

C 80318

(Pages : 2)

Name.....

Reg. No.....

SIXTH SEMESTER B.A./B.Sc. DEGREE EXAMINATION, MARCH 2020

(CUCBCSS—UG)

Zoology

ZOL 6B 10—BIOCHEMISTRY

Time : Three Hours

Maximum : 80 Marks

Part A

I. One Word Questions. Answer *all* questions :

- 1 Name a structural polysaccharide found in animals.
- 2 Name an unsaturated fatty acid.
- 3 Give example for a triose sugar.
- 4 Reagent used in Xanthoproteic test.
- 5 RNA molecules that has catalytic activity.
- 6 Name the pyrimidine bases present in RNA.
- 7 Metabolic pathway that result in the generation of glucose from non-carbohydrate substrates.
- 8 Who proposed the chemiosmotic theory of ATP synthesis ?
- 9 What is the end product of glycolysis in an oxygen deficient muscle ?
- 10 Lipid with a carbohydrate attached by a glycosidic bond

(10 × 1 = 10 marks)

Part B

II. Short Answer Questions. Answer any *ten* :

- 11 Give any *two* biological roles of ATP.
- 12 Write the principle involved in Benedict's test.
- 13 How is a peptide bond formed ?
- 14 What is transamination ? Give an example.
- 15 What are disaccharides ? Give two examples.

Turn over

- 16 Write the principle of spectrophotometry.
- 17 Distinguish between oils and fats.
- 18 What are zwitter ions ?
- 19 What is Chargaff's rule?
- 20 Define Redox potential.
- 21 What are ketoses ? Give two examples.
- 22 Write any *two* biological functions of cholesterol.

(10 × 2 = 20 marks)

Part C

III. Paragraph Questions. Answer any *five* :

- 23 Explain PAGE.
- 24 Give an account of prostaglandins.
- 25 With the help of a diagram explain the structure of tRNA.
- 26 Explain Beta oxidation.
- 27 What is the principle behind chromatography ? Add a note on paper chromatography.
- 28 What is meant by competitive inhibition of enzyme action ?
- 29 Write an account of major classes of enzymes.
- 30 Enlist the biological functions of carbohydrates.

(5 × 6 = 30 mark)

Part D

IV. Essay Questions. Answer any *two* :

- 31 Write an essay on Glycolysis.
- 32 Explain the mechanism and theories of enzyme action.
- 33 Electron transport chain and oxidative phosphorylation.
- 34 Describe the structural organization of proteins.

(2 × 10 = 20 ma