Gurudas College

Internal Assessment 2021

Zoology Honours

Paper: ZOOA-CC3-7-TH

FM: 10 Time: 30 Minutes

(Answer ***any Ten Multiple Choice Questions*** of the following**)**

1. What is the molecular formula of sucrose?
   a. $C_{12}H_{22}O_{11}$
   b. $C_{10}H_{20}O_{10}$
   c. $C_6H_{12}O_6$
   d. $C_{12}H_{20}O_{11}$

2. Maltose is a disaccharide of
   a. glucose /galactose
   b. glucose/glucose
   c. glucose/lactose
   d. fructose/lactose

3. Where does glycolysis occur?
   a. mitochondria
   b. nucleus
   c. ribosome
   d. cytosol

4. Which of the following is not formed during the Krebs cycle?
   a. Lactate
   b. Isocitrate
   c. Succinate
   d. Both (a) and (b)

5. Number of milligrams of KOH required to neutralize fatty acid present in 1g of fat is called
   a. Potassium number
   b. Acid number
   c. Saponification number
   d. Iodine number

6. β-oxidation takes place in
   a. Cytoplasm
   b. Chloroplasts
   c. Nucleus
   d. Mitochondria

7. What products of glucose oxidation are essential for oxidative phosphorylation?
   a. Acetyl CoA
   b. Pyruvate
   c. NADH and $FADH_2$
   d. NADPH and ATP

8. The naturally occurring proteins consist of
   a. D-amino acids
   b. L-amino acids
   c. both (a) and (b)
   d. none of these

9. The simplest amino acid is
   a. Glycine
   b. Alanine
   c. Asparagine
   d. Tyrosine

10. Which part of the amino acid gives it uniqueness?
   a. Amino group
   b. Carboxyl group
   c. Side chain (R Group)
   d. None of the mentioned

11. Which of the following is not the precursor of a purine ring?
   a. Glutamine
   b. Lysine
   c. Glycine
   d. Aspartate

12. Which of the following disorder is caused due to the high serum level of urate?
   a. Gout
   b. Galectosemia
   c. Cystic fibrosis
   d. Maple syrup urine disease

13. Name the genetic disorder which is caused by the deficiency of enzyme HGPRT?
   a. SCID
   b. Cystic fibrosis
   c. Lesch-Nyhan syndrome
   d. Down syndrome

14. Which is the correct Line weaver-Burk equation of the following?
   a. $V_{max} = \frac{V_0[S]}{K_m+[S]}$
   b. $V_0 = \frac{V_{max}[S]}{K_m+[S]}$
   c. $\frac{1}{V_0} = \frac{K_m}{V_{max}[S]} + \frac{1}{V_{max}}$
   d. $\frac{1}{V_{max}} = \frac{K_m}{V_0[S]} + \frac{1}{V_0}$

15. Which of the following statements is the general mechanism of an enzyme?
   a. It acts by means of increasing the pH.
   b. It acts by means of decreasing the pH..
   c. It acts by means of increasing the activation energy.
   d. It acts by means of reducing the activation energy.