

Reg. No.:.....

**Second Year B.Sc Optometry Degree Supplementary Examinations  
October 2021**

**Nutrition, Biochemistry & Pharmacology**

**(2014 scheme)**

**Time: 3 hrs**

**Max marks: 80**

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Draw table/diagrams/flow charts wherever necessary*
- *Write Section A and Section B in separate answer books. Do not mix up questions from Section A and Section B*

**Q.P. Code: 211013**

**Marks: 40**

**Section A: Nutrition & Biochemistry**

**Essay (10)**

1. Define Beta oxidation. Describe steps of Beta oxidation. Add a note on energetics and regulation (1+5+2+2)

**Short notes (3x5=15)**

2. Significance of TCA cycle
3. How heme is catabolized
4. Functions of Vitamin C

**Answer briefly (5x2=10)**

5. Marasmus
6. Composition of tear film
7. Metabolic acidosis
8. Dietary fibre
9. IOP

**Fill in the blanks (5x1=5)**

10. Normal reference level of blood pH .....
11. The semi essential amino acids are .....& .....
12. The Glycosaminoglycan which does not contain uronic acid is .....
13. The Selenium containing enzyme is .....
14. The enzyme deficiency in Von Gierke's disease is .....

**(P.T.O)**

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**Marks: 40**

**Section B: Pharmacology**

**Essay (10)**

1. Enumerate the local anaesthetics for ophthalmic use. Write the mechanism of action, therapeutic uses and different techniques of giving local anaesthetic in eye.

**Short notes (3x5=15)**

2. Antianginal drugs
3. Antiseptics
4. Significance of Vitamin A in eye

**Answer briefly (5x2=10)**

5. Drugs for allergic conjunctivitis
6. Miotics and its uses
7. Plasma expanders
8. Teratogenicity
9. Uses of Diazepam.

**Fill in the blanks (5x1=5)**

10. Name one tear substitute used in eye.....
11. Name one diagnostic dye used in eye.....
12. Ketorolac belongs to ..... group of drugs
13. Give one adverse effect of topical steroids.....
14. Name one drug which causes optic neuritis.....

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