

**QP CODE: 112329**

**Reg. No:.....**

**First Semester M.Pharm Degree Regular/Supplementary Examinations  
November 2021  
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. Explain photo stability testing guidelines of pharmaceuticals as per ICH guidelines
2. Describe the biological assay of tetanus anti toxin and heparin sodium
3. Explain the guidelines for impurity testing of new drug products

**Short Notes**

**(9x5=45)**

4. Limits and analytical procedures for solvents in pharmaceuticals
5. Analysis of N and S elements
6. Steps involved in stability testing protocols
7. Interaction and complexity of phyto-pharmaceuticals
8. Principle of immunoassays
9. PCR studies for gene regulation
10. Biological products stability testing
11. Characterization of degradation
12. A view on WHO guidelines for stability testing.

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