



PAR-003-001535

Seat No. _____

B. Sc. (Sem. V) (CBCS) Examination

October / November - 2018

Zoology : Paper - Z - 503

Faculty Code : 003

Subject Code : 001535

Time : Hours]

[Total Marks : 70

- Instructions :** (1) Draw neat and labeled diagram wherever necessary.
(2) Figures to the right side indicate full marks for the question.

- 1 Objective type question : 20
- (1) Define : Polysaccharide.
 - (2) Which type of bond is present between two units forming disaccharides ?
 - (3) A solution having pH 5, nature of solution is.....:.....
 - (4) Which vitamin is known as anti pellagra factor ?
 - (5) Describe : Inversion mutation.
 - (6) Define : Cancer.
 - (7) Define : Active site of enzyme.
 - (8) Define : Gene.
 - (9) What is centrifugation ?
 - (10) Define : Activation energy.
 - (11) Definition of Chromatography.
 - (12) Bond present in primary protein.
 - (13) Define : Enzyme.
 - (14) What is acid stain ?
 - (15) Types of chromosome name only.
 - (16) Define : Chromatography.
 - (17) Function of Protein.
 - (18) Application of pH meter.
 - (19) What is negative staining ?
 - (20) Paper chromatography is used for the separation of

- 2 (a) Answer any **three** out of six : 6
- (1) Briefly describe disaccharide.
 - (2) Importance of vitamin.
 - (3) Deletion type chromosomal mutation.
 - (4) Define : Gene.
 - (5) Short note on alpha helix.
 - (6) Explain : Sucrose with structure.
- (b) Answer any **three** out of six : 9
- (1) Explain : Amniocentesis.
 - (2) Explain : Paper chromatography.
 - (3) Explain : Tocopherol.
 - (4) Types of chromosome in detail with structure ?
 - (5) What are Chemical mutagens ?
 - (6) Explain Colourblindness as a hereditary trait.
- (c) Answer any **two** out of five : 10
- (1) Explain the centrifugation process.
 - (2) Characteristics of cancerous cells.
 - (3) DNA fingerprinting.
 - (4) Explain translocation.
 - (5) Molecular structure of gene.
- 3 (a) Answer any **three** out of six : 6
- (1) Discuss : Haemophilia.
 - (2) Short note : Tertiary Protein.
 - (3) Hormonal disturbance theory of carcinogenesis.
 - (4) Types of cancer.
 - (5) Metabolic theory of carcinogenesis.
 - (6) Structure of Primary protein with bond.
- (b) Answer any **three** out of six : 9
- (1) Explain Lock and key theory of enzymes.
 - (2) Secondary protein.
 - (3) Structure of insulin.
 - (4) Short note : Chromium.
 - (5) Radiation as a mutagen.
 - (6) Define and classify : Carbohydrates.
- (c) Answer any **two** out of five : 10
- (1) Describe the classification of amino acids along with their structure.
 - (2) Importance of minerals.
 - (3) Types of enzymes and factors affecting it.
 - (4) Give the comparison between centrifugation and chromatography.
 - (5) Importance of carbohydrate ?