Exam.Code:1301
Sub. Code: **9510**

1127

B. Voc. (Food Processing and Preservation)

First Semester

BFP-105: Food Analysis and Instrumentation (OLD)

Time allowed: 3 Hours Max. Marks: 60

NOTE: *Attempt five questions in all, including Question No. IX (Unit-V) which is compulsory and selecting one question each from Unit I - IV.*

x-x-x

UNIT – I

I. Define sample. What are its various types? Describe sampling techniques used for different food samples. What precautions should be taken while storing food samples? (12)

II. What are the various principles for food preservation and processing? (12)

UNIT – II

III. Describe agarose gel electrophoresis. Name the factors influencing the electrophoretic mobility of a molecule. (12)

IV. Describe ion exchange chromatography and its applications. (12)

UNIT – III

V. Describe application of X-rays in food analysis. Is the use of x-rays in food analysis safe? Elaborate. (12)

VI. What is the principle of SEM? How can SEM be used in analysis of food samples? (12)

UNIT – IV

VII. Elaborate the importance of food texture in sensory analysis of food. What are the various equipment used for food texture analysis? (12)

VIII. Describe the following:-

a) the techniques for analysis of toxins and pesticides in food
b) rapid methods of microbial analysis (2x6)

UNIT – V

IX. Write short notes on:-

a) R_f value
b) Universal detection reagents for paper chromatography
c) Principles of colorimetry
d) Colour measurement in food
e) Ultrasonics in food texture analysis
f) Immuno assays (6x2)

x-x-x