

**Second Year B.Sc Optometry Degree Examinations - October 2014**

**Nutrition & Biochemistry**

**Time : 3 hrs**

**Max marks : 80**

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

**Essays**

**(2x15=30)**

1. Describe the dietary sources, requirement, biochemical functions and deficiency manifestations of vitamin A. (1+1+7+6=15)
2. What are the essential amino acids. Explain the digestion and absorption of proteins. (5+10=15)

**Short notes**

**(5x5=25)**

3. Formation of aqueous humor
4. Jaundice.
5. Lipoproteins.
6. Oral glucose tolerance test.
7. Dietary fiber.

**Answer briefly**

**(10x2 = 20)**

8. Balanced diet.
9. Pellagra.
10. Significance of TCA cycle.
11. Respiratory alkalosis.
12. Galactosemia.
13. Genetic code.
14. Functions of lipids.
15. Free radicals.
16. Cori's cycle.
17. Ferritin.

**One word answer**

**(5x1 = 5)**

18. Schilling test is done to detect deficiency of which vitamin.
19. The lens contains insoluble proteins called .....
20. Limiting amino acid in pulses is .....
21. A neurotransmitter identified in the retina is .....
22. Toxic metabolite produced from methanol is .....

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