

Reg. No.:.....

**Second Year B.Sc Optometry Degree Supplementary Examinations  
May 2025**

**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. Explain Urea cycle and its biochemical reactions.

**(1+9)**

**Short notes**

**(3x5=15)**

2. Sugar cataracts and medical therapy with recent developments
3. Classification of Lipids
4. Enzyme inhibition with examples

**Answer briefly**

**(5x2=10)**

5. Wald's visual cycle
6. Prostaglandins
7. Mucosal block theory
8. Types of blood buffer
9. Diabetes Mellitus

**Fill in the blanks**

**(5x1=5)**

10. Deficiency of ..... results in hemolysis of RBC
11. The normal fasting blood glucose level is .....
12. Wilson's disease is due to the deficiency of .....
13. Phenylketonuria is due to the deficiency of .....
14. .... are the protein biocatalysts synthesized by the living cells

**(P.T.O)**

**Section B: Pharmacology**

**Essay** **(10)**

1. List four mydriatics and their uses. Add a note on the periocular routes of drug administration **(5+5)**

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

2. Anti-inflammatory agents used in eye
3. Anticoagulants
4. Management of angle closure glaucoma

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

5. Drug induced Ocular Toxicity
6. Uses and adverse effects of steroids
7. Name and uses of newer antidepressants
8. Uses of local anesthetics in eye
9. Antifungal agents for ophthalmic use

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

10. A drug used to treat vernal conjunctivitis is.....
11. Herpes zoster ophthalmicus is treated with.....
12. Onchocerciasis is treated with.....
13. A dye use for diagnostic purpose is.....
14. Name a diuretic.....

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