

M.Pharm (Pharmaceutical Chemistry) 1st Year 2nd Semester Examination-2025
Pharmaceutical Process Chemistry (MPC-204T)

FM-75

Time- 3hr

Answer any five questions taking at least one from each group.

Group-A

1. What are the differences between process chemistry and medicinal chemistry? Discuss the consideration of different parameters related to synthetic strategies that can be applied in process chemistry. [3+12]
2. Write short notes on (a) pilot plant (b) process adaptability (c) Essentials of Pharmaceutical validation (d) Protocol (e) Steps in scaling up [3 x 5]

Group-B

3. Write in detail about the structure, biosynthesis, fermentation process, and uses of Streptomycin. [15]
4. Write in detail about the microbial production of Vitamin B₁₂. [15]
5. Discuss in detail about the fermentation process of Penicillin. [15]

Group-C

6. Explain azeotropic distillation and steam distillation. [15]
7. a) Write in details about long tube vertical evaporator. Why it is preferable over previous evaporators? [9+6=15]
b) Write a note on Soxhlet extraction.
8. Write in details about plate and frame filter press. What are the added advantages of this filter than previous model? [15]

Group D

9. a) What is a fire hazard? What are the types of fire-extinguishers? [5]
b) Discuss in brief the environmental management system ISO14001. [10]
10. a) What are pharmaceutical wastes? Discuss the waste disposal methods & their limitations. [10]
b) What are the Occupations Health Safety Assessment Specifications (OHSAS)? [5]