



Name :

Roll No. :

Invigilator's Signature :

CS/B.OPTM/SEM-1/BO-104/2011-12

2011

BIOCHEMISTRY (GENERAL & OCCULAR)

Time Allotted : 3 Hours

Full Marks : 70

The figures in the margin indicate full marks.

*Candidates are required to give their answers in their own words
as far as practicable.*

GROUP – A

(Multiple Choice Type Questions)

1. Choose the correct alternatives for any *ten* of the following : 10 × 1 = 10

i) Water soluble vitamin is

a) Vitamin A

b) Vitamin B

c) Vitamin C.

ii) When Levo & Dextro isomers are present in equal amounts in a solution it is

a) Rhythmic solution

b) Neutral solution

c) Racemic solution.

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- iii) Aldosterone is the example of
- a) Glucocorticoids
 - b) Mineralocorticoids
 - c) Androgen.
- iv) Glucose is an example of
- a) Triose
 - b) Tetrose
 - c) Pentose
 - d) Hexose.
- v) All are essential amino acid, *except*
- a) Phenylalanine
 - b) Tryptophan
 - c) Tyrosin
 - d) Methionine.
- vi) Iodopsin is responsible for
- a) red colour vision
 - b) green colour vision
 - c) blue colour vision
 - d) yellow colour vision.
- vii) Xerophthalmia is caused by deficiency of
- a) Vitamin A
 - b) Vitamin B
 - c) Vitamin C
 - d) Vitamin D.
- viii) The number of heme groups present in myoglobin is
- a) 1
 - b) 2
 - c) 3
 - d) 4.

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GROUP – C

(Long Answer Type Questions)

Answer any *three* of the following. $3 \times 15 = 45$

6. What are hormones. Explain briefly the role of Estrogen, Progesterone and Testosterone in the human body.
7. a) What are enzymes ? Classify enzymes.
- b) Explain competitive and non-competitive inhibitions of an enzyme. $7 + 8$
8. a) Describe the process of glycolysis and write its importance.
- b) Explain — “Energy investment” and “splitting phases” of glycolysis. $7 + 8$
9. a) Discuss Tests for “Tear film adequacy”.
- b) Discuss Michaelis-Menten equation. $7 + 8$
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