C 62077 (Pages : 3) Name

Reg. No.....

FOURTH SEMESTER B.Sc. DEGREE EXAMINATION, MAY 2014

(UG—CCSS)

Complementary Course--Biochemistry

BC4 C13—ENZYMOLOGY AND METABOLISM—II

Time : Three Hours Maximum : 30 Weightage

I. Answer *all* twelve questions :

1 Knoops hypothesis is associated with :

(a) β oxidation. (b) S oxidation.

(c) α oxidation. (d) co oxidation.

2 The coenzyme not associated with in fatty acid oxidation :

(a) FAD. (b) NAD.

(c) CoA. (d) NADPH.

3 Urea cycle intermediate formed inside mitochondria is :

(a) Ornithine. (b) Citrulline.

(c) Arginine. (d) Argininosuccinate.

4 Parietal cells of gastric glands produce :

(a) Bicarbonate. (b) HC1.

(c) Pepsinogen. (d) Pepsin.

5 Trypsinogen is converted to trypsin by :

(a) Trypsin. (b) Pepsin.

(c) Chymotrypsin. (d) Enteropeptidase.

6 Lysine is a _____ amino acid.

(a) Ketogenic. (b) Glycogenic.

(c) Both (a) and (b). (d) None of these.

7 DNA synthesis proceeds is :

(a) 5'-3' direction. (b) 3'-5' direction.

(c) Both (a) and (b). (d) None of these.

8 rimase is :

(a) Dna A protein. (b) Dna B protein.

(c) Dna C protein. (d) Dna G protein.

Turn over

9 Amber codon is :

(a) UAA. (b) UAG.

(c) UGA. (d) AUG.

10 Nyctalopia is due to the deficiency of :

(a) Vit. D. (b) Vit. A.

(c) Vit. E. (d) Vit. K.

11 Hormone produced by pituitary gland is :

(a) Growth hormone. (b) Epinephrine.

(c) Glucogon. (d) Insulin.

12 Ceruloplasmin contains :

(a) Na. (b) Cu.

(c) Ca. (d) Fe.

(12 x = 3 weightage)

II. Answer *all* nine questions :

13 What is RDA ?

14 What is a template strand ?

15 What is a promoter ?

16 What are peptide hormones ? Give examples.

17 Write a biochemical reaction involving FAD.

18 Mention the physiological functions of Vitamin C.

19 Give the biological role of Fluorine.

20 What are amonotelics ? Give examples.

21 What is familial hypercholesterolemia ?

(9 x 1 = 9 weightage)

III. Answer any *five* questions from seven :

22 Write note on fatty acid synthase.

23 Write note on the biological significance of phospholipids.

24 Write note on different types of RNA.

25 Describe the post translational modification of proteins.

26 Write note on the inhibitors of transcription.

27 Write the physiological functions of epinephrine and glucocorticoids.

28 Write the degradative pathway of phenyl alanine.

(5 x 2 = 10 weightage)

IV. Answer any *two* questions from three :

29 Outline the biosynthesis of Cholesterol.

30 Describe the role of proteolytic enzymes in the gastrointestinal tract and their activation.

31 Describe the replicational events in E-Coli.

(2 x 4 = 8 weightage)