QP CODE:301006 Reg.No:

Third Year B.Pharm Degree Supplementary Examinations - August 2014

PHARMACEUTICS IV (Pharmaceutical Microbiology and Biotechnology)

Time: 3 Hours Total Marks: 100

- Answer all Questions.
- Draw suitable diagrams wherever necessary

Essay (3x10=30)

- 1. Explain the structure of a bacterial cell in detail
- 2. Describe aerobic and anaerobic methods of cultivation of bacteria
- 3. Explain thermal methods of sterilization in detail

Short notes (14x5=70)

- 4. Bacterial growth curve
- 5. Neutralization reaction
- 6. Protoplast fusion
- 7. Production of cortisones from progesterones by microbial transformation
- 8. Classify immunity
- 9. Cloning vectors
- 10. Ideal disinfectant
- 11. Microbial assay of antibiotics by diffusion
- 12. Electron microscopy
- 13. Poliomyelitis vaccine
- 14. Staining methods for identification of bacteria
- 15. Fermentatory production of vitamin B₁₂
- 16. Complement fixation test
- 17. Bacterial count
