

Reg. No.:.....

**Second Year B.Sc Optometry Degree Supplementary Examinations  
September 2019**

**Nutrition, Biochemistry & Pharmacology**

**(2014 scheme)**

**Time: 3 hrs**

**Max marks: 80**

- Answer all questions
- Draw diagrams 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 the normal blood level of urea. Discuss the steps in urea cycle. (2+8)

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

2. Significance of HMP shunt pathway
3. Fatty acid synthase complex
4. Enzyme inhibition

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

5. Hormones regulating blood sugar level
6. Intraocular gel
7. Two functions of prostaglandin
8. Balanced diet
9. Absorption of iron

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

10. Beri beri is due to deficiency of vitamin .....
- 11..... is a hypoglycemic hormone
- 12.Active form of methionine is .....
- 13.Calcitriol ..... blood calcium level
- 14.Normal serum total cholesterol level is .....

**(P.T.O)**

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**Section B: Pharmacology**

**Essay (10)**

1. Describe the factors influencing penetration of ocular drugs. Enumerate the different drug delivery system for ophthalmic use.

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

2. Mydriatics and their uses
3. Antiglaucoma drugs
4. Mast cell stabilizers

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

5. Serotonin
6. Contraindications of atropine in eye
7. Antifungal agents and their indications in eye
8. Fluoxetine and its uses
9. Anticoagulants

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

10. Name one astringent .....
11. Name a zinc preparation used in eye.....
12. Name a drug which cause optic neuritis as a side effect.....
13. Name the drug of choice in anaphylactic shock .....
14. Name one hemostatic .....

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