

**First Semester M.Pharm Degree Supplementary Examinations  
August 2024  
M.Pharm (Pharmaceutical Analysis)**

**Paper IV - Food Analysis (MPA 104T)**

**(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. What are proteins. Classify them giving suitable example. Explain the methods used for the estimation of proteins.
2. Determination of adulteration in fats and oils. Explain hydrogenation of vegetable oils.
3. Explain the effects of pest and insects on various food. Also explain about organophosphorus and organochlorine pesticides analysis.

**Short Notes**

**(9x5=45)**

4. Principle and procedural sequence for estimation of niacin by microbiological assay.
5. Explain the quality control tests for beer.
6. Write briefly about FDA and US-FDA regulations of food products.
7. Explain the analytical methods for the estimation of carbohydrates in food.
8. Explain determination of ethanol and methanol in wine sample.
9. Explain about various methods used for detection of natural dyes.
10. Explain about the methods of analysis of any three food additives.
11. Explain the various analytical methods employed for assuring the quality of butter.
12. Explain about dietary fibre and application of food carbohydrates.

\*\*\*\*\*