

**B.Sc. CLINICAL NUTRITION**  
(New Syllabus 2018-2019)

**FIRST YEAR**

**PAPER I – BASIC NUTRITION**

*Q.P. Code: 803001*

**Time: Three Hours**

**Maximum: 100 Marks**

**Answer all questions**

**I. Elaborate on:**

**(3 x 10 = 30)**

1. What are fat soluble vitamins?
2. Explain water as nutrient and its deficiency.
3. Explain source, composition, function and deficiency of protein.

**II. Write notes on:**

**(8 x 5 = 40)**

1. Explain trace elements.
2. Sources and functions of Vitamin D and K.
3. Write notes on phospholipids.
4. Polysaccharides.
5. Essential and non-essential aminoacids.
6. Nutritional classification of food.
7. What are the effects of cooking and heat processing of foods?
8. Explain digestion and absorption of food in our body.

**III. Short answers on:**

**(10 x 3 = 30)**

1. Functions of sodium and potassium.
2. Define pellagra.
3. Role of intrinsic factor.
4. Define waxes.
5. What are fibers?
6. What is food sanitation?
7. Zwitter ions.
8. Stereoisomer.
9. What are polypeptides?
10. Colour vision.

\*\*\*\*\*

**THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY**

[AHS 0321]

**MARCH 2021**  
**(AUGUST 2020 EXAM SESSION)**  
**B.Sc. CLINICAL NUTRITION**  
**FIRST YEAR (Regulation 2018-2019)**  
**PAPER I – BASIC NUTRITION**  
*Q.P. Code : 803001*

**Sub. Code: 3001**

**Time: Three hours**

**Answer ALL Questions**

**Maximum: 100 Marks**

**I. Elaborate on:**

**(3 x 10 = 30)**

1. Classification of lipids.
2. Give a brief account on the chemistry. Sources, functions, deficiencies and recommended daily dosage of Vitamin C.
3. Classify the food based on nutrients with example and its function.

**II. Write notes on:**

**(8 x 5 = 40)**

1. Nutrition for athletic person.
2. Homeostasis of calcium.
3. Protein energy malnutrition.
4. Dark adaptation time.
5. Write about cyanocobalamin.
6. Write about saturated and unsaturated fatty acids.
7. Explain water as nutrient.
8. Uses of fibre in diet.

**III. Short answers on:**

**(10 x 3 = 30)**

1. What is meant by body building foods?
2. Functions of fats.
3. Xerophthalmia.
4. Amino acid.
5. Define energy.
6. Selenium.
7. Mention the functions of phospholipids.
8. Mutarotation.
9. Phrynoderma.
10. Disaccharides.

\*\*\*\*\*

**THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY**

[AHS 0422]

APRIL 2022

Sub. Code: 3001

(FEBRUARY 2021 & AUGUST 2021 EXAM SESSIONS)

**B.Sc. CLINICAL NUTRITION  
FIRST YEAR (Regulations 2018-2019)  
PAPER I – BASIC NUTRITION  
Q.P NO. 803001**

**Time: Three Hours**

**Answer All questions**

**Maximum: 100 Marks**

**I. Elaborate on : (3X10=30)**

1. Write in detail about digestion, absorption, transport and utilization of food in body.
2. Classify fats and oils & elaborate on composition, food sources and its functions.
3. Explain in detail about the effect of cooking and heat processing on the nutritive value of foods.

**II. Write Notes on : (8X5=40)**

1. Describe the inter-relationship between nutrition and health.
2. Write in brief about basic five food groups.
3. Explain about the functions of proteins.
4. What do you understand by the term water balance and write the effect of water imbalance?
5. Write about functions, sources, bioavailability and deficiency of  
a) Calcium b) Iron.
6. Elaborate on functions of water-soluble vitamins.
7. Brief about Standardization of recipe.
8. Explain the different methods of food preparation.

**III. Short Answers on : (10X3=30)**

1. Define malnutrition.
2. Define Nutrition.
3. Give Recommended Dietary Allowance of protein for pregnant and lactating women.
4. Explain saturated fatty acids and give examples of its sources.
5. Explain and list out the essential amino acids.
6. What are the different routes of excretion of water?
7. List down the sources and give Recommended Dietary Allowance (adult man) for sodium and potassium.
8. Write about processed supplementary foods.
9. Write any 6 points on care of kitchen equipment.
10. Write in brief about the functions of carbohydrates.

