C 4114 **(Pages : 2)** **Name.....**

Reg. No.....

SECOND SEMESTER (CUCBCSS—UG) DEGREE EXAMINATION
APRIL 2021

Biochemistry

BCH 2C 02—BIOCHEMISTRY—II

Time : Three Hours Maximum : 64 Marks

Section A

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

1. Name two basic amino acids.
2. ———————— is the most abundant GAG.
3. Name an oligomeric protein.
4. Write down the specificity of protein cleavage by trypsin.
5. Name the non-reducing disaccharide and the bond present in it.
6. Write the name of an essential fatty acid.
7. The sugar present in DNA is ————————.
8. Name the optically inactive amino acid.
9. Presence of rancidity in fat is given by ————————.
10. Name a reaction specific to aromatic amino acids.

(10 × 1 = 10 marks)

Section B

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

11. Draw the linear and cyclic structure of glucose.
12. Define saponification number and mention its significance.
13. What are Epimers ? Give an example.
14. How are osazones formed ?

Turn over

15. Write about Xanthoproteic reaction.
16. Represent the Haworth structure of isomaltose.
17. What are sugar alcohols ?
18. Draw the structure of tryptophan.
19. What is meant by oxidative deamination of an amino acid ?
20. What are Sphingolipids ?

(7 × 2 = 14 marks)

Section C

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

21. Discuss about protein denaturation.
22. Represent the structure of cholesterol and mention its functions.
23. How is C-terminal amino acid identification done ?
24. Write about heteropolysaccharides and their functions.
25. Write a comparison between RNA and DNA.
26. Discuss about the basic physiological functions of lipids.

(4 × 5 = 20 marks)

Section D

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

27. Discuss about the different levels of structural organization of proteins.
28. Write an essay on structure, functions and properties of homopolysaccharides.
29. Give a detailed account of classification, structure and functions of fatty acids.
30. Explain the Watson and Crick model of DNA.

(2 × 10 = 20 marks)