

17. (a) How are the chlorinated pesticides identified in food products?

Or

- (b) Discuss the analysis of Vitamin A.

18. (a) Discuss the application of food irradiation.

Or

- (b) Discuss the effect of Subfreezing and freezing temperatures on microorganisms.

19. (a) Explain briefly on Food standards in India.

Or

- (b) Explain briefly about the Essential Commodities Act, 1955.

20. (a) Explain briefly about Food and Drug Administration (FDA) agencies.

Or

- (b) How are the assessments of aroma and mouth flavour of wines made by Descriptive analysis?
-

Reg. No. :

Code No. : 8163

Sub. Code : C 3 AC

M.Sc. (CBCS) DEGREE EXAMINATION,
NOVEMBER 2011.

Third Semester

Chemistry

Non Major Elective — FOOD ANALYSIS

(For those who joined in July 2008 and afterwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL the questions.

1. Write the moisture and fat content of Cow's milk and butter milk.
2. Explain the terms Low residue (fibre) and high residue (fibre) diets.
3. What are the causes for the contamination of food with pesticides and insecticides?
4. How will you detect the Vitamin B_2 ?
5. Explain the term "Pasteurization".

6. Name three irradiation processes.
7. Name two Non-permitted colouring agents which are still added to lots of foods.
8. How is the Coffee powder adulterated with tamarind powder detected?
9. What are the responsibilities of International commission on microbiological specimens for foods?
10. Explain malolactic flavours (MLF).

PART B — (5 × 5 = 25 marks)

Answer ALL the questions, choosing either (a) or (b).

11. (a) How is the degree of inversion of sugar determined by Lane and Eynon method?

Or

- (b) Suggest an experimental method to determine the calorific value of food.

12. (a) Explain the principle of Electron capture detector. How is it used to measure polyhalogenated compounds particularly pesticides such as DDT and Aldrine.

Or

- (b) Discuss any four solvent systems and adsorbents used in TLC.

Page 2

Code No. : 8163

13. (a) Explain the various methods of drying of foods.

Or

- (b) How are antimicrobial preservatives added to foods can be grouped?

14. (a) List any five common food adulterants in foods.

Or

- (b) Discuss the limits for sulphurdioxide and benzoic acid in food products.

15. (a) Explain Hedonic testing of essences.

Or

- (b) Explain signal detection method of testing packaged foods.

PART C — (5 × 8 = 40 marks)

Answer ALL questions, choosing either (a) or (b).

16. (a) Explain the food exchange lists suitable for India with suitable examples.

Or

- (b) Discuss the recommended dietary allowance for Indians - I.C.M.R. 1989.

Page 3

Code No. : 8163