DPP
DAILY PRACTICE PROBLEMS

Class : XIIth
Date :

Solutions

Subject : CHEMISTRY
DPP No. : 4

Topic :- Biomolecules

1 **(c)**
Despite having, the aldehyde group, glucose does not give, 2, 4-DNP test, Schiff's test and it does not form the hydrogen sulphite addition product with $NaHSO_3$. It shows that glucose is a cyclic compound.

2 **(c)**
Lauric acid: $C_{11}H_{23}COOH$, palmitic acid: $C_{15}H_{31}COOH$,
myristic acid: $C_{13}H_{27}COOH$ and linoleic acid: $C_{17}H_{31}COOH$ (an unsaturated acid).

3 **(a)**
Fe of haemoglobin acts as catalyst for the reaction.

4 **(c)**
Val. Uyr. Ala Tyr. ala. Val
Val. Ala. Tyr Ala. Tyr. Val
Tyr. Val. Ala Ala. Val. Tyr

5 **(d)**
It is an example of conjugated protein (conjugated proteins hydrolysis give α — amino acids and a non-protein portion. This non-protein portion is called the prosthetic group).

7 **(b)**
Cellulose is a polysaccharide (carbohydrate) while rest three are enzymes. Enzymes are chemically complex proteins which act as catalyst in biological activities.

8 **(a)**
Each one is a polymer of glucose.

9 **(b)**
The first is biuret test, protein gives violet colour with alkali and $CuSO_4$ (aq.); the second is ninhydrin test and the third is xanthoproteic test; all are tests of proteins.

10 **(c)**
Fats and oils contain even or odd carbon fatty acid derivative of glycerol.

11 **(a)**
It is a fact.

12 **(b)**
Thymine base is not present in RNA. Uracil is found in place of thymine.

13 **(b)**
Haemoglobin containing iron is a transport protein found in RBC of most of the animals. It is responsible for the transport of oxygen from the lungs to the cells and for removal of

waste CO_2 from the cells which it returns to lungs.

14 **(c)**

In liver glucose is converted into glycogen.

15 **(c)**

Lipase hydrolyses triglycerides to fatty acids and glycerol.

16 **(b)**

Lemon, orange, etc., are sources of vitamin C.

17 **(d)**

One molecule of CH_3COCl reacts at one $-OH$.

$$-OH + CH_3COCl \longrightarrow -OOCCH_3$$

18 **(a)**

Night blindness is caused by the deficiency of vitamin A or retinol

19 **(d)**

Zwitter ion is formed by amino acid. Glycine is amino acid. Zwitter ion of glycine is

$$\overset{+}{N}H_2—CH_2—COO^-$$

ANSWER-KEY										
Q.	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
A.	**C**	**C**	**A**	**C**	**D**	**C**	**B**	**A**	**B**	**C**
Q.	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
A.	**A**	**B**	**B**	**C**	**C**	**B**	**D**	**A**	**D**	**D**