D 10623 (Pages : 2) Name.....

Reg. No.....

FIFTH SEMESTER U.G. DEGREE EXAMINATION, NOVEMBER 2021

(CBCSS—UG)

Food Technology

FTL 5D 03—FOOD AND HEALTH

(2019 Admissions)

Time : Two Hours Maximum : 60 Marks

Section A

Answer at least **eight** *questions.*
Each question carries 3 *marks.*
All questions can be attended.
Overall Ceiling 24.

1. Define food allergens.
2. Define lactose intolerance.
3. Define preservatives.
4. Describe Angina pectoris.
5. Function of enzyme.
6. Define nutrient density.
7. What is food poisoning and name any two bacteria that causing food poisoning ?
8. Briefly explain the functions of Vitamin D.
9. What are essential amino acids ?
10. Define BMI.
11. Define ORS.
12. Write two ways in which food is infected.

(8 × 3 = 24 marks)

Section B

Answer at least **five** *questions.*
Each question carries 5 *marks.*
All questions can be attended.
Overall Ceiling 25.

13. What is the importance of iodine in human nutrition ?
14. Explain about Gluten-chinese Syndrome.
15. Discuss the nutritional guidelines for a Diabetic person.
16. Differentiate between the uses of emulsifier and stabilizers.
17. How does the acid base balance regulate in our body.
18. Describe about bacterial poisons.
19. Explain Botulism.

(5 × 5 = 25 marks)

Section C

Answer any **one** *question.*
The question carries 11 *marks.*

20. Treatment and prevention for food poisoning.
21. What are the effects of diet on plasma lipids ?

(1 × 11 = 11 marks)

D 10620 (Pages : 2) Name.....

Reg. No.....

FIFTH SEMESTER U.G. DEGREE EXAMINATION, NOVEMBER 2021

(CBCSS—UG)

Food Technology

FTL 5B 11—FOOD PRESERVATION AND PACKAGING TECHNOLOGY

Time : Two Hours Maximum : 60 Marks

Section A

Answer at least **eight** *questions.*
Each question carries 3 *marks.*
All questions can be attended.
Overall Ceiling 24.

1. Enlist different chemical preservatives used in food industry.
2. What is aseptic processing of food products ?
3. State the importance of pasteurization in food preservation.
4. What is the principle of drying ?
5. What is chilling injury ?
6. What is the effect of quick and slow freezing in food quality ?
7. Dose of irradiation.
8. Give any one example for artificial preservative and state its function.
9. What is the action of benzoic acid in food preservation ?
10. What is Hurdle technology ?
11. Explain high pressure processing of food.
12. Enlist 2 biopolymers used in edible packaging.

(8 × 3 = 24 marks)

Section B

Answer at least **five** *questions.*
Each question carries 5 *marks.*
All questions can be attended.
Overall Ceiling 25.

13. What is Modified Atmosphere Packaging and describe about its advantages ?
14. What is the significance of nutritional labelling ?

Turn over

15. What are the functions of food packaging ?

16. Explain briefly about the methods of freezing.

17. What are the benefits of fermentation in food industry ?

18. What are the advantages of glass as a packing material ?

19. What are the advantages of edible packaging ?

(5 × 5 = 25 marks)

Section C

Answer any **one** *question.*
The question carries 11 *marks.*

20. Explain types of packages used in food industry.

21. Classification of packaging.

(1 × 11 = 11 marks)

D 10619 (Pages : 2) Name.....

Reg. No.....

FIFTH SEMESTER U.G. DEGREE EXAMINATION, NOVEMBER 2021

(CBCSS—UG)

Food Technology

FTL 5B 10—CEREALS, PULSES AND OIL SEEDS TECHNOLOGY

(2019 Admissions)

Time : Two Hours and a Half Maximum : 80 Marks

Section A

Answer at least **ten** *questions.*
Each question carries 3 *marks.*
All questions can be attended.
Overall Ceiling 30.

1. What is wet milling ?
2. Define TVP with an example.
3. What is caramelization ?
4. Define Equilibrium Moisture Content.
5. Name the byproducts in rice milling.
6. What are different types of wheat ?
7. Define rice fortification.
8. Define hydrogenation.
9. What are the factors affecting oil extraction ?
10. What is the cooking time of rice ?
11. What is tofu ?
12. What is bleaching in oil refining ?
13. What are the reasons for streaked crumbs in bread ?
14. Distinguish between tempering and conditioning of wheat.
15. What is malting of barley ?

