

B.Pharm. Fourth Semester (C.B.S.) Examination
PHARMACEUTICAL MICROBIOLOGY AND IMMUNOLOGY—II
Paper—5

Time : Three Hours]

[Maximum Marks : 80

- Note** :— (1) Question No. 1 is compulsory.
 (2) Solve any **FOUR** questions from remaining.
 (3) Draw neat labelled diagrams wherever necessary.

1. Solve any **FIVE** of the following :
 - (a) Explain in brief about sterilization indicators.
 - (b) Write the sources of contamination in aseptic area.
 - (c) Discuss about the portal of entry of Microorganism.
 - (d) Explain in detail about the structure of antibody and enlist its classes.
 - (e) Write a note on ELISA.
 - (f) Define immunity and enlist the various types of immunity.
 - (g) Explain the various factors affecting disinfection activity. 5×4=20
2. Define sterilization and enlist the various methods of sterilization and elaborate the Moist heat sterilization. 15
3. (a) Draw a neat, labelled, layout for designing the Aseptic area and elaborate its parts. 8
 (b) Explain the non specific defense mechanism. 7
4. (a) Define disinfectants and classify. 8
 (b) Discuss the method of preparation of diphtheria. 7
5. (a) Discuss in detail about Antigen, Antibodies reaction. 10
 (b) Write note on radioimmunoassay. 5
6. Differentiate the following :
 - (a) Vaccines and Sera
 - (b) Antigen and antibody
 - (c) Exotoxins and Endotoxins. 15
7. Write short notes on (any **THREE**) :
 - (a) Diagnostic Agents
 - (b) BCG and Polio Vaccines
 - (c) DPT and Rabbits Vaccine
 - (d) Shick's Test. 5×3=15