

**15U615**

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Name: .....

Reg. No.....

**SIXTH SEMESTER B.Sc. DEGREE EXAMINATION, MARCH 2018**

(CUCBCSS-UG)

**CC15U ZO6 B10 - BIOCHEMISTRY**

Zoology - Core Course

(2015 Admission)

Time: Three Hours

Maximum: 80 Marks

**Part A**

Answer *all* questions. Each carries 1 mark :

1. Name the two kinds of glucose polymers found in starch
2. The protein part of an enzyme is called -----
3. Expand PAGE
4. What are ribozymes
5. What are cytochromes
6. The formation of glucose from non-carbohydrate precursor substances is known as -----
7. Name a non-reducing disaccharide
8. What is a zwitterion
9. Esters of fatty acids and glycerol are known as -----
10. What is a nucleotide

**(10 x 1 = 10 Marks)**

**Part B**

Answer any *ten* questions. Each carries 2 marks:

11. Diagrammatically represent the structure of an aminoacid
12. List out the biological functions of NAD
13. Define Crabtree effect
14. What is Biuret reaction
15. What are Phospholipids
16. What is Ionic bond
17. What is Kreb's cycle
18. Explain the term Transamination
19. Classify proteins based on nutritional requirements
20. Distinguish between glycosidic bond and peptide bond
21. Define Chemiosmotic coupling hypothesis
22. What is glycogenolysis

**(10 x 2 = 20 Marks)**

### **Part C**

Answer any *five* questions. Each carries 6 marks:

23. Explain metabolic fate of Pyruvic acid
24. Describe different types of Compound lipids
25. Comment on different types of Enzyme inhibitions
26. Explain the structure of tRNA with appropriate diagram
27. Give a brief account of Chromatography and its types
28. Briefly explain the steps involved in Beta oxidation
29. Write notes on any two high energy compounds
30. Enumerate the biological functions of Carbohydrates

**(5 x 6 = 30 Marks)**

### **Part D**

Answer any *two* of the following: Each carries 10 marks:

31. Explain the properties, mechanism and theories of enzyme action
32. Write an essay on different levels of structural organization of protein
33. Give the classification of carbohydrates with examples
34. Explain the Catabolism of Amino Acids

**(2 x 10 = 20 Marks)**

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