QP CODE: 114329	Reg. No:

## First Semester M.pharm Degree Examinations March 2019 M.Pharm (Pharmaceutical Analysis)

Paper IV - Food Analysis (MPA 104T)

Time: 3 Hours Total Marks: 75

- Answer all Questions.
- Draw Diagrams wherever necessary.

Essays (3x10=30)

- 1. Give an account of general analytical methods for milk. Describe the constituents, adulterants and contaminants of milk.
- 2. Classify proteins and discuss the principle and procedure involved in the estimation of protein by micro Kjeldahl method of analysis.
- 3. Explain the different types and characters of food colorants. Explain the method of detection of natural, permitted and non-permitted dyes in food.

Short Notes (9x5=45)

- 4. Metabolism of proteins.
- 5. Classification of fats and oils.
- 6. Sap value and iodine value.
- 7. Artificial sweetener.
- 8. Crude fiber
- 9. Analysis of cheese.
- 10. Analysis of beer.
- 11. Analysis of organophosphorus pesticide.
- 12. Analysis of margarine

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