\*\*\*\*\*

**THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY**

[AHS 1122]

**NOVEMBER 2022**

**Sub. Code: 3001**

**B.Sc. CLINICAL NUTRITION  
FIRST YEAR (Regulation 2018-2019)  
PAPER I – BASIC NUTRITION  
Q.P NO. 803001**

**Time: Three Hours**

**Answer All questions**

**Maximum: 100 Marks**

**I. Elaborate on:**

**(3X10=30)**

1. Describe the role of nutrition in fitness, athletics and sports.
2. Classify carbohydrates and describe its storage, sources and functions.
3. Elaborate on food sanitation in hygiene.

**II. Write notes on:**

**(8x5=40)**

1. How are nutrition and health inter-related?
2. Explain the role of dietary fiber in health.
3. Brief about protein deficiency.
4. Iron-sources, functions and deficiency.
5. Write about functions, sources, bioavailability and deficiency of  
a) Sodium b) Potassium.
6. Elaborate on functions of fat-soluble vitamins.
7. Brief about Standardization of recipe.
8. Water deficiency.

**III. Short answers on:**

**(10x3=30)**

1. Define optimum and good nutrition.
2. Define nutrients and energy.
3. What is Recommended Dietary Allowance of calcium for pregnant and lactating women?
4. Sources of unsaturated fatty acids.
5. List out the non-essential amino acids.
6. Name five basic food groups.
7. Name the different cooking methods.
8. Processed supplementary foods.
9. What are the different cuts of meat?
10. Functions of fats and oils.

\*\*\*\*\*

**THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY**

**[AHS 0423]**

**APRIL 2023**

**Sub. Code: 3001**

**B.Sc. CLINICAL NUTRITION  
FIRST YEAR (Regulation 2018-2019 onwards)  
PAPER I – BASIC NUTRITION  
Q.P. Code: 803001**

**Time: Three Hours**

**Answer All questions**

**Maximum: 100 Marks**

**I. Elaborate on: (3 x 10 = 30)**

1. Define and classify Moist Heat Cooking. Describe any three Moist Heat Cooking methods with advantages and disadvantages.
2. Classify Detergents with examples. Add a note on formulating Detergents.
3. Describe the classification of Food groups and elaborate on how to use a Food guide.

**II. Write notes on: (8 x 5 = 40)**

1. Functions of Carbohydrates.
2. Explain properties of Dietary fiber.
3. Explain digestion and absorption of Proteins.
4. Explain the mechanism of water balance in the human body.
5. Food handling habits.
6. What are the functions of Food?
7. Effect of cooking on nutritive value of Foods.
8. Explain factors affecting fat absorption.

**III. Short answers on: (10 x 3 = 30)**

1. List the sources of heme and non-heme Iron.
2. Name the Fat soluble and Water soluble Vitamins.
3. Write any three functions of Water.
4. List the differences between Soluble and Insoluble Fiber.
5. Name the essential and non-essential Amino Acids.
6. List the sources of Potassium.
7. Symptoms of Hyponatremia.
8. List any two food sources of saturated and Polyunsaturated Fatty Acids.
9. Define Pesticides and give two examples.
10. What are the consequences of Protein deficiency?

\*\*\*\*\*

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[AHS 1123]

NOVEMBER 2023

Sub. Code: 3001

**B.Sc. CLINICAL NUTRITION**  
**FIRST YEAR (Regulation 2018-2019 onwards)**  
**PAPER I – BASIC NUTRITION**

*Q. P. Code: 803001*

**Time: Three hours**

**Maximum : 100 Marks**

**Answer ALL Questions**

**I. Elaborate on:**

**(3 x 10 = 30)**

1. Explain the effect of cooking on the Nutritive Value of Food.
2. Classify Vitamins and write down the functions of Vitamin C.
3. Explain in detail the sources, functions, reference values and deficiency manifestations of Calcium.

**II. Write notes on:**

**(8 x 5 = 40)**

1. Sports Nutrition.
2. Food Guide Pyramid.
3. Symptoms of Good Nutritional Status.
4. Classification of Carbohydrates.
5. Functions of Fats.
6. Processed Supplementary Foods.
7. Food sanitation.
8. Deficiency of Iron.

**III. Short answers on:**

**(10 x 3 = 30)**

1. Vitamin K.
2. Deficiency manifestation of Iodine.
3. Dietary fibre.
4. Pellagra.
5. Sources of Fat.
6. Dehydration.
7. Beri-beri.
8. Any three difference between Marasmus and Kwashiorkor.
9. Essential aminoacids.
10. List the Enzymes involved in digestion.

\*\*\*\*\*