

**C 62641**

**(Pages : 2)**

**Name**

**Reg. No**

**SECOND SEMESTER (CUCBCSS—UG) DEGREE EXAMINATION, MAY 2019**

**B.Sc. Biochemistry**

**BCH 2C 02—BIOCHEMISTRY—II**

Time : Three Hours

Maximum : 64 Marks

**Section A**

*Answer all the questions.*

*Each question carries 1 mark.*

1. Write an example for heteropolysaccharide ?
2. Glucose on oxidation with bromine water forms \_\_\_\_\_
3. Name one amino acid gives yellow colour with ninhydrin ?
4. Iodine number of the fat/oil indicates \_\_\_\_\_
5. A glycosaminoglycan which does not contain uronic acid derivative as one of the component is \_\_\_\_\_
6. What is a non-reducing sugar ?
7. Proteins absorb UV light at 280 nm and show a characteristic peak at this wavelength. Which amino acid residue in the protein is responsible for this absorption ?
8. Name the base is not present in RNA ?
9. What is chitin ?
10. Amino acid which act as the precursor of epinephrine synthesis is

(10 x 1 = 10 marks)

**Section B**

*Answer any seven questions.*

*Each question carries 2 marks.*

11. What is protein denaturation ?
12. What are anomers ? Give one example ?
13. What is saponification number ? Give its significance ?
14. Give two general chemical reactions of amino acids ?

**Turn over**

15. Give the structure of triacyl glycerol ?
16. Give the structure of methyl P—D-glucopyranose ?
17. What are sphingolipids ? Give one example ?
18. What is a zwitter ion ? Give one example.
19. Draw the structure of cysteine ?
20. What are essential fatty acids ?

(7 x 2 = 14 marks)

### Section C

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

21. Explain proteolysis with an example ?
22. Give the biological significance of fat ?
23. Write a short note on secondary structure of tRNA ?
24. Describe any *one* method for protein sequencing ?
25. Draw the structure of ergosterol and explain its functions ?
26. What are osazones ? How is it formed ?

(4 x 5 = 20 marks)

### Section. D

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

27. Give an account of the structure and important properties of glycogen and cellulose ?
28. Describe the features of Watson and Crick model of DNA ?
29. Write an essay on the classification of amino acids ?
30. Give an account of the classification and biological functions of lipids ?

(2 x 10 = 20 marks)