

(6 pages)

Reg. No. :

Code No. : 20623 E Sub. Code : ESCH 11/
FSCH 11

B.Sc. (CBCS) DEGREE EXAMINATION,
APRIL 2025.

First Semester

Chemistry

Skill Enhancement Course — FOOD CHEMISTRY

(For those who joined in July 2023 onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. Insulin is a

- (a) carbohydrate (b) protein
(c) fat (d) lipids

2. The iodine number of pure cow ghee is

- (a) 34.00 (b) 36.50
(c) 38.70 (d) 38.10

3. Alkaloid Poison mainly causes

- (a) night blindness (b) nephrotoxicity
(c) vomiting (d) diarrhoea

4. Malathion belongs to _____ insecticide.

- (a) Organochlorine
(b) Carbamate
(c) Coumarine derivative
(d) Organophosphorous

5. What is the main function of colourant in food products?

- (a) To enhancement the appearance
(b) To improve the taste
(c) To increase the self-life
(d) To reduce the fat content

6. Sweetners have beneficial effects for

- (a) Hypertension (b) Diarrhoea
(c) Diabetes mellitus (d) Typhoid fever

7. What is the process called that adds bubbles to a beverage?

- (a) Fermentation (b) Carbonation
(c) Distillation (d) Pasteurisation

8. Which of the following is a stimulating beverage?
(a) Coffee (b) Tea
(c) Both (a) and (b) (d) Milk

9. The purity of fats and oils is determined by
(a) R.M. Value
(b) Iodine value
(c) Saponification value
(d) All of these

10. The saponification of a factor oils is done using _____ solution for cold process.
(a) NaCl (b) HCl
(c) NaOH (d) KOH

PART B — (5 × 5 = 25 marks)

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

Each answer should not exceed 250 words.

11. (a) Define food. Explain the main types of food.
Or
(b) Discuss the detection of adulterated food by simple analytical techniques.

12. (a) Discuss pesticides poisons especially by DDT.

Or

(b) Explain the following first aid
(i) by swallowed poison
(ii) poison in eye.

13. (a) Explain food colourants with example.

Or

(b) Write notes on Baking powder.

14. (a) Write a note on alcoholic beverages.

Or

(b) Explain the social problems due to alcoholism.

15. (a) How will you produce refined sunflower oil?

Or

(b) Write notes on Iodine value.

PART C — (5 × 8 = 40 marks)

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

Each answer should not exceed 600 words.

16. (a) Describe the advantages and disadvantages of proteins and vitamins as food.

Or

- (b) Explain the ghee adulterants. How will you detect these adulterants?

17. (a) Explain briefly chemical poisoning.

Or

- (b) Describe the potential hazards of chemical poisons.

18. (a) What are preservatives in food? Explain their role in food preservation.

Or

- (b) Explain the following

- (i) Yeast
- (ii) Taste makers
- (iii) Vinegar.

19. (a) What is carbonation? Discuss the methods of carbonation.

Or

- (b) Define alcoholic beverages. Discuss the ABV range of any four beverages.

20. (a) Explain the following refined vegetable oils.

- (i) refined cotton seed oil
- (ii) refined soyabean oil.

Or

- (b) Write a brief note on role of MUFA and PUFA in preventing heart disease.