

**First Semester M.Pharm Degree Regular/Supplementary Examinations**  
**June 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. Give general methods of analysis of protein foods
2. Discuss on principles of microbial assays of vitamin B series
3. Discuss on analysis of fermentation products with an emphasis analysis of wine.

**Short Notes**

**(9x5=45)**

4. Spoilage of fatty foods and its determination
5. Metabolism of proteins
6. Antioxidants in food products
7. Artificial sweeteners
8. Determination of ice cream quality
9. Analysis of organophosphorous pesticides
10. BIS
11. Determination of milk powder quality
12. Classification, properties and digestion of carbohydrates.

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