QP Code: 323006 Reg. No......

## Third Semester B. Pharm Degree Regular/Supplementary Examinations January 2020

## **Pharmaceutical Microbiology**

## (2017 Scheme)

Time: 3 Hours Max. Marks: 75

- Answer all questions to the point neatly and legibly
  Do not leave any blank pages between answers
  Indicate the question number correctly for the answer in the margin space
- Answer all parts of a single question together Leave sufficient space between answers
- Draw table/diagrams/flow charts wherever necessary

Essays (2x10=20)

- 1. Enlist and describe the different methods for identification of bacteria.
- 2. Discuss the phenol coefficient methods used for evaluation of disinfectants

Short Notes (7x5=35)

- 3. Sterility testing of pharmaceutical products
- 4. Cultivation of anaerobic bacteria
- 5. Quantitative measurement of bacterial growth
- 6. Cultivation of viruses
- 7. Microbial assay of antibiotics
- 8. Design of laminar flow equipment
- 9. Types of microbial spoilage for pharmaceutical products

Answer Briefly (10x2=20)

- 10. Principle of dark field microscopy
- 11. Evaluation of microbial stability of pharmaceutical formulations
- 12. Pasteurization
- 13. Different types of fungal spores
- 14. Principle of animal cell culture
- 15. Cell wall composition of eukaryotes
- 16. Classification of clean areas
- 17. Differences between pili and fimbriae
- 18. Differences between antiseptics and disinfectants
- 19. Chemical indicators used in the evaluation of sterilization methods

\*\*\*\*\*\*\*