C 24776 (Pages : 2) Name.....

Reg. No.....

SECOND SEMESTER B.Sc. DEGREE EXAMINATION, MAY 2017

(CUCBCSS—UG)

Complementary Course

BCH 2C 02—BIOCHEMISTRY—II

Time : Three Hours Maximum : 64 Marks

Section A

Answer **all** *the questions.*
Each question carries 1 *mark.*

1. What are anomers ?
2. Name one example for essential fatty acid ?
3. What is a nucleoside ?
4. Saponification number of the fat/oil indicates ———— ?
5. A natural anticoagulant is ———— ?
6. Which is an unusual, nonreducing disaccharide found in insect blood ?
7. Glucose and fructose give the same osazone. Why ?
8. Name the base is not present in DNA ?
9. ———— is considered as the structural parent of all sphingolipids ?
10. Which amino acid, among the 20 standard protein coding amino acids, is most abundantly occurs in proteins ?

(10 × 1 = 10 marks)

Section B

Answer any **seven** *questions.*
Each question carries 2 *marks.*

11. Explain mutarotation ?
12. What is iodine number ? Give its significance ?
13. Give two general chemical reactions of amino acids ?
14. Give the structure of phosphatidyl choline ?
15. What is meant by base complementarity ?
16. What are sphingolipids ? Give one example ?

Turn over

17. What are epimers ? Give one example ?
18. Write the structure of AMP ?
19. What are essential amino acids ?
20. What are heteropolysaccharides ?

(7 × 2 = 14 marks)

Section C

Answer any **four** *questions.*
Each question carries 5 *marks.*

21. Describe any one method for protein sequencing ?
22. Give the biological significance of fat ?
23. Write a short note on different types of RNA ?
24. Draw the structure of cholesterol and explain the properties of cholesterol ?
25. Draw the structures of maltose, sucrose, and lactose ?
26. Explain proteolysis with an example ?

(4 × 5 = 20 marks)

Section D

Answer any **two** *questions.*
Each question carries 10 *marks.*

27. Give an account of the classification and biological functions of lipids ?
28. Describe the features of Watson and Crick model of DNA ?
29. Write an essay on the different levels of structural organization of protein ?
30. Explain briefly on the structure and important properties of structural polysaccharides ?

(2 × 10 = 20 marks)