

QP CODE: 214331

Reg. No:.....

**Second Semester M. Pharm Degree Regular/Supplementary Examinations
May 2022**

M.Pharm (Pharmaceutical Chemistry)

Paper IV - Pharmaceutical Process Chemistry (MPC 204T)

Time: 3 Hours

Total 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

(3x10=30)

1. Explain nitrating agents, aromatic nitration, kinetics and mechanism of aromatic nitration.
2. Explain reaction progress kinetic analysis with respect to streamlining reaction steps and route selection.
3. Explain different types of evaporators and factors affecting evaporation.

Short Notes

(9x5=45)

4. Explain OHSAS-1800.
5. Explain kinetics of halogenation.
6. Explain types of fire and fire extinguishers.
7. Explain vacuum filtration. Add a note on its merits.
8. Differentiate between laboratory scale and pilot scale.
9. Give the characteristics of cost effective routes in unit process.
10. Describe hazard labels of chemicals.
11. Different classes of impurities with examples.
12. Explain production of Penicillin
