

Name: _____	Subject: Biology	Class: 9 th	Time: 60 minutes	Total Marks:	30
Chapter No.6	MJDexpert.com			Obtained marks	

Objective Section

Q.1 Encircle the correct answer. (10x1=10)

1. To what category of molecules do enzymes belong?
A) Carbohydrates B) Proteins C) Nucleic Acids D) Lipids
2. The term metabolism is derived from a Greek word meaning:
A) Division B) Change C) Deficiency D) Matter
3. The molecule on which enzyme acts is called:
A) Active Site B) Cofactor C) Substrate D) Prosthetic Group
4. The type of protein that catalyzes a biochemical reaction is called:
A) Enzymes B) Hormones C) Co-enzymes D) None of these
5. Which enzyme is used to remove protein stains on clothes?
A) Protease B) Lipase C) Amylase D) Pepsin
6. In what medium does the enzyme trypsin work?
A) Alkaline B) Acidic C) Modification D) Light Base
7. In which year was the lock and key model proposed?
A) 1824 B) 1924 C) 1994 D) 1894
8. Who used the term enzyme for the first time?
A) Emil Fischer B) Daniel Koshland C) Ibn-e-Nafees D) Winhelm Kuhne
9. Lipase enzyme acts on only:
A) Carbohydrates B) Proteins C) Lipids D) Starch
10. Specificity of different enzymes is determined by:
A) Temperature B) Concentration of substrates C) Shapes of active sites D) pH

Subjective Section

Q.2 Write short answers of the following parts. (10x2=20)

- i. Define substrate and product.
- ii. Differentiate between anabolism and catabolism.
- iii. Differentiate between prosthetic group and coenzyme.
- iv. What is meant by denaturation of enzymes?
- v. Write down the equation for the mechanism of enzyme action.
- vi. What is meant by intracellular and extracellular enzymes?
- vii. Define activation energy. How do enzymes lower the activation energy?
- viii. What is meant by saturation of active sites?
- ix. What is the main use of enzymes in the paper industry?
- x. What is the induced fit model for enzyme action?