

[LB 0212]

**AUGUST 2012**  
**B.Sc. OPTOMETRY**  
**FIRST YEAR**  
**PAPER V – NUTRITION**  
**Q.P. Code : 806007**

**Sub. Code: 6007**

**Time : Three hours**

**Maximum : 100 marks**

**(180 Mins) Answer ALL questions in the same order.**

**I. Elaborate on :**

**Pages Time Marks**  
**(Max.)(Max.)(Max.)**

- |  |   |    |    |
|--|---|----|----|
| 1. Explain in detail about eye diseases caused due to the deficiency of vitamin A. | 7 | 20 | 10 |
| 2. Write on protein energy malnutrition.   | 7 | 20 | 10 |
| 3. Write in detail about iron and its role in eye.                                 | 7 | 20 | 10 |

**II. Write notes on:**

- |  |   |    |   |
|--|---|----|---|
| 1. Dietary fiber.                                      | 4 | 10 | 5 |
| 2. Difference between incomplete and complete protein. | 4 | 10 | 5 |
| 3. Supplementary food.                                 | 4 | 10 | 5 |
| 4. Functions of proteins.                              | 4 | 10 | 5 |
| 5. Zeaxanthin.   | 4 | 10 | 5 |
| 6. Functions of calcium and its sources.               | 4 | 10 | 5 |
| 7. Menu planning.                                      | 4 | 10 | 5 |
| 8. Body mass index with interpretation.                | 4 | 10 | 5 |

**III. Short Answers on:**

- |   |   |   |   |
|---|---|---|---|
| 1. Write on Starvation.                                 | 2 | 4 | 3 |
| 2. List of water- soluble and fat –soluble vitamins.    | 2 | 4 | 3 |
| 3. Write on deficiency of essential fatty acids.        | 2 | 4 | 3 |
| 4. Write about the functions of calcium.                | 2 | 4 | 3 |
| 5. Define nutrients.                                    | 2 | 4 | 3 |
| 6. Define hyperlipidemia.                               | 2 | 4 | 3 |
| 7. Define energy unit.                                  | 2 | 4 | 3 |
| 8. Write any two sources and functions of carbohydrate. | 2 | 4 | 3 |
| 9. Write about anemia.                                  | 2 | 4 | 3 |
| 10. Define antioxidants with example.                   | 2 | 4 | 3 |

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[LC 0212]

**FEBRUARY 2013**  
**B.Sc. OPTOMETRY**  
**FIRST YEAR**  
**PAPER V – NUTRITION**  
*Q.P. Code : 806007*

**Sub. Code: 6007**

**Time: Three hours**

**Maximum : 100 marks**

**Answer ALL questions.**

**I. Elaborate on:**

**(3X10=30)**

1. Write in detail about iron and its role in eye.
2. Explain in detail about protein energy malnutrition.
3. Write in detail about vitamin A deficiency diseases related to eye.

**II. Write notes on:**

**(8X5=40)**

1. Any two antioxidants.
2. Nutritional management of obesity.
3. Iodine – excess and deficiency.
4. Functions of carbohydrates.
5. Write about food groups.
6. Functions of calcium and its sources.
7. Recent advances of nutrition in vision.
8. Measurement of energy value of food.

**III. Short answers on:**

**(10X3=30)**

1. What is obesity?
2. Define recommended daily allowance.
3. Write on essential fatty acids.
4. Write about the functions of iodine.
5. Define nutrients.
6. Define body mass index.
7. Define energy unit.
8. Define malnutrition.
9. What is xerophthalmia?
10. Define dialysis.

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[LD 0212]

**AUGUST 2013**  
**B.SC. OPTOMETRY**  
**FIRST YEAR**  
**PAPER VI – NUTRITION**  
**Q.P. Code: 806007**

**Sub.Code :6007**

**Time: Three hours**

**Maximum : 100 marks**

**Answer ALL questions.**

**I. Elaborate on:**

**(3X10=30)**

1. The eye diseases that are caused by Vitamin A deficiency
2. List a few antioxidants and discuss their role in maintaining normal vision.
3. Food sources of iron and the role played by iron in vision.

**II. Write notes on:**

**(8X5=40)**

1. Obesity management with nutrition.
2. Protein energy malnutrition.
3. Balanced diet
4. Food pyramid
5. Source and function of carbohydrates
6. Diet in Pregnancy
7. Role of fiber in diet
8. Explain menu planning.

**III. Short answers on:**

**(10X3=30)**

1. Sources of antioxidants
2. Role of calcium in maintaining good health
3. Define Body Mass Index (BMI).
4. List various fat and water soluble vitamins.
5. The sources and functions of Carbohydrates.
6. Lycopene
7. Incomplete proteins
8. Polysaccharides
9. Free radicals
10. WHO definition of health

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[LE 0212]

FEBRUARY 2014

Sub.Code :6007

**B.SC. OPTOMETRY  
FIRST YEAR  
PAPER VI – NUTRITION  
Q.P. Code: 806007**

**Time: Three hours**

**Maximum : 100 marks**

**Answer ALL questions.**

**I. Elaborate on:**

**(3X10=30)**

1. Give an account on sources, kinds and functions of proteins
2. Describe the source, distribution and deficiency symptoms of vitamins
3. Write a detail about iron and its role in eye.

**II. Write notes on:**

**(8X5=40)**

1. Mention any five factors to be considered while planning of menu
2. Explain the basic four food groups
3. Write short note on malnutrition?
4. How do you prevent PEM?
5. Difference between macro and micro elements
6. Classification of amino acids
7. Define the units of energy and give the inter conversions
8. How will you estimate the energy value foods?

