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 pyramidine.
- 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.

 $(4 \ge 5 = 20 \text{ marks})$ 

## Part D

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

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

 $(2 \ge 10 = 20 \text{ marks})$