

**C 83014**

(Pages : 2)

Name.....

Reg. No.....

**SECOND SEMESTER B.Sc. DEGREE EXAMINATION, MAY 2015**

(CUCBCSS-UG)

Complementary Course

Biochemistry

BCH 2C 02—BIOCHEMISTRY II

Time : Three Hours

Maximum : 80 Marks

**Part A**

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

1. What is an **epimer** ?
2. What is an **assymmetric** carbon ?
3. What is isomerism ?
4. What is a disaccharide ?
5. What is a non essential fatty acid ?
6. What is Iodine number ?
7. What do you mean by a saturated fatty acid ?
8. What are **sphingomyelins** ?
9. Give an example of a fibrous protein.
10. Point out any *one* specialty of **proline**
11. What is N-terminus ?
12. What is **iso** electric point ?
13. What is a nucleotide ?
14. Give an example of a **pyrimidine**.
15. What is the force which stabilizes base pairing ?
16. Where is DNA located in a cell ?

(16 x 1 = 16 marks)

**Part B**

*Answer any **eight** questions.  
Each question carries 3 marks.*

17. Explain stereo isomerism.
18. Outline the structures of galactose.

**Turn over**

19. What is chitin ? What are its functions ?
20. Draw the structure of ergosterol.
21. Discuss the functions of phosphatidyl serine.
22. What are the common functions of lipids ?
23. Give the structure of tryptophan. Explain its salient features.
24. What is a primary structure ?
25. What is rRNA ?
26. Outline the structure of ADP.

(8 x 3 = 24 marks)

### Part C

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

27. Give a brief account on protein sequencing.
28. Explain the physiological functions of polysaccharides.
29. Explain the features of a peptide bond.
30. Explain why some sugars are called reducing sugars.
31. What is a minor groove ?
32. Outline the major types of RNA.

(4 x 5 = 20 marks)

### Part D

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

33. With the help of appropriate diagram, explain the Watson and Crick model of DNA.
34. Give an account on the structural organization of proteins.
35. Explain the classification of fatty acids.

(2 x 10 = 20 marks)