic gene expression.
  - 10) National and international patent laws.
  - 11) ISO and NIH-RAC.
  - 12) Genetically Engineered food.
  - 13) Protein Pharmaceuticals.

Max. Marks: 70

(3×10=30)

(5×5=25)

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III. Write short note on any five of the following :

- 14) Quality control.
- 15) Principles of bioprocesses.
- 16) Vaccines.
- 17) Bacteriocins.
- 18) Streptomycin.
- 19) EPA.
- 20) cDNA.
- 21) Copy right.

(5×3=15)