

**FACULTY OF PHARMACY****Pharm. D II-Year (6 YDC) (Main & Backlog) Examination, August 2016****Subject : Pharmaceutical Microbiology****Time : 3 Hrs****Max. Marks: 70****Note: Answer all questions from Part - A and answer any five questions from Part-B.****PART – A (10 x 2 = 20 Marks)**

- 1 What are spirochetes?
- 2 Define Disinfection and Disinfectants.
- 3 What is Mckonkey's Agar media.
- 4 Write abt the chemical nature of antigens.
- 5 What do y mean by Booster dose?
- 6 Write abt negative staining and its applications.
- 7 What is endo toxin give examples?
- 8 Explain the term phagocytosis with examples.
- 9 Write abt Indole test and its importance.
- 10 What is Widal test write its significance?

**PART – B (5 x 10 = 50 Marks)**

- 11 (a) Describe the history and development of microbiology. (5)  
(b) Discuss the importance of microbes in medical microbiology. (5)
- 12 (a) Explain the physical conditions required for the growth of bacteria. (6)  
(b) Write a note on cultivation of anaerobic bacteria. (4)
- 13 (a) Describe the general methods of classification for bacteria. (5)  
(b) Explain the techniques used in bacterial and viral enumeration. (5)
- 14 (a) Discuss various methods of sterilization for pharmaceutical products. (6)  
(b) Discuss in brief validation of sterilization process. (4)
- 15 (a) What are disinfectants? Explain the mode of action of common disinfectants. (5)  
(b) Discuss in detail any one popular evaluation test for disinfectants. (5)
- 16 Give a brief account on  
(a) blotting techniques. (6)  
(b) PCR. (4)
- 17 (a) Write an essay on microbiological assays and discuss in detail the bioparameters controlling the microbiological assays. (6)  
(b) Describe the process of standardization of vaccines. (4)
- 18 (a) Explain artificial immunity and how is it different from natural immunity. (5)  
(b) Describe the different lab diagnostic tests and treatment for syphilis. (5)

\*\*\*\*\*