

**THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY**

**[M.PHARM 1223]**

**DECEMBER 2023  
(OCTOBER 2023 EXAM SESSION)**

**Sub. Code: 2954**

**M.PHARMACY DEGREE EXAMINATION  
SEMESTER - I (PCI New Regulations 2016)  
PHARMACEUTICAL ANALYSIS - MPA  
PAPER IV – FOOD ANALYSIS**

*Q.P. Code: 262954*

**Time: Three hours**

**Answer ALL Questions**

**Maximum: 75 Marks**

**I. Elaborate on:**

**(2 x 20 = 40)**

1. (a) Write the general methods of analysis of food carbohydrates.  
(b) Explain the various adulterants are present in fats and oils. How will you determine them?
2. (a) Write the various methods are used to determine the natural, permitted and non permitted dyes.  
(b) Write a note on BIS and AGMARK.

**II. Write notes on**

**(7 X 5 = 35)**

1. Write a note on analysis of butter.
2. Write the chemistry and classification of amino acids.
3. Write a note on hydrogenation of vegetable oil.
4. Write the methods of analysis of wine.
5. Write the methods of analysis of flavors and flavor enhancers.
6. Elaborate on Digestion and absorption of food Carbohydrate.
7. Mention the antioxidants and preservatives are added in to the ice cream. How will they analysed?

\*\*\*\*\*