

Reg. No.:.....

**Second Year B.Sc Optometry Degree Supplementary Examinations  
May 2023**

**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. What is transamination. Write the steps of Urea cycle. Add a note on energetics and regulation of urea cycle (2+5+1+2)

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

2. Classification of lipids
3. Galactosemia
4. Steps of beta oxidation of palmitic acid

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

5. Characteristic features of competitive enzyme inhibition
6. Anomerism in sugars
7. Chronic complications of Diabetes Mellitus in the eye
8. Dietary fibre
9. Lens transparency

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

10. An example of Se containing enzyme is.....
11. The normal anion gap is.....
12. Apo lipoprotein present in LDL is.....
13. Pellagra is caused due to deficiency of.....
14. Most important buffer system in plasma is.....

**(P.T.O)**

**Section B: Pharmacology**

**Essay (10)**

1. Classify Atropine substitutes. Write the pharmacological actions and therapeutic uses of Atropine in the eye

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

2. Different routes of administration of ocular drugs
3. Topical antibacterial agents and their indications in eye
4. Local anesthetics

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

5. Vitamin A deficiency
6. Antiviral agents for ophthalmic use
7. Ophthalmic uses of steroids
8. Digoxin
9. Antihistamines

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

10. Name one preservative used in eye drops.....
11. Selective  $\alpha_2$  agonist for ophthalmic use.....
12. Name one antifungal agent used in eye.....
13. Name a drug which causes optic neuritis as side effect.....
14. Name one drug causing peptic ulcer.....

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