(10 × 3 = 30 marks)

Section B

Answer at least **five** *questions.*
Each question carries 6 *marks.*
All questions can be attended.
Overall Ceiling 30.

16. Explain defects in bread.
17. What are leavening agents? Write different types of leavening agents and their functions in the baking industry.
18. Write on fermented products of legumes.
19. What is soaking ? What are the methods of soaking ?
20. What are the roles of ingredients in cake making ?
21. Explain milling of rice.
22. What is the difference between flaked rice and puffed rice ?
23. Write on the changes in pulses during germination.

(5 × 6 = 30 marks)

Section C

Answer any **two** *questions.*
Each question carries 10 *marks.*

24. Explain methods of grain drying and dryers used.
25. Explain steps in oil refining in detail.
26. Explain wet milling and dry milling of pulses.
27. Explain the current status of cereal cultivation and processing in India.

(2 × 10 = 20 marks)

D 10618 (Pages : 2) Name.....

Reg. No.....

FIFTH SEMESTER U.G. DEGREE EXAMINATION, NOVEMBER 2021

(CBCSS—UG)

Food Technology

FTL 5B 09—FOOD MICROBIOLOGY—II

(2019 Admissions)

Time : Two Hours Maximum : 60 Marks

Section A

Answer at least **eight** *questions.*
Each question carries 3 *marks.*
All questions can be attended.
Overall Ceiling 24.

1. Define microbial intoxication.
2. What is microbial infection ?
3. Name two fermented food products.
4. What is Endotoxin ?
5. Define food spoilage.
6. Mention the uses of fermented products.
7. What are the major sources of contamination of food ?
8. Give two examples of fermented dairy products.
9. What do you mean by 'desiccation' ?
10. Name any microbes used in food.
11. Name the methods used for isolating pure culture.
12. What is food microbiology ?

(8 × 3 = 24 marks)

Turn over

Section B

Answer at least **five** *questions.*
Each question carries 5 *marks.*
All questions can be attended.
Overall Ceiling 25.

13. Differentiate between endotoxin and exotoxin with example.
14. Briefly explain the sources of contamination of food.
15. What are the factors affecting kinds and number of micro-organisms in food ?
16. Explain the contamination and spoilage of meat and meat products.
17. Which are the methods of prevention and investigation of food borne disease outbreak ?
18. Explain any three fermented food products.
19. Describe microbiological testing of milk.

(5 × 5 = 25 marks)

Section C

Answer any **one** *question.*
The question carries 11 *marks.*

20. Explain microbiological testing of water.
21. Explain the contamination and spoilage of fruits and vegetables.

(1 × 11 = 11 marks)

D 10180 (Pages : 2) Name.....

Reg. No.....

FIFTH SEMESTER U.G. DEGREE EXAMINATION, NOVEMBER 2021

(CUCBCSS—UG)

Food Technology

FTL 5D 03—FOOD AND HEALTH

(2017 Admissions)

Time : Two Hours Maximum : 40 Marks

Part A

Answer **all** *questions.*
Each question carries 1 *mark.*

1. ———————— is essential for forming haemoglobin in the blood.

   a) Iron. b) Calcium.

   c) Phosphorous. d) Magnesium.

2. Expand AIDS.

3. Lecithin is an/a example of ————————.

   a) Curing agent. b) Flavour enhancer.

   c) Emulsifier. d) Antioxidant

4. Peppercorns are mostly adulterated with ————————.

5. The Prevention of Food Adulteration Act :

   a) 1954. b) 1965.

   c) 1965. d) 1957.

(5 × 1 = 5 marks)

Part B

Answer **all** *the questions.*
Each question carries 2 *marks.*

6. What is an Adulterant ? Give one example.

7. List out any *four* Vitamin A rich food sources.

Turn over

8. List the nutrients which act as cancer preventing agents.

9. Enlist any *four* synthetic antioxidants.

10. What are the food sources causing food poisoning by Salmonella species ?

(5 × 2 = 10 marks)

Part C

Answer any **three** *questions.*
Each question carries 5 *marks.*

11. What is BMI ? Classify it.

12. Write a short note on lactose intolerance.

13. Write a short note on metallic contamination.

14. Write a short note on natural colouring agent.

15. Briefly explain any *five* food allergens.

(3 × 5 = 15 marks)

Part D

Answer any **one** *of the following.*
Each question carries 10 *marks.*

16. a) Explain the functions of protein in the body.

    b) Write a short note on PEM.

17. Explain in detail the risk factors of cardiovascular diseases.

(1 × 10 = 10 marks)

D 10178 (Pages : 3) Name.....

