Exam Date & Time: 31-Mar-2021 (01:30 PM - 04:30 PM)

MANIPAL ACADEMY OF HIGHER EDUCATION

Manipal Academy of Higher Education, Manipal MPharm Theory End-Semester Examinations.

Food Analysis [PCH-MPA104T]

Marks: 75   **Duration: 180 mins.**

SECTION - A

Answer all the questions.

Answer the following (10 marks x 5 = 50 marks)

1)	Explain the method of preparation of sample of cheese. Discuss the procedure involved in the determination of milk fat in cheese.	(10)
2)	Discuss on the methods used for qualitative and quantitative analysis of benzoic acid in food or beverages	(4)
A)		
B)	Discuss Molybdate test for castor oil, Halphen's test for cotton seed oil and Holde's test for mineral oils in edible oils?	(6)
3)	What are the reasons for adding colour additives in food products? How food colours are classified and add note on determination of synthetic food colours containing single colour	(5)
A)		
B)	Write the principle, reactions and procedure involved in the assay of vitamin-C in food samples by 2,6-Dichloroindophenol Titrimetric Method	(5)
4)	Write the principle and procedure involved in the microbiological assay of Vitamin B12	(5)
A)		
B)	Discuss the principle and procedure involved in Babcock and Gerber method for milk fat determination	(5)
5)	Explain in detail the general methods of analysis of food carbohydrates.	(10)

SECTION - B

Answer all the questions.

Answer the following (5 marks x 5 = 25 marks)

6)	Explain Kjeldahl method and Biuret method of protein analysis.	(5)
7)	What is pesticide cycle? Explain with a neat diagram.	(5)
8)	Explain the methods of organophosphorus and organochlorine pesticides analysis.	(5)

9)   How will you estimate methanol, isopropanol and acidity in the given sample of
        wine? Explain the procedure involved in the analysis.   (5)

10)   What is FDA FSMA? Write a note on rules and related programmes, background and
        activities related to FDA FSMA.   (5)

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