

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

Nutrition & Biochemistry

(2010 scheme)

Time: 3 hrs

Max marks: 80

- **Answer all questions**
- **Draw diagram wherever necessary**

Essays

(2x15=30)

1. How are lipids classified. Describe in detail beta oxidation of palmitic acid. Add a note on energetics of this pathway. (5+7+3)
2. What is the biochemical composition of cornea. Describe in detail about nutrient uptake and metabolism of cornea. Add a note on factors affecting corneal transparency (3+7+5)

Short notes

(5x5=25)

3. Tyrosine metabolism
4. Enzyme classification
5. Glaucoma
6. Glycogen storage disorders
7. Wald's visual cycle

Answer briefly

(10x2=20)

8. GTT
9. Tear film
10. Photoreceptor cells
11. Intraocular gels
12. Rothera's test.
13. Hormones involved in blood sugar regulation
14. Transfer RNA.
15. Jaundice
16. Essential amino acids
17. Two coenzyme functions of vitamin C

Give precise answer

(5x1=5)

18. Name two dietary fibres
19. Name two sulphur containing amino acids
20. Define respiratory acidosis
21. Normal level of blood urea
22. Name two zinc containing proteins
