QP CODE: 311006 (new scheme)

# Third Year B.Pharm Degree Supplementary Examinations January 2018 PHARMACEUTICS III (Pharmaceutical Microbiology and Biotechnology) (2012 Scheme)

### Time: 3 Hours

- Answer all Questions.
- Draw diagram wherever necessary.

#### Essay

- 1. Discuss microscopic methods of bacterial identification highlighting staining method in detail.
- 2. Discuss in detail about hybridoma technology and its applications.
- 3. Discuss in detail the fermentative production of penicillin.

#### Short notes

- 4. Bacterial spores with examples
- 5. Dry heat sterilization
- 6. Principle of antigen antibody reactions
- 7. Sterility testing methods
- 8. Pharmaceutically important fungi with examples
- 9. Parts of a fermenter with uses
- 10. Disinfectant evaluation methods
- 11. Microbiological transformation- examples and uses
- 12. Compare various methods of enzyme immobilization
- 13. Taxonomy of bacteria
- 14. Virus-classification and structure in brief
- 15. Defense mechanisms of body against viruses
- 16. Gene cloning- basics and uses
- 17. Pure culture and its importance

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## Total Marks: 100

# (3x10=30)

## (14x5=70)

Reg.No: .....