Reg. No.....

FIFTH SEMESTER U.G. DEGREE EXAMINATION, NOVEMBER 2021

(CUCBCSS—UG)

Food Technology

FTL 5B 11—TECHNOLOGY OF ANIMAL FOODS

(2017 Admissions)

Time : Three Hours Maximum : 80 Marks

Part A

Answer **all** *the questions.*
Each question carries 1 *mark.*

1. The egg white contains ———— % of protein.

   a) 8–12. b) 14–17.

   c) 20–24. d) 18–19.

2. The yolk of egg is enclosed in a sac called ————.

3. For cold smoking the temperature of the smoke must not rise above ———— °C.

   a) 24. b) 18.

   c) 29. d) 32.

4. Oxytetracycline is a/an ————.

5. Fish protein concentrate contains how much amount of protein ?

   a) 70-80 %. b) 60-65 %.

   c) 90-95 %. d) 80-90 %.

6. Sugar, spices, nitrates are examples of ————.

7. Botulism is caused by ————.

8. Which one of the following is not a meat protein ?

   a) Myosin. b) Actin.

   c) Tropomyosin. d) Rennin.

Turn over

9. A bovine female animal that has borne a calf :

a) Calf. b) Stag.

c) Heifer. d) Cow.

10. What is Lard ?

(10 × 1 = 10 marks)

Part B

Answer any **five** *questions.*
Each question carries 2 *marks.*

10. Define rigor mortis.
11. List out the by-products of meat.
12. What is tenderness of meat ?
13. Whatare the nutritional benefits of fish liver oil ?
14. What is Bacon ?
15. What is food irradiation ?
16. Enlist any *four* industrial use of egg.

(5 × 2 = 10 marks)

Part C

Answer any **six** *questions.*
Each question carries 5 *marks.*

17. Draw and label the muscle structure of meat.
18. Explain in short the meat cuts of beef.
19. Briefly explain the effect of cooking in texture, colour and flavour of meat.
20. Writea short note on methods for introducing curing agents to meat.
21. What are the methods of incorporating antibiotics into meat ?
22. What are the spoilage indices of fish by physical examination ?
23. Explain canning of fish.
24. Discuss the changes during storage of egg.

(6 × 5 = 30 marks)

Part D

Answer any **two** *of the following.*
Each question carries 15 *marks.*

25. Explain the common methods of stunning in animal.

26. Explain the processing and casing of sausage.

27. a) Explain in short the preservation methods in egg.

    b) Briefly explain the pigments in egg white and egg yolk.

28. Write a detailed note on by-products of fish.

(2 × 15 = 30 marks)

D 10177 (Pages : 2) Name.....

Reg. No.....

FIFTH SEMESTER U.G. DEGREE EXAMINATION, NOVEMBER 2021

(CUCBCSS—UG)

Food Technology

FTL 5B 10—CEREALS, PULSES AND OIL SEEDS TECHNOLOGY

(2017 Admissions)

Time : Three Hours Maximum : 80 Marks

Part A

Answer **all** *the questions.*
Each question carries 1 *mark.*

1. What is the biological leavening agent in bread making process ?
2. Gluten made up of ———— and ————.
3. What is Baker's yeast ?
4. ———— is the shortening agent in bakery.
5. What is the scientific name of pearl millet ?
6. Name two pulse based fermented foods.
7. Name a sugar based confectionary.
8. Vitamin lost during polishing of rice is ————.
9. Expand TVP.
10. Which of the following ingredient increases loaf volume, increase absorption and dough strengthening ?

    a) Salt. b) Water.

    c) Milk. d) Egg.

(10 × 1 = 10 marks)

Part B

Answer any **five** *questions.*
Each question carries 2 *marks.*

11. What are the chemical leavening agents in bakery ?
12. Explain the functions of sugar during dough fermentation.
13. Differentiate soft wheat and hard wheat.

Turn over

14. Define caramelization.
15. Differentiate cereals and millets.
16. What are the basic ingredients in cake making ?
17. Differentiate baking soda and baking power.

(5 × 2 = 10 marks)

Part C

Answer any **six** *questions.*
Each question carries 5 *marks.*

18. Write a short note on staling of bread.
19. What is flaked rice and puffed rice ?
20. What are the changes during bread baking ?
21. Write a short note on health benefits of legumes.
22. Explain in brief the preparation of sugar candy.
23. What are the physical and chemical changes during aging of rice ?
24. Explain rice fortification.
25. Discuss different cake making methods.

