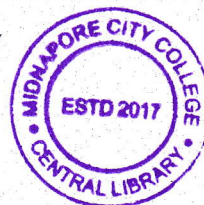


## The West Bengal University of Health Sciences 1st BMLT September, 2023 Examination

Subject: Basic Biochemistry



Time: 3 hrs

Full Marks: 100

*Attempt all questions*

20 x 1

1. Answer all questions :
  - a) Enzyme increases the rate of reaction :
    - i) By increasing activation energy.
    - ii) By lowering activation energy.
    - iii) Remaining the activation energy same.
    - iv) None of the above.
  - b) Double bond is absent in :
    - i) MUFA.
    - ii) PUFA.
    - iii) Saturated fatty acid.
    - iv) All of the above.
  - c) Which Nitrogenous base is absent in RNA :
    - i) Adenine.
    - ii) Thymine.
    - iii) Guanine.
    - iv) Uracil.
  - d) Example of lipid aggregate is :
    - i) Fat.
    - ii) Oil.
    - iii) Wax.
    - iv) Liposome.
  - e) Ketonemia is defined as :
    - i) Presence of ketone body in urine.
    - ii) Presence of ketone body in blood.
    - iii) Absence of ketose in blood.
    - iv) Absence of ketose in urine.
  - f) Example of globular protein is :
    - i) Albumin.
    - ii) Collagen.
    - iii) Elastin.
    - iv) Fibrinogen.
  - g)  $\beta$ -1,4 glycosidic bond is present in :
    - i) Glucose.
    - ii) Fructose.
    - iii) Cellulose.
    - iv) Glycogen.
  - h) Factor which do not affect fluorescence is :
    - i) Structure.
    - ii) Temperature.
    - iii) pH.
    - iv) Odour.
  - i) Fatty acid activation occurs in :
    - i) Mitochondria.
    - ii) Cytoplasm.
    - iii) ER.
    - iv) All of the above.
  - j) Cholesterol synthesis is inhibited by :
    - i) Aspirin.
    - ii) Ibuprofen.
    - iii) Lovastatin.
    - iv) Isoniazid.
  - k) In uncompetitive inhibition :
    - i)  $K_m$  decreases.
    - ii)  $K_m$  increases.
    - iii)  $V_{max}$  increases.
    - iv)  $V_{max}$  remain unchanged.
  - l) Which vitamin deficiency leads to microcytic anaemia?
    - i) B3.
    - ii) B5.
    - iii) B7.
    - iv) B6.
  - m) Example of essential fatty acid is :
    - i) Palmitic acid.
    - ii) Linoleic acid.
    - iii) Stearic acid.
    - iv) Myristic acid.
  - n) Molecular weight is defined by :
    - i) Addition of atomic weight of a molecule.
    - ii) Multiplication of atomic weight of a molecule.
    - iii) Subtraction of atomic weight of a molecule.
    - iv) None of the above.
  - o) The hormone calcitonin :
    - i) Increases blood calcium.
    - ii) Decreases bone calcium.
    - iii) Increases bone calcium.
    - iv) None of the above.
  - p) Zwitter ion property showed by :
    - i) Fatty acid.
    - ii) Amino acid.
    - iii) Nucleic acid.
    - iv) All of the above.
  - q) The anion liberated by ionization of an acid is called :
    - i) Conjugate acid.
    - ii) Amino acid.
    - iii) Conjugate base.
    - iv) Modified base.

**P. T. O.**