**III. Short answers on:**

**(10X3=30)**

1. Dietary fiber
2. Sources of lipids
3. Nitrogen balance
4. Folic acid
5. Incomplete proteins
6. Two antioxidants and its role
7. Define the balance diet
8. RDA
9. Diabetes mellitus
10. List any two difference between fat and water soluble vitamins

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[LF 0212]

**AUGUST 2014**  
**B.Sc. OPTOMETRY**  
**FIRST YEAR**  
**PAPER V – NUTRITION**  
*Q.P. Code: 806007*

Sub.Code :6007

**Time: Three hours**

**Maximum : 100 marks**

**Answer ALL questions.**

**I. Elaborate on:**

**(3X10=30)**

1. Discuss fats and the eye.
2. Explain in detail about important minerals and vision.
3. Write antioxidants and vision.

**II. Write notes on:**

**(8X5=40)**

1. Protein energy malnutrition and the eye.
2. Complete protein.
3. Essential fatty acids.
4. Functions of Vitamin A.
5. Energy requirement for various age groups.
6. Dietary fibre.
7. Deficiency of iron.
8. Write ophthalmic complications.

**III. Short answers on:**

**(10X3=30)**

1. Food guide.
2. Write any 3 functions of carbohydrate.
3. Essential amino acids.
4. Write deficiency of fat.
5. Write some energy value of food.
6. Write any 3 functions of minerals.
7. List out sources of vitamins A.
8. List out micro nutrients.
9. Write role of vitamins B2 (Riboflavin).
10. What is atherosclerosis.

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[LG 0215]

**FEBRUARY 2015**  
**B.Sc. OPTOMETRY**  
**FIRST YEAR**  
**PAPER V – NUTRITION**  
*Q.P. Code: 806007*

**Sub.Code : 6007**

**Time: Three Hours**

**Maximum : 100 Marks**

**Answer ALL questions.**

**I. Elaborate on:**

**(3 x 10 = 30)**

1. Bomb calorimeter.
2. Write iron and vision.
3. Write deficiency and excess of lipids.

**II. Write notes on:**

**(8 x 5 = 40)**

1. Role of micro minerals.
2. Nutritional classification of food.
3. Write about Lutein and zeaxanthin.
4. Under nutrition and over nutrition.
5. Iodine.
6. Requirements of protein.
7. Write basic 5 food groups.
8. Protein quality determination any two.

**III. Short answers on:**

**(10 x 3 = 30)**

1. Sources of unsaturated fat.
2. Pyrinoderma.
3. What is morbid obesity?
4. Write any three functions of trace elements.
5. Write antioxidants rich food.
6. What is anthropometry?
7. Write any three functions of protein.
8. Write any three functions of ascorbic acid.
9. Define xerophthalmia.
10. What is free radicals? Give an example.

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[LH 0815]

AUGUST 2015

Sub. Code: 6007

**B.Sc. OPTOMETRY**  
**FIRST YEAR**  
**PAPER V – NUTRITION**

*Q.P. Code: 806007*

**Time : Three Hours**

**Maximum : 100 marks**

**Answer ALL questions**

**I. Elaborate on:**

**(3 x 10 = 30)**

1. Explain in detail about vitamin A deficiency eye diseases.
2. Write about bomb calorimeter with diagram.
3. Discuss in detail about protein energy malnutrition.

**II. Write notes on:**

**(8 x 5 = 40)**

1. Write a brief description about lutein and lycopene.
2. Mention the importance of dietary fiber.
3. Discuss about the impact of energy imbalance.
4. What is the effect of excessive intake and deficiency of fats?
5. Define essential and non-essential amino acids. List them.
6. Write a brief note on supplementary food.
7. Explain in detail about food groups.
8. Discuss briefly about menu planning.

**III. Short Answers on:**

**(10 x 3 = 30)**

1. Define balanced diet.
2. What are the sources and functions of carbohydrates?
3. Define body mass index.
4. How are vitamins classified? List them.
5. Define nutrients.
6. Define energy and its unit.
7. What are the functions of calcium?
8. What are essential fatty acids?
9. What is a complete protein?
10. Write any three functions of proteins with examples.

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[LI 0216]

FEBRUARY 2016

Sub.Code : 6007

**B.Sc. OPTOMETRY**

**FIRST YEAR**

**PAPER V – NUTRITION**

*Q.P. Code: 806007*

**Time: Three Hours**

**Maximum : 100 Marks**

**Answer ALL questions.**

**I. Elaborate on:**

**(3 x 10 = 30)**

1. What is the WHO definition of health? Name the food groups. Classify carbohydrates.
2. Write about Vitamin A deficiency. What are the sources of Vitamin A?
3. What is starvation? Describe protein energy malnutrition.

**II. Write notes on:**

**(8 x 5 = 40)**

1. RDA.
2. Sources of calcium.
3. ARMD.
4. Omega-3-fatty acids.
5. Obesity.
6. Lipids.
7. Antioxidants.
8. Balanced diet.

**III. Short answers on:**

**(10 x 3 = 30)**

1. Iron deficiency anemia.
2. Methyl cobalamine.
3. Vitamin D.
4. Chylomicrons.
5. Calcium rich food.
6. Junk food.
7. Beverages.
8. Define nutrients.
9. Dietary fibre.
10. Obesity.

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