

QP CODE: 112329

Reg. No:.....

**First Semester M.Pharm Degree Regular/Supplementary Examinations
April 2023
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. Discuss in detail about the stability studies and concepts of validation of accelerated stability testing and shelf life prediction.
2. Discuss the bioassay of oxytocin (any two methods) in detail
3. Define impurity. Classify the impurities present in the drug/ formulations. Discuss in detail about impurity profile of drugs as per International Council for Harmonisation guidelines

Short Notes

(9x5=45)

4. Principle and procedure involved in the bioassay of the human anti-hemophilic vaccine B
5. Bioassay of heparin sodium IP
6. General analytical procedures for quantification of elemental impurities.
7. Regulatory requirements for Phytopharmaceuticals
8. Bioassay of tetanus toxoid
9. Short term stability studies of formulations.
10. Radioimmunoassay.
11. General analytical procedures for quantification of residual solvent.
12. Quantification and applications of immunoassay
