478468

D_{1}	0023	5
---------	------	---

(Pages: 2)

Name.....

Reg. No.....

SIXTH SEMESTER U.G. DEGREE EXAMINATION, MARCH 2024

(CUCBCSS—UG)

Zoology

ZOL 6B 10—BIOCHEMISTRY

(2018 Admission only)

Time: Three Hours

Maximum: 80 Marks

Part A

- I. One Word Questions. Answer all questions:
 - 1 Give example for a triose sugar.
 - 2 Name a structural polysaccharide found in animals.
 - 3 RNA molecules that has catalytic activity.
 - 4 What is the end product of glycolysis in an Oxygen deficient muscle?
 - 5 Name the pyrimidine bases present in RNA.
 - 6 Expand PAGE.
 - 7 Name a macromolecule present in living cells.
 - 8 Give an example for aldoses.
 - 9 The site of gluconeogenesis in our body.
 - 10 Name the coenzyme in transamination reactions.

 $(10 \times 1 = 10 \text{ marks})$

Part B

- II. Short Answer Questions. Answer any ten:
 - 11 Write the principle involved in Benedict's test.
 - 12 What is Transamination? Give an example.
 - 13 Write the principle of spectrophotometer.
 - 14 What are Zwitter ions?

Turn over

478468

- Define redox potential.
- Write any two biological functions of Cholesterol.
- Mention any two uses of Colorimeter. 17
- What is a denatured protein? 18
- 19 What are Ribozymes?
- What is B-DNA? 20
- What are high energy compounds? Give example. 21
- Give the structure of glucose. 22

(10 x 1

51

Part C

III. Paragraph Questions. Answer any five:

- Give an account of high energy compounds. 23
- Explain beta oxidation of fatty acids.
- Write an account of major classes of enzymes. 25
- How are lipids classified?
- What is meant by competitive inhibition of enzyme action?
- Enlist the biological functions of /carbohydrates.
- What are the properties of amino acids? 30
- Explain the proton gradient and chemiosmotic synthesis of ATP.

Part D

- IV. Essay Questions. Answer any two:
 - Discuss the deamination, transamination and decarboxylation of amino
 - Electron transport chain and Oxidative phosphorylation.
 - ${}^{Describe} \, the \, structure \, and \, elassification \, of \, Carbohydrates.$ 34 Write an essay on glycolysis.