



**TARGET : NEET (UG) 2024**

**Course : SARANSH (Youtube Live CRASH COURSE)**

**BIOLOGY**

**DPP**

**DAILY PRACTICE PROBLEMS**

**DPP NO. 2**

**ZOOLOGY: Biomolecules**

**DPP No. : 2**

- Enzymes are divided into -
  - 6 Classes, each with 4 - 13 subclasses and named accordingly by a four- digit number
  - 7 Classes, each with 4 - 13 subclasses and named accordingly by a four- digit number
  - 6 Classes, each with 4 - 13 subclasses and named accordingly by a three- digit number
  - 6 Classes, each with 4 - 20 subclasses and named accordingly by a four- digit number
- Enzyme are best defined as
 

(1) Catalysts	(2) Bio-catalysts
(3) Inorganic-catalysts	(4) Metallo-catalysts
- Which one of the following is an enzyme?
 

(1) Insulin	(2) Riboflavin	(3) Griseofulvin	(4) Lipase
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- A dialysable non-protein organic substance which combines with apoenzyme to make a functional enzyme is
 

(1) Hormone	(2) Coenzyme	(3) Proenzyme	(4) Holoenzyme
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- In competitive inhibition -
  - Inhibitor resembles the substrate in molecular structure
  - Competition is found between substrates and inhibitors to occupy active sites
  - Binding of the inhibitors to active sites declines the enzyme action
  - All
- Holoenzyme is produced by
 

(1) Combined coenzyme and apoenzyme	(2) Only prosthetic group
(3) Only protein	(4) Only cofactor
- Lecithin is a
 

(1) Sterol	(2) Glycolipid	(3) Phospholipid	(4) Sphingolipid
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- Triglycerides are fatty acid esters of glycerol, which are formed by the esterification of \_\_\_\_\_ molecule(s) of fatty acids with \_\_\_\_\_ molecule(s) of glycerol.
 

(1) One, two	(2) One, three	(3) Three, one	(4) Two, one
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- A phospholipid molecule consists of
  - one molecule of fatty acid and three of glycerol
  - one molecule of phosphoric acid, two of fatty acids and one of glycerol
  - one molecule of phosphoric acid, three of fatty acids and one of glycerol
  - one molecule of phosphoric acid, one of fatty acid and three of glycerol

10. Lecithin is  
(1) Fatty acid (2) Heteropolysaccharide  
(3) Derivative of chitin (4) Phospholipid
11. Which one is the most appropriate definition for an enzyme?  
(1) A protein, acts like biocatalyst by lowering activation energy in biochemical reactions  
(2) A protein, acts like a biocatalyst by increasing activation energy in biochemical reactions  
(3) A protein, acts like a biocatalyst by neither lowering nor increasing activation energy in biochemical reactions  
(4) A protein, but not a biocatalyst and has nothing to do with activation energy
12. In Enzymology the 'turnover number' means:  
(1) The maximum number of chemical conversions of substrate molecules per second that a single catalytic site will execute for a given enzyme concentration  
(2) The requirement of a number of prosthetic groups by an enzyme  
(3) The requirement of a number of coenzymes by an enzyme  
(4) The requirement of a number of metal ions by an enzyme
13. The inhibitor which does not resemble the substrate in structure and binds to the enzyme at the site other than active site is called:  
(1) Non-competitive inhibitor (2) Activator  
(3) Substrate analogue (4) Competitive inhibitor
14. Micaelis-Menten constant ( $K_m$ ) is equal to :  
(1) Substrate concentration at which the rate of reaction is maximum  
(2) Substrate concentration at which the reaction attains half of its maximum velocity  
(3) The rate of enzymatic activity  
(4) The rate of reaction
15. Which of the following is correct for competitive inhibition of enzymes  
(1) Inhibitor can attach with the active site  
(2) Inhibitor is substrate analogue  
(3)  $V_{max}$  remains unchanged and  $K_m$  increases  
(4) More than one option is correct
16. Parts of the enzyme that interacts with substrate is called \_\_\_\_\_ A  
(1) cofactor (2) active site (3) competitor (4) apoenzyme
17. The substance which inactivates an enzyme by denaturing is called: .  
(1) enzyme inhibitor (2) allosteric inhibitor  
(3) competitive inhibitor (4) irreversible inhibitor
18. The inhibitor which closely resembles the substrate in its molecular structure and inhibits the enzyme activity by binding to the active site of the enzyme is called  
(1) feed back inhibitor  
(2) non-competitive inhibitor  
(3) Competitive inhibitor  
(4) allosteric modulator
19. The protein part of enzyme is  
(1) Prosthetic group (2) Apoenzyme (3) Holoenzyme (4) Zymogen
20. A non proteinaceous organic compound, which tightly binds to enzyme and is non separable is called  
(1) Apoenzyme (2) Prosthetic Group (3) Coenzyme (4) Co-factor