

Class: XIth

Date:

Subject: BIOLOGY

DPP No.: 9

	_	omolecules		
1.	In which one of the following sets of three against them?	e items each belong to the category mentioned		
	a) Lysine, glycine,	b) Myosin, oxytocin		
	thiamine – Amino acids	and gastric – Hormones		
	c) Rennin, helicase	d) Optic nerve,		
	and hyaluronidase – Enzymes	oculomotor, vagus – Sensory nerves		
2.	the substrate in structure is called	te other than the active site and do not resemble		
	a) Activator	b) Substrate analogue		
	c) Competitive inhibitor	d) Non-competitive inhibitor		
3.		to some other biomolecules and are made from		
	a) Amino acids b) Biomolecules only	c) Monosaccharides d) Enzymes		
4.	A physical change, during a chemical reaction a) Change in shape without breaking of bonds b) Change in state of matter c) Change in the bond energy during the chem d) Both (a) and (b)			
5.	Identify, in which of the following carbon coma) Proteins b) Amino acids	npounds, heterocyclic rings can be found? c) Nitrogen bases d) Lipids		
6.	Hydrolysis of lipid yields? a) Fats c) Mannose and glycerol	b) Fatty acids and glycerol d) Maltose and fatty acids		
7.	If all the peptide bonds of protein are brol a) Amide b) Oligosaccharide	ken, then the remaining part is c) Polypeptide d) Amino acid		

8.	In a polysaccharide, the individual monosaca) Glycosidic bond c) Ester bond			b) Pep	ccharides are linked by a b) Peptide bond d) Phosphodiester bond		
9.	The free energy of a sys a) Decreases c) Becomes equal to zer		spontaneous	b) Inc	n reases nains unchango	ed	
10.		activity nzyme i	-	lle, which	h reversibly n	nodifies the structure of e reversible inhibition	
11.	Pentoses and hexoses a) Monosaccharides			c) Pol	ysaccharides	d) Oligosaccharides	
12.	Which one of the folloa) Glycogen	owing is b) Sucro	_	ride? c) Lac	ctose	d) Maltose	
13.	Oxygenic compounds a) Vitamins	of biolo b) Horm	7		activate cher zymes	nical reactions are d) Fats	
14.	A product of metabolisma) Metabolite	n is <mark>calle</mark> b) C <mark>atab</mark>		c) Ana	abolite	d) All of these	
15.	Starch and cellulose a a) Glycerol	re comp b) Amin		-	s of uple sugars	d) Fatty acids	
16.	According to Watson-Crick model, DNA exists as aA The two strands of polynucleotides areB The backbone is formed by the sugarC,D chain. The nitrogen bases are mor or lessE to this backbone Choose the correct options for the blanks A, B, C, D and E a) A-chain, B-perpendicular, C-carbonate, D-base, E-parallel b) A-helix, B-parallel, C-sugar, D-phosphate, E-perpendicular c) A-double helix, B-antiparallel, C-phosphate, D-sugar, E-perpendicular d) A-strand, B-parallel, C-sulphate, D-sugar, E-perpendicular						

- 17. After grinding a living tissue in trichloroacetic acid and then straining it, you would obtain two fractions: acid soluble pool and acid insoluble fraction. Acid insoluble fraction does not contains
 - a) Nucleic acids

b) Polysaccharides

c) Lipids

- d) Flavonoids and alkaloids
- 18. The curve given below shows enzymatic activity with relation to three conditions (pH, temperature and substrate concentration)
 What do the two axes (*X* and *Y*) represent?

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(is			
Y-axis		· Control of the cont	
	1	1	

X-axis

		X-axis	Y	-axis
a)	Te	mperature		Enzyme activity
b)	Su	bstrate		Enzymatic
	со	ncentration		activity
c)	En	zymatic activity		Temperature
d)	En	zymatic activity		рН

19. Choose the correct options

a) E + S
$$\rightarrow$$
 ES \rightarrow E + P \rightarrow EP

b)
$$E + S \rightleftharpoons ES \rightarrow E - P \rightarrow E + P$$

c)
$$E + S \rightarrow ES \rightleftharpoons E - P \rightarrow E + P$$

d) E + S
$$\rightleftharpoons$$
 ES \rightleftharpoons E - P \rightleftharpoons E + P

- 20. Which of the following statement(s) are/is correct?
 - I. In the process of metabolism, all organic biomolecules are constantly being broken down but not being built up through chemical reactions
 - II. A product of metabolism in called a metabolite, but not always
 - III. Metabolism is always known to built up new products
 - IV. Metabolism is the characteristic feature of non-living things
 - a) All are incorrect

b) All are correct

c) Only IV is correct

d) II and IV are correct