

D 31908

(Pages 3)

Name.....

Reg. No.....

**SECOND SEMESTER B.Sc. DEGREE (SUPPLEMENTARY)
EXAMINATION, DECEMBER 2012**

(CCSS)

Biochemistry

BC 2C 05—ELEMENTARY BIOCHEMISTRY-2

Time : Three Hours

Maximum : 30 Weightage

Section A

*Answer **all** questions.*

Each question carries a weightage of $\frac{1}{4}$.

1. The unique properties of each amino acid are determined by its particular :
(a) R group. (b) amino group.
(c) Kinds of peptide bonds. (d) acid group.
2. Cholesterol is :
(a) Diglyceride. (b) Phospholipid.
(c) steroid. (d) Unsaturated fat.
3. Which of the following is a polysaccharide ?
(a) Glucose. (b) Glycogen.
(c) Maltose. (d) Lactose.
4. _____ ~~are nitrogenous bases~~ in nucleic acids.
5. _____ ~~are pyrimidine bases~~.
6. An example of aldohexose is _____
7. Lipoprotein belongs to _____ ~~class of lipids~~.
8. Amino acid with indole side chain :
(a) Histidine. (b) Arginine.
(c) Tryptophan. (d) Serine.
9. _____ is a non-reducing disaccharide.
10. Rancidity of fats can be detected by :
(a) Saponification value. (b) Acid value.
(c) Iodine value. (d) RM value.

Turn over

11. Which of the following bonds are not involved in secondary and tertiary structure of proteins ?
(a) Hydrogen bond. (b) Covalent bond.
(c) Dipole-dipole interactions. (d) Disulphide bond.
12. Which of the following is not a nitrogenous base present in nucleic acids ?
(a) Cytosine. (b) Adenine.
(c) Guanine. (d) Pyridine.

(12 x $\frac{1}{4}$ = 3 weightage)

Section B

Answer all questions.

Each question carries a weightage of 1.

13. Define Saponification value.
14. What is Anomerism ? Explain with suitable examples.
15. Draw the structure of linoleic acid.
16. Explain the amphoteric nature of amino acids.
17. Distinguish between nucleoside and nucleotide.
18. What are heteropolysaccharides ?
19. What are imino acids ? Give two examples.
20. Write short note on chitin.
21. What is denaturation of proteins ?

(9 x 1 = 9 weightage)

Section C

Answer any five questions.

Each question carries a weightage of 2.

22. What are oligosaccharides ? Explain the different types of oligosaccharides with suitable examples.
23. What are phospholipids ? Explain the different classes of phospholipids with suitable examples.
24. Draw and explain the structure of sucrose. Why sucrose is non-reducing ?
25. What are steroids ? Narrate their biological significance.
26. Describe the isomerism of carbohydrates.
27. What are the different types of RNA ? Explain their structure.
28. Explain the colour reactions of proteins.

(5 x 2 = 10 weightage)

Section D

Answer any two questions.

Each question carries a weightage of 4.

29. What are amino acids ? Explain the classification of amino acids with suitable examples.
30. What are fat constants ? Explain their significance in quality evaluation of fats and oils.
31. Explain the Watson-Crick model of DNA.

(2 x 4 = 8 weightage)