Roll No. | | | | | | | | | | | |

Total No. of Pages : 02

Total No. of Questions : 09

B.Sc. Hons. (Nutrition and Dietetics) (Sem.–2)

BASIC OF COOKING

Subject Code : BSND-121-18

M.Code : 77755

Date of Examination: 11-05-2026

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN Multiple Choice questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION-A

1. **Answer briefly:**

(a)Danger Zone

(b) Nutrients of Food

(c) Consommé

(d) Parts of Kitchen attire

(e) Poaching

(f) Blast chiller

(g) Effects of cooking on Protein

(h) Draw a Chef knife mentioning its parts

(i) Roux

(j) Contemporary Sauces

SHRI GURU RAM DASS EDUCATIONAL SOCIETY (REGD.) LANDRAN (MOHALI) May LIBRARY 2026

SECTION-B

2. Define Blanching, ways of blanching, and its uses.
3. What is the significance of the uniform in the kitchen department?
4. Discuss various factors which are responsible for the loss in nutritive value of food.
5. Discuss the main principles which need to be followed in the case of stewing cuts of meat.
6. Discuss various heat transfer methods used for cooking food.

SECTION-C

7. Write in detail about various dry cooking methods of food.
8. What is the effect of heat, acidic, and alkaline mediums on the pigments of vegetables? Answer by drawing a color-changing chart.
9. What are the various binding agents used in cookery? Discuss in detail about their applications.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.

Roll No. | | | | | | | | | | | | Total No. of Pages : 02

Total No. of Questions : 09

B.Sc.Honours (N&D) (Sem.–2)

FOOD PROCESSING AND PRESERVATION

Subject Code : BSND-122-18

M.Code : 77756

Date of Examination : 14-05-2026

Time: 3 Hrs. Max. Marks : 60

INSTRUCTION TO CANDIDATES:

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION - A

1. **Answer briefly :**

a) Aseptic packaging

b) Cryogenic freezing

c) List Common Food Bourne Micro-organisms

d) Food Spoilage

e) UHT

f) Class 1 Preservatives

g) Irradiation

h) MAHPD

i) Thermal Death Time

j) Sterilization

SHRI GURU RAM DASS EDUCATIONAL SOCIETY (REGD.) LANDRAN (MOHALI) MAY LIBRARY 2026

SECTION-B

2. List the major intrinsic factors responsible for microbial contamination of food.
3. Define Pasteurization and its various types.
4. Discuss the types of microorganisms that can contaminate food and cause foodborne illness.
5. What is the effect of irradiation on Foodborne Microbial Pathogens?
6. Discuss various air drying methods used for food preservation.

SECTION-C

7. Define Food preservation. Also explain the principles and factors affecting the Food preservation.
8. What is the technology of Food Irradiation and also discuss its applications.
9. Discuss the applications of TDT curves in industrial sterilization and food preservation.

NOTE : Disclosure of identity by writing mobile number or making passing request on any page of Answer sheet will lead to UMC case against the Student.

Roll No. | | | | | | | | | | | |

Total No. of Pages : 03

Total No. of Questions : 09

B.Sc. Hons. (Nutrition and Dietetics) (Sem.–2)

FOOD CHEMISTRY

Subject Code : BSND-123-18

M.Code : 77757

Date of Examination : 19-05-2026

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES:

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION - A

1. **Answer briefly :**

a) How does hydrogen bonding differ between liquid water and solid ice?

b) How does water activity affect the shelf life of food products?

c) What is peroxide value, and how is it used to assess the quality of fats and oils?

d) How does antioxidant prevent rancidity and improve the shelf life of food products?

e) What are oligosaccharides? Give example.

f) What are fat-soluble vitamins? What are their dietary sources.

g) Differentiate between cellulose and hemicellulose in terms of structure and function.

h) What is meant by the amphoteric nature of proteins?

i) What is the purpose of hydrogenation of fats.

j) What is the Reichert–Meissl (RM) value and its significance.

SHRI GURU RAM DASS EDUCATIONAL SOCIETY (REGD.) * LANDRAN (MOHALI) * May LIBRARY 2026

SECTION-B

2. a) Describe the types of bonds present in a water molecule and explain how hydrogen bonding leads to the formation of its unique molecular structure and physical properties.

   b) Discuss the types and causes of rancidity in foods. Discuss the chemical changes involved and the methods used to prevent or control rancidity during storage.

3. Explain the process of protein denaturation. Discuss the factors that cause denaturation and how it affects the structure properties of proteins in food systems.

4. a) What is the difference between the reducing and non-reducing ends of starch? Explain how the structural arrangement of glucose units in starch determines these two ends.

   b) Describe the structure of pectin and cellulose. How do differences in their molecular arrangement influence their functional properties in plant tissues and food products?

5. a) Explain the refining process of oils. Describe purpose of each step. How they improve quality.

   b) Describe the major chemical reactions of carbohydrates (Maillard reaction, and oxidation). Explain their significance in food processing and product quality.

6. a) Describe the structure of pectin and cellulose. How do differences in their molecular arrangement influence their functional properties in plant tissues and food products?

   b) Explain the concept of protein texturization. Describe how proteins are modified structurally during the process.

SECTION-C

7. a) Explain the importance of vitamins in human nutrition. Discuss the factors affecting their stability in foods.

   b) Define flavor. Explain the five basic tastes.

8. Explain the concept of sorption isotherms in foods. How do they help in understanding moisture–food interactions, and why are they important for food storage and shelf-life prediction?

9. a) Describe the major functional properties of proteins in food systems. How do factors such as pH, temperature, and ionic strength affect properties like solubility, emulsification, and foaming?

   b) Explain the role of flavor enhancers in foods. Discuss the common types used, their mode of action, and any safety considerations associated with their use.

SHRI GURU RAM DASS EDUCATIONAL SOCIETY (REGD.) * LANDRAN (MOHALI) *
May
LIBRARY
2026

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.

Roll No. | | | | | | | | | | | Total No. of Pages : 02

Total No. of Questions : 09

B.Sc. Honours (Nutrition and Dietetics) (Sem.–2)

FOOD PACKAGING

Subject Code : BSND-124-18

M.Code : 77758

Date of Examination : 22-05-2026

Time : 3 Hrs. Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION - A

1. **Answer briefly :**

a) Primary packaging

b) MAP

c) List types of can closure systems

d) Aseptic Packaging

e) Food Labelling

f) LDPE

g) Lacquers

h) TFC

i) Role of O_2, CO_2, and N_2 in MAP

j) Two piece can

SHRI GURU RAM DASS EDUCATIONAL SOCIETY (REGD.) * LANDRAN (MOHALI) * May LIBRARY 2026

SECTION-B

2. What are the advantages and limitations of Corrugated Fibre Board boxes.

3. Write a note upon the food packaging Laws and Regulations.

4. Discuss the various contents mentioned on food labels.

5. What are the merits and demerits of Metal packaging?

6. Describe the process of tin plating.

SECTION-C

7. What are the various types of Packaging systems? Discuss all of them briefly.

8. What are the different types of machinery used for food packaging? Explain.

9. Discuss the tests for evaluation of packaging materials:

(a) Tear Strength or Tearing Resistance

(b) Bursting Strength

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.