(6 × 5 = 30 marks)

Part D

Answer any **two** *of the following.*
Each question carries 15 *marks.*

26. Write in details bread making process.
27. Explain wet and dry methods of pulse milling.
28. Write a detailed note on different methods of parboiling.
29. Discuss the different methods used for oil extraction from seed.

(2 × 15 = 30 marks)

D 10176 (Pages : 3) Name.....

Reg. No.....

FIFTH SEMESTER U.G. DEGREE EXAMINATION, NOVEMBER 2021

(CUCBCSS—UG)

Food Technology

FTL 5B 09—FOOD MICROBIOLOGY—II

(2017 Admissions)

Time : Three Hours Maximum : 80 Marks

Part A (Multiple Choice)

Answer **all** *the questions.*
Each question carries 1 *mark.*

1. Red spot on the surface of meat is caused due to :

   a) *Serratia marcescens.* b) *Pseudomonas syncyanea.*

   c) *Thamnadium.* d) *Penicillium expansum.*

2. Shredded cabbage is the starting product for which of the following fermented food ?

   a) Sauerkraut. b) Pickles.

   c) Green olives. d) Sausage.

3. Most spoilage bacteria grow at :

   a) Acidic pH. b) Alkaline pH.

   c) Neutral pH. d) Any of the pH.

4. What are the intrinsic factors for the microbial growth ?

   a) pH. b) Moisture.

   c) Oxidation-Reduction Potential. d) All of these.

Fill in the blanks :

5. Brewer's yeast is used for _____ making.

6. Sorbic acid is used on cheese to control _____.

7. Best pH range for microbial growth is _____.

8. Botulism is caused by _____.

Turn over

Give very short answer :

9. What is Aflatoxin ?

10. What is Temph ?

(10 × 1 = 10 marks)

Part B

Answer any **five** *questions.*
Each question carries 2 *marks.*

11. Give two examples for mycotoxins.

12. What is stroke cluture ?

13. What is Intoxication ?

14. What is Asepsis ?

15. Write four fermented Indian products.

16. What is TA spoilage ?

17. Give two disease due to bacterial infection.

(5 × 2 = 10 marks)

Part C

Answer any **six** *questions.*
Each question carries 5 *marks.*

18. What is exotoxin and endotoxin, give examples.

19. What is food poisoning ?

20. What is Yoghurt ? How it is classified ?

21. What are the physical methods used to control microbial growth ?

22. Differentiate between differential media and selective media.

23. Explain the factors responsible for the spoilage.

24. Write a short note on spoilage of canned food.

25. What are the chemical changes associated with spoilage in food ?

(6 × 5 = 30 marks)

Part D

Answer any **two** *of the following.*
Each question carries 15 *marks.*

26. What are the chemical agents used to control the growth of micro-organism ?

27. Explain in detail contamination and spoilage of meat and meat product.

28. Explain contamination and spoilage of milk and cream.

29. Explain pure culture. What are the methods of isolation ?

(2 × 15 = 30 marks)

D 10175 (Pages : 2) Name.....

Reg. No.....

FIFTH SEMESTER U.G. DEGREE EXAMINATION, NOVEMBER 2021

(CUCBCSS—UG)

Food Technology

FTL 5D 03—FOOD AND HEALTH

(2014 Admissions)

Time : Two Hours Maximum : 40 Marks

Part A

Answer **all** *the questions.*

Each question carries 1 *mark.*

1. Define Junk foods ?
2. What is lactose intolerance ?
3. What are food additives ?
4. Expand BHA.
5. What are food allergens ?

(5 × 1 = 5 marks)

Part B

Answer **all** *the questions.*

Each question carries 2 *marks.*

6. Mention the adulterants used in the following foods

   (a) Ghee. (b) Edible oil.

   (c) Tea leaves. (d) Turmeric.

7. Define antioxidants ? Name *two* natural anti-oxidants.
8. What are carbohydrates ? Give the classification of carbohydrates with examples.

9. Define RDA. Give the RDA of iron for a pregnant woman.

10. How is gluten formed? Give two factors which affects the formation of gluten ?

(5 × 2 = 10 marks)

Part C

Answer any **three** *questions.*

Each question carries 5 *marks.*

11. Write the sources, functions and deficiency symptoms of vitamin K ?

12. How do hormones help in maintaining normal calcium levels ?

13. Write the deficiency stages of Vitamin A ?

14. Explain briefly digestion of fat.

15. Write a note on preservatives.

(3 × 5 = 15 marks)

Part D

Answer any **one** *question.*

The question carries 10 *marks.*

16. List ten food items normally adulterated ? Name two adulterants and tests for detection of adulterant? Write a note on health implications when food is adulterated ?

