

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

MSc DEGREE EXAMINATION DECEMBER 2022
(First Semester)

Branch – FOODS AND NUTRITION

FOOD PROCESSING TECHNOLOGY/TECHNIQUES IN FOOD PROCESSING

Time: Three Hours

Maximum: 50 Marks

SECTION-A (5 Marks)

Answer ALL questions

ALL questions carry EQUAL marks (5 x 1 = 5)

- 1 Which of the following operation is related to extrusion?
(i) Hot working and Cold working (ii) Casting
(iii) Welding (iv) Fitting
- 2 Choose which process in legumes increases the digestibility, the microbial enzymes break down, the legume protein, enhances cooking process and improves palatability and nutritive value.
(i) Puffing (ii) Over cooking
(iii) Fermentation (iv) Milling or decortication
- 3 Which nutrient source is low in green leafy vegetables?
(i) Fiber (ii) Carbohydrates
(iii) Iron (iv) Vitamin K
- 4 Indicate the cold storage temperature of eggs.
(i) -20°C to -10°C (ii) -10°C to -9°C
(iii) -9°C to -5°C (iv) -1°C to 0°C
- 5 Name the process in which the temperature of food is lowered to about -20°C within 30 min.
(i) Refrigeration (ii) Slow freezing
(iii) Rapid freezing (iv) Irradiation

SECTION - B (15 Marks)

Answer ALL Questions

ALL questions carry EQUAL marks (5 x 3 = 15)

6. a) State the dry milling process for maize.
(OR)
b) Classify the breakfast cereals.
7. a) Elucidate the methods of oil extraction.
(OR)
b) Explain any three soya bean products.
8. a) Compare jaggery and sugar.
(OR)
b) Explain processing methods of coffee.
9. a) Discuss homogenised milk.
(OR)
b) Sketch the freezing process of mushrooms.
10. a) State the followings: i) Thermal death time ii) Thermal death point.
(OR)
b) Determine the advantages and disadvantages of Pulse electric field.

Cont...

SECTION -C (30 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

(5 x 6 = 30)

11. a) Interpret different types of wheat milling.
(OR)
b) Elucidate manufacturing processes for breakfast cereals.
12. a) Design the extraction of oil from oil seeds.
(OR)
b) Interpret the winterization process.
13. a) Enumerate the benefits of edible coatings.
(OR)
b) Appraise the medicinal properties of jaggery.
14. a) Interpret the processing of milk at Dairy farm.
(OR)
b) Assess the principles and importance of meat processing and preservation.
15. a) Determine the colouring agents of spices.
(OR)
b) Justify the role of Artificial Intelligence (AI) and Machine Learning (ML) in food industry.

Z-Z-Z END