

**QP CODE: 114329**

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

**First Semester M.Pharm Degree Regular/Supplementary Examinations  
March 2020**

**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. Discuss in detail about the types and selection of an ideal stabilizers used in food industries and write the determination of any two anti-oxidants
2. Elaborate the analytical method for the determination of adulterants and contaminant of milk in ice cream.
3. Describe in detail about the legislation regulation of food products with special emphasis on BIS.

**Short Notes**

**(9x5=45)**

4. Crude fibre and application of food carbohydrate
5. Explain the principle and procedure for the microbial assay of thiamine hydrochloride
6. Enlist the permitted and non-permitted synthetic dyes in food industry and write any one method for detection.
7. Outline the adulterants used in oils and explain its determination.
8. Analysis of vinegar
9. General method of analysis of amino acids
10. Summarize the various methods used for measurement of spoilage of fats and fatty foods
11. Enlist an artificial sweeteners and flavors used in food industries and mention any one method for determination.
12. Agmark.

\*\*\*\*\*