17. Discuss on the sources, functions and deficiency symptoms of any two water soluble vitamins.

(1 × 10 = 10 marks)

D 10173 (Pages : 2) Name.....

Reg. No.....

FIFTH SEMESTER U.G. DEGREE EXAMINATION, NOVEMBER 2021

(CUCBCSS—UG)

Food Technology

FTL 5B 11—TECHNOLOGY OF ANIMAL FOODS

(2014 Admissions)

Time : Three Hours Maximum : 80 Marks

Part A

Answer **all** *the questions.*
Each question carries 1 *mark.*

1. Bacon is cut from the part of the ————.
2. Skin of the sausage called as ————.
3. Gelatin obtained from the heating of ————.
4. The ———— is the public health agency in the U.S. Department of Agriculture (USDA) responsible for protecting the public's health by ensuring the safety of the Nation's commercial supply of meat, poultry, and processed egg products.
5. ———— can be defined as the process of treating and handling food in such a way as to stop or greatly slow down spoilage and prevent foodborne illness while maintaining nutritional value, texture and flavour.
6. The myofibrillar protein mainly composed of ———— and ————.
7. Curing is one of the ———— and ———— processes of foods such as meat, fish and vegetables, by the addition of salt, with the aim of drawing moisture out of the food by the process of osmosis.
8. EPA and DHA are the ———— fatty acids.
9. Chitosan is produced commercially by deacetylation of ———— which is the structural element in the exoskeleton of crustaceans (such as crabs and shrimp).
10. Green rots in egg is chiefly caused by :

    A) *Pseudomonas fluorescens.*

    B) *Micrococcus or Bacillus* sp.

    C) Molds or yeasts.

    D) All of the above.

(10 × 1 = 10 marks)

Turn over

Part B

Answer any **five** *questions.*
Each question carries 2 *marks.*

11. Enlist the factors affecting the tenderness of meat.
12. Sketch structure of egg and with label.
13. Write on the type of sausage casing.
14. Enlist the fish byproducts generated during the fish processing.
15. List out the slaughtering methods of sheep or pig.
16. Enlist the factors affecting the egg coagulation.
17. Enlist the pre and post-mortal factors affecting on tenderness of meat.

(5 × 2 = 10 marks)

Part C

Answer any **six** *questions.*
Each question carries 5 *marks.*

18. Write on the post mortem changes in the meat.
19. Define the curing of meat. Briefly explain the curing of meat using the nitrite and NaCl.
20. Write the freezing process of meat. Enlist the different freezing methods for meat.
21. Explain the smoking of meat. Enlist the advantage and disadvantage of smoking of meat.
22. Explain the effect of cooking on texture, color and flavor of meat.
23. Explain in detail for preparation of meat sausage.
24. Write on the measurement of egg quality.
25. Write on the drying of fish. Enlist the advantage and disadvantage of sun drying fish.

(6 × 5 = 30 marks)

Part D

Answer any **two** *questions.*
Each question carries 15 *marks.*

26. Explain in detail basic components, preparation method and classification of meat sausage.
27. Write note on the preservation of egg by refrigeration, freezing and thermal processing.
28. Write short notes on preparation of fish protein concentrate, fishmeal and fish oil.
29. Write a detailed note on methods of measuring internal and external egg quality.

(2 × 15 = 30 marks)

D 10171 (Pages : 3) Name.....

Reg. No.....

FIFTH SEMESTER U.G. DEGREE EXAMINATION, NOVEMBER 2021

(CUCBCSS—UG)

Food Technology

FTL 5B 09—FOOD MICROBIOLOGY—II

(2014 Admissions)

Time : Three Hours Maximum : 80 Marks

Part A

Answer **all** *questions.*
Each question carries 1 *mark.*

Multiple choices :

1. Which is the bread mold ?

   a) *Rhizopus stolonifer.* b) *Aspergillus flavus.*

   c) *Candida albicans.* d) *Penicillium notatum.*

2. Muscle food products spoiled mainly by :

   a) Coliform bacteria. b) Proteolytic bacteria.

   c) Proteolytic virus. d) Photosynthetic bacteria.

3. Which is the test generally used for analysis microbiological quality of water :

   a) MPN test. b) NPM test.

   c) MNP test. d) PMN test.

