

Class: XIIth Date:

**Solutions** 

**Subject : CHEMISTRY** 

**DPP No.: 6** 

## **Topic:- Biomolecules**

1 **(d)** 

Spermaceti is white waxy solid consisting mainly cetyl palmitate, i.e.,  $C_{15}H_{31}COOC_{16}H_{33}$ .

2 **(d)** 

 $C_{12}H_{25}SO_4Na$ ; Synthetic detergents are the chemical compounds synthesized in laboratory and possess properties like soaps. These are also surface active agents and possess cleansing capacity like soaps. These are generally sodium or potassium salts of long chain alkyl benzene sulphonic acids, or long chain alkyl sulphate.

3 **(c)** 

Triolein is an unsaturated glyceride while tristearin is a saturated glyceride. Hence, the conversion of triolein to tristearin can be affected by hydrogenation.

Triolein +  $H_2 \xrightarrow{\text{Ni}}$  Tristearin

4 (a)

CH<sub>2</sub>OH(CHOH)<sub>4</sub>CHO

Glucose

CH<sub>2</sub>OH (CHOH)<sub>4</sub>COOH

gluconic acid

5 **(d)** 

All plant cells contain cellulose.

6 **(c)** 

The main structural feature of protein is peptide linkage.

7 **(a)** 

Thyroxine is:

$$HO$$
 $I$ 
 $CH_2$ 
 $C$ 
 $COOH$ 
 $NH_2$ 

8 **(a)** 

Follow text.

9 **(d)** 

Here, the –0H of hemiacetal group is equatorial therefore, it is a  $\beta$  – pyranose of an aldohexose.

10 **(c)** 

General formula of acetic acid  $C_2(H_2O)_2$  but it is not a carbohydrate.

11 (a)

Vitamin E develops impotency.

12 **(d)** 

Glucose is CHO(CHOH)<sub>4</sub> CH<sub>2</sub>OH.

14 **(c**)

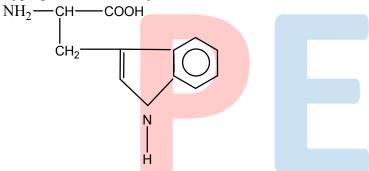
On reduction with HI/P fructose gives n- hexane.

15 **(b)** 

Progesterone is secreted by Ovaries.

16 **(d)** 

Tryptophan is a heterocyclic amino acid.



17 **(b)** 

Guanine is the constituent of nucleic acid and guanidine.

18 **(c)** 

It is Tollens' reagent and with this Ag mirror is formed.

19 **(c)** 

Sucrose is the only naturally occurring disaccharide which is non-reducing

20 **(b)** 

Those sugar which contain 2, 3, 5, 6 carbon atom are known as monosaccharides. Hence, hexoses and pentoses are monosaccharides.

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

