# **Question Paper**

Exam Date & Time: 30-Dec-2017 (09:30 AM - 12:30 PM)



#### MANIPAL ACADEMY OF HIGHER EDUCATION

Manipal University, Manipal MPharm Theory End-Semester Examinations.

MANIPAL COLLEGE OF PHARMACEUTICAL SCIENCES

END SEMESTER THEORY EXAMINATIONS- DECEMBER 2017 - JANUARY 2018

PROGRAM: MPHARM SEMESTER 1

DATE: 30/12/2017 TIME: 9:30AM - 12:30PM

#### Food Analysis [PCH-MPA104T]

Marks: 50 Duration: 180 mins.

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### Answer all the questions.

Answer the following (5 marks  $\times$  8 = 40 marks)

1) (5)Discuss the principle and procedure involved in Babcock and Gerber method for milk fat determination (5) 2) 2A. What are the different types of adulteration in edible oil and fats? Discuss the sodium azide test for synthetically made mustard oil and Halphen's test for detection of cotton seed oil. (3 mark) 2B. What are the reasons for adding colour additives in food products? Classify food colours with examples. (2 mark) 3) (5)Classify the methods used for assay of vitamins. Write the principle and procedure involved in the microbiological assay of Vitamin B<sub>2</sub> (5)4) Discuss the principle and procedure involved in the determination of monosodium glutamate and saccharine in food 5) How will you determine the total solids and over-run in ice cream? Explain. 6) (5)Explain the procedure involved in the analysis of spirits. 7) (5) Write the principle and procedure involved in Somogyi-Nelson method of analysis of reducing sugar content. 8) (5)Explain the enzymatic methods of carbohydrate analysis

## Answer all the questions.

Answer the following with specific answers (2 marks x = 10 marks)

9) (2) What is peroxide value and what is its significance? Write the principle involved in the determination of peroxide value A) B) (2) What is BIS? Discuss the salient features and importance of BIS C) (2) What is Maillard reaction? D) (2) Describe pesticide cycle E) (2) How will you test for sulphates in milk?

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