

M.Sc. Biochemistry, Semester-I Examination-2023

Paper Title: Lab Course I. Paper Code: MBC-104

Roll No:

Question 1: Give appropriate answers to the following

Positive Molisch's test is observed for

- a) Reducing Sugars
- b) Glycoproteins
- c) Globosides
- d) All the above

Barfoed's test can be used to distinguish

- a) Glucose and Lactose
- b) Glucose and Fructose
- c) Galactose and Mannose
- d) All the above

(iii) Acrolein test can be used to identify

- (a) Triglycerides
- (b) Cholesterol
- (c) Glucose
- (d) Proteins

(iv) A positive Millons test indicates the presence of

- (a) Amino acids
- (b) Carbohydrates
- (c) Phenols
- (d) None of the above

(v) The Folin-Ciocalteu reagent in the Lowry method reacts with

- a) Peptide bonds
- b) Tyrosine and Tryptophan
- c) Amino groups of Lysine and Arginine
- d) All of the above

(vi) The BeerLambert law (or Beer's law) is the linear relationship between

- (a) Concentration of absorbing species
- (b) Absorbance of absorbing species
- (c) Both a and b
- (d) None of the above

(vii) Detectors used in chromatography generally convert the amount of each component of sample into

- a) Electrical signals
- b) Magnetic signals
- c) Noise signals
- d) Radio signals

(viii) Wijs solution is used in

- a) Determination of molecular weight of Fats
- b) Determination of type of Fat
- c) Number of double bonds in Fats

d) Determination of concentration of Fats

(ix) Proteins are least soluble at

- a) Acidic pH
- b) Basic pH
- c) Iso electric point
- d) Neutral pH

(x) Example of partition chromatography

- a) Gel filtration Chromatography
- b) Ion exchange chromatography
- c) Paper Chromatography
- d) High Performance Liquid Chromatography

(xi) If $\text{pH} < \text{pKa}$ then it will lead to of amino acids

- a) Neutral state of amino acid
- b) Protonation
- c) Deprotonation
- d) No change

(xii) Very long chain alcohols are associated with

- a) Triglycerides
- b) Waxes
- c) Sterols
- d) Phospholipids

(xiii) Quantitative analysis can be carried out using

- a. Spectrophotometry
- b) Chromatography
- c) Titrations
- d) All of the above

(xiv) Hopkin's Cole test is used for the estimation of

- a) Glutamic acid
- b) Triglycerides
- c) Fatty acids
- d) Tryptophan

(xv) Orcinol can be used for the estimation of

- a) RNA
- b) DNA
- c) Carbohydrates
- d) All of the above