

UG Odd Semester (CBCS) Exam., December—2016

## PHARMACEUTICAL SCIENCE

( 5th Semester )

Course No. : BPH-503 (C)

( Pharmaceutical Microbiology )

*Full Marks : 75**Pass Marks : 30**Time : 3 hours**The figures in the margin indicate full marks  
for the questions*Answer **five** questions, taking **one** from each Unit

## UNIT—I

1. (a) Discuss the morphological characters and taxonomy of bacteria and fungi. 8
- (b) Write down the various types of staining methods. 7
2. Explain the nutrition factors and isolation techniques of bacteria. Write in brief the lytic cycle of bacteriophages. 8+7=15

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( Turn Over )

## UNIT—II

3. (a) Describe the steps involved in the methods of transformation as a recombination. 9
- (b) Write down the various types of mutations. 6
4. (a) Explain the stages of conjugation during the recombination. 9
- (b) Write a short note on protoplast fusion. 6

## UNIT—III

5. (a) Explain the terms bacteriostatic and bactericidal with examples. Write down the factors influencing disinfectants and antiseptics. 3+5=8
- (b) Explain the method to evaluate efficacy of disinfectants and antiseptics. 7
6. (a) Define the term sterilization. Give classification with example. 2+3=5
- (b) What are the physical methods to control the growth of microbes? 10

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( Continued )

( 3 )

UNIT—IV

7. What do you mean by sterility test? Explain the method of membrane filtration. 3+12=15
8. What are control tests? Explain sampling media and procedure adopted for the test of sterility of pharma control products. 2+13=15

UNIT—V

9. Describe the different methods of microbiological assays. 15
10. What is the significance of microbiological assays? Give the procedure for the assay of penicillin. 5+10=15

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