

QP CODE: 112329

Reg. No:.....

**First Semester M.Pharm Degree Supplementary Examinations
February 2022
M.Pharm (Pharmaceutical Analysis)**

**Paper II: Advanced Pharmaceutical Analysis (MPA 102T)
(Common for 2017 and 2019 Scheme)**

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. Describe the general principles and classification of residual solvent in impurity. Add note on its analytical procedures.
2. Explain the separation of bound and unbound drug in IA. Enzyme IA and applications of IA.
3. Discuss about WHO and ICH guidelines for stability testing in impurity profiling and degradant characterization

Short Notes

(9x5=45)

4. Describe HPLC finger printing in stability testing of phytopharmaceuticals.
5. Biological assay of adsorbed diphtheria vaccine.
6. What are the stability testing protocol for storage condition.
7. Give the concepts of validation of accelerated stability testing.
8. The principle and procedures for instrument of PCR.
9. Define and classify impurity in drug substance as per ICH guidelines.
10. Discuss the reporting and control of degradation products of impurity in new drug product.
11. Analysis of carbon and sulphur in elemental impurity.
12. Radioimmunoassay.
