

SECOND SEMESTER B.Sc. DEGREE EXAMINATION, APRIL/MAY 2013

(CCSS)

Biochemistry**BC2 C05—ELEMENTARY BIOCHEMISTRY-2**

Time : Three Hours

Maximum : 30 Weightage

Section AAnswer **all** questions.Each question carries a *weightage* 01¼.

1. An amino acid containing sulphur is :

(a) Arginine.	(b) Lysine.
(c) Methionine.	(d) Proline.
2. Nucleosides are composed of _____ and _____
3. _____ is an essential amino acid.
4. _____ is a saturated fatty acid.
5. An example of ketohexose is _____
6. An example of heteropolysaccharide is :

(a) Amylose.	(b) Hemicelluloses.
(c) Cellulose.	(d) Amylopectin.
7. The functional groups present in monosaccharides are _____ and _____ groups.
8. _____ is the type glycosidic linkage present in cellulose.

(a) α (1, 4).	(b) α (1, 2).
(c) β (1, 4).	(d) (1, 2).
9. Aminocids possess positive as well as negative charges in solution and hence are said to be _____ nature.
10. The nitrogenous base present in lecithin is _____
11. A sugar which rotates the plane polarized light anticlockwise is known as _____
12. Which one of the following attachments is not correct

(a) A = T.	(b) T = A.
(c) G \equiv C.	(d) C = G.

(12 x ¼ = 3 weightage)

Turn over

Section B

Answer all questions.

Each question carries a weightage of 1.0.

13. Define the primary structure of protein.
14. What is Proteolysis ?
15. What is Optical activity ?
16. Define the tertiary structure of proteins.
17. Distinguish between nucleoside and nucleotide.
18. What are Derived lipids ? Give *two* examples.
19. What are basic amino acids ? Give *two* examples.
20. Write short note on phosphatidic acid.
21. Draw the structure of ATP.

(9 x 1 = 9 weightage)

Section C

*Answer any **five** questions.*

Each question carries a weightage of 2.0.

22. Explain Mutarotation.
23. Explain the classification of fatty acids.
24. Explain the structure of tRNA.
25. What are essential amino acids ? Explain their significance.
26. Draw and explain the structure of starch.
27. Explain the colour reactions of proteins.
28. Explain the structure and functions of cholesterol.

(5 x 2 = 10 weightage)

Section D

Answer any two questions.

Each question carries a weightage of 4.0.

29. What are Carbohydrates ? Explain the classification of carbohydrates.
30. Explain the Watson—Crick model of DNA.
31. What is Isomerism ? What are the different types of Isomerism ? Explain with suitable examples.

(2 x 4 = 8 weightage)