

Reg. No.:.....

**Second Year B.Sc Optometry Degree Supplementary Examinations  
May 2024**

**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 the Citric Acid Cycle and its biochemical reactions. (1+9)

**Short notes**

**(3x5=15)**

2. Mention the biochemical functions and the deficiency manifestations of Vitamin A.
3. IUBMB classification of enzymes with examples.
4. Porphyrias

**Answer briefly**

**(5x2=10)**

5. Composition of cornea
6. Wilson's disease
7. Buffer
8. Atherosclerosis
9. Protein-Energy Malnutrition

**Fill in the blanks**

**(5x1=5)**

- 10.....and ..... are primarily concerned with humoral immunity
11. The normal blood glucose level is.....
12. Niacin deficiency causes .....
- 13 ..... is a hypoglycemic hormone."
14. Active form of Vitamin D is .....

**(P.T.O)**

**Section B: Pharmacology****Essay** **(10)**

1. List five oculotoxic drugs along with their specific ocular toxicity. Add a note on adverse drug reactions (5+5)

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

2. Ocular routes of drug administration
3. Treatment of bacterial conjunctivitis and corneal ulcers
4. Ocular uses of local anesthetics

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

5. Wetting agents and tear substitutes
6. Two uses and contraindications of ocular steroids
7. Muscarinic receptor antagonists used in eye
8. Treatment of Onchocerciasis blindness
9. Prostaglandin analogues used for glaucoma

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

10. Name one selective serotonin receptor inhibitor .....
11. The thrombolytic agent given as a single intravenous bolus is.....
12. Name one dye used for retinal angiography.....
13. Name one antianginal given sublingually .....
14. Name the drug of choice for anaphylactic shock .....

\*\*\*\*\*