DPP

DAILY PRACTICE PROBLEMS

Class : XIIth
Date :

Solutions

Subject : CHEMISTRY
DPP No. : 10

Topic :- Biomolecules

1 **(d)**
Enzymes have well defined active sites and their action are specific in nature. They are called biological catalysts and work at optimum temperature between 25°C to 40°C

2 **(c)**
Enzyme catalysed reactions are highly specific in nature.

4 **(a)**
Vitamin A is also called xerophythol or retinol.

5 **(d)**
Inulin is a polysaccharide made up of fructose units.

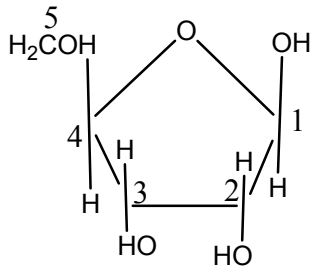
6 **(b)**
The reaction with phenyl hydrazone gives same osazone because glucose and fructose differ only on carbon atoms 1 and 2 which are involved in osazone formation.

7 **(a)**
The sugar which cannot reduce Fehling solution and Tollen's reagent are called non-reducing sugars *e.g.,* sucrose and all polysaccharides.

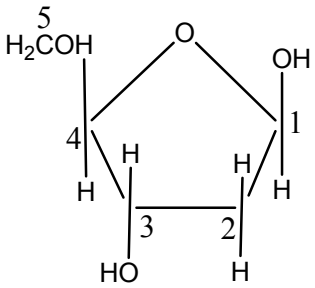
8 **(b)**
Glucose and mannose are epimers of each other.

9 **(c)**
Testosterone is an hormone.

10 **(b)**



β-D-ribose used in RNA;
At 2nd carbon-OH group is present



β-D-deoxyribose used in DNA

At 2nd carbon-OH group is missing.

11 **(b)**

Commercially it is obtained from pine trees.

12 **(c)**

When protein is boiled with a dilute solution of ninhydrin (triketo hydrindin), a blue colour is produced.

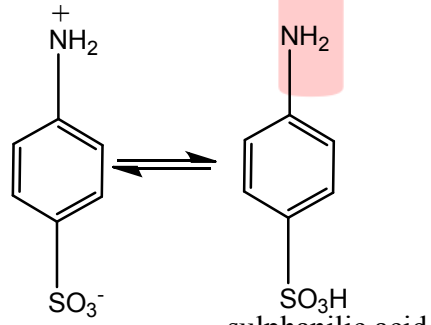
Protein + Ninhydrin solution $\xrightarrow{\Delta}$ Blue colour

13 **(a)**

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.

15 **(c)**

The compounds having $-NH_2$ and $-COOH$ or $-NH_2$ and $-SO_3H$ groups exist as Zwitter ion *e.g.,*



Zwitter ion sulphanilic acid

16 **(a)**

ATP provides energy during metabolic changes.

17 **(d)**

It is 160 times sweeter than sucrose.

18 **(d)**

The formation of DNA from older one is called replication. It requires a DNA template, a primer deoxyribonucleoside triphosphates (dATP, dGTP, dTTP, dCTP). Mg^{2+}, DNA unwinding protein supper halix releasing protein. It is also called as DNA multiplication.

19 **(b)**

Glyceraldehyde $(CH_2OH - CHOH - CHO)$ is the first member of monosaccharide.

20 **(d)**

The sugars which doesn't reduce Tollen's reagent, Fehling solution and Benedict solution are known non-reducing sugars. Sucrose is a non-reducing sugar.

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