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SAT No. _____

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SARDAR PATEL UNIVERSITY
B.Sc Examination, 6th Semester

US06CBIT-24

27th June 2022

(Enzymology)

Total marks: 70

Time: 10:00 am to 12:00 pm

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Q-1 Multiple Choice Question.

1. A sigmoidal plot of substrate concentration versus reaction velocity may indicate?
 - a) Michaelis-Menten kinetics
 - b) Co-operative binding
 - c) Competitive inhibition
 - d) Non-Competitive inhibition
2. An inducer is absent in ____ type of enzyme.
 - a) Allosteric enzyme
 - b) Isoenzyme
 - c) Constitutive enzyme
 - d) Cooperative enzyme
3. Which enzyme is concerned with transfer of electron?
 - a) Isomerases
 - b) Lysases
 - c) Oxidoreductases
 - d) Transferases
4. Which one is coenzyme?
 - a) ATP
 - b) CoA
 - c) Vitamin B and C
 - d) All of the above
5. A coenzymes containing aromatic hetero-ring is _____.
 - a) ATP
 - b) Biotin
 - c) FMN
 - d) TPP
6. A non competitive inhibitor of an enzyme -catalyzed reaction?
 - a) Increase K_m and V_{max}
 - b) Decreases K_m and V_{max}
 - c) Increases K_m and reduces V_{max}
 - d) Increases V_{max} and reduces K_m
7. Which of the following are reduced coenzymes?
 - a) NADH and $FADH_2$
 - b) ATP and GTP
 - c) NAD^+ and FAD
 - d) coenzyme A and ubiquinone
8. Which of the following is not a physical method of immobilization?
 - a) Absorption
 - b) Encapsulation
 - c) entrapment
 - d) cross linking
9. In leather industry _____ is used to remove hair from hides.
 - a) Trypsin
 - b) rennet
 - c) alkaline protease
 - d) amylase
10. The lock and key hypothesis mechanism is related with?
 - a) Enzyme structure
 - b) Enzyme specificity
 - c) Enzyme inhibition
 - d) Enzyme activity

Q-2

Answer the following

1. The enzyme which helps in changing configuration of molecules is _____.
2. The enzyme following M-M kinetics shows a characteristic graph when substrate concentration is plotted against velocity, the nature of graph will be _____.
3. Uncompetitive inhibition is most noticeable at low substrate concentration and can be overcome at high substrate concentration. State true /false.
4. Ping-pong reaction is also known as _____.
5. Induced fit model was discovered by _____.