4. Micro-organism used for the production fermented food product :

   a) Thermophilic bacteria. b) Autotrophic bacteria.

   c) Lactic acid bacteria. d) Psychrotrophic.

5. Pour plate method is used for :

   a) Enumeration. b) Controlling.

   c) Preservation. d) Stocking.

True *or* False :

6. *Aspergillus flavus* is the principal organism responsible for the spoilage of canned foods.
7. Heat liable materials generally sterilized by autoclaving.
8. Baird-Parker agar medium is used for the selective isolation of yeast and mold.
9. *Bacillus lichenoformis* is responsible for fermentation of milk.
10. Ingestion of contaminated food with pathogenic bacteria cause food borne illness.

(10 × 1 = 10 marks)

Part B

Answer any **five** *questions.*
Each question carries 2 *marks.*

11. Microbial spoilage of bread.
12. Note on cheeses and its economic importance.
13. Name four chemical agents used for controlling micro-organisms.
14. What is endotoxin ? Give an example.
15. Define idli. Name of the micro-organisms involved its formation.
16. Note on methylene blue reduction test of milk.
17. Name one fermented product each from milk, vegetable, fruit and cereal.

(5 × 2 = 10 marks)

Part C

Answer any **six** *questions.*
Each question carries 5 *marks.*

18. Note on factors effecting contamination and spoilage of fresh milk and milk products.
19. Differentiate selective, differential and enrichment media.
20. What is Sauer Kraut ? Describe the process involved in the production of Sauer Kraut.
21. Note on the principles and protocol of investigation of food borne disease outbreak.
22. Differentiate pour plate and spread plate methods.
23. Explain in details chemical changes due to spoilage.
24. Briefly explain spoilage of fruit and vegetables.
25. Explain in details various non-thermal process for controlling of micro-organism.

(6 × 5 = 30 marks)

Part D

Answer any **two** *questions.*
Each question carries 15 *marks.*

26. What is food poisoning ? Explain in details food poisoning caused by bacteria and fungi.

27. Describe in details the following :

    a) Source and factors effecting microbial contamination of fresh meat.

    b) Different microbial spoilage of fresh meat.

28. Describe briefly the methods involved in microbiological testing of water and milk.

29. Explain the following :

    a) What is a fermented food product ?

    b) Characteristic of micro-organisms associated with production of fermented food products.

    c) Nutritional and health benefits of fermented food products.

(2 × 15 = 30 marks)

D 92419 (Pages : 2) Name.....

Reg. No.....

FIFTH SEMESTER U.G. (CUCBCSS—UG) DEGREE [SPECIAL] EXAMINATION, NOVEMBER 2020

Food Technology

FTL 5D 03—FOOD AND HEALTH

(2017 Admissions)

Time : Two Hours Maximum : 40 Marks

Part A

All questions to be attended.
Each question carries 1 mark.

1. Which one of the following components is not a type of carbohydrate ?

   a) Sterols. b) Maltodextrins.

   c) Dietary fibre. d) Lactose.

2. Fluorosis is associated with ————.

   a) Bones. b) Muscles.

   c) Skin. d) Teeth.

3. BHA, BHT and Vitamin E are examples of ————.

4. Iodine test in milk and milk products is done to find the presence of ————.

5. Food poisoning can be caused by *Staphylococcus aureus* on consuming which of the following foods ?

   a) Cream pastries, egg salad. b) Shell fish, fish salad.

   c) Canned meat. d) Vegetable salad.

(5 × 1 = 5 marks)

Part B

All questions can be attended and overall ceiling.
Each question carries 2 marks.

6. List out four natural colouring agents.

7. What is glycaemic index ?

8. What is constipation ?

9. Enlist the adulterants found in ghee and vegetable oil.

10. What is food poisoning ?

(5 × 2 = 10 marks)

Part C

All questions can be attended and overall ceiling.
Answer any **three** *questions.*
Each question carries 5 *marks.*

11. Write a short note on the natural pigments from plant source.

12. Explain the signs and symptoms of diabetes mellitus.

13. Write a short note on PFA in regard to adulteration of milk and milk products.

14. Explain the role of emulsifiers in food.

15. Briefly explain the allergens in fish and crustaceans.

(3 × 5 = 15 marks)

Part D

All questions can be attended and overall ceiling.
Answer any **one** *of the following.*
The question carries 10 *marks.*

16. Explain in detail the risk factors of cancer.

17. Write a detailed note on natural and synthetic antioxidants.

(1 × 10 = 10 marks)