DF-1512

M. Sc. (Sem. III) (Microbiology) Examination
March/April – 2016
MB-304 : Pharmaceutical Microbiology
(New Course)

Time : 3 Hours] [Total Marks : 70

Instruction :

1. Answer any two the following : 18
   a) Write a detailed note on Different sorts of Microbiological assays for growth promoting and growth inhibiting substances.
   b) Write a note on Mode of action of amino acids as growth promoting substances in tube assay.
   c) Explain in detail: The quantitative theory of microbial growth and inhibition in turbidometric assay.

2. Answer any two the following : 18
   a) Write a note on Environmental Monitoring in pharmaceutical industries.
   b) Give a detailed account on Conventional testing methods for Monitoring of microbiological quality.
   c) Write a detailed note on Clean-in-Place (CIP).

3. Answer any two the following : 18
   a) Explain: Heat as most reliable and widely used method of sterilization of pharmaceuticals.
   b) Write a note on Ophthalmic preparations: Important sterile pharmaceutical products.
   c) Write a note on Quality control of ampoules and infusion containers.

4. Write notes on (any two) : 16
   a) Antibiotics: Important Pharmaceuticals of microbial origin.
   b) rDNA technology has four-fold positive impact on the production of pharmaceutically important proteins.
   c) Microbiological Auditing.