

**Topic :- Biomolecules**

- 1 (c)  
Glucose has five –OH gp. and thus, acylation occurs at all –OH units.
- 2 (c)  
It is a fact.
- 3 (a)  
All are functions of DNA.
- 4 (d)  
Ptyalin enzyme is found in saliva.
- 6 (a)  
DNA has nucleotide unit, i.e., sugar + base + H<sub>3</sub>PO<sub>4</sub>.
- 9 (b)  
Wax is ester.
- 10 (d)  
Waxes are the esters of higher fatty acids with higher monohydric alcohols such as mericyl and cetyl alcohols.
- 11 (a)  
Nucleic acids (RNA and DNA) are polymers of nucleotides.
- 12 (b)  
Both have molecular formula C<sub>12</sub>H<sub>22</sub>O<sub>11</sub>.
- 13 (d)  
All these are amino acids.
- 14 (d)  
Glycogen is polysaccharide with monomeric units of glucose.
- 16 (c)  
One molecule of glucose reacts with 3 molecules of phenyl hydrazine to form glucosazone.
- $$\begin{array}{c} \text{CH}=\text{NNHC}_6\text{H}_5 \\ | \\ \text{C}=\text{NNHC}_6\text{H}_5 \\ | \\ (\text{CHOH})_3 \\ | \\ \text{CH}_2\text{OH} \end{array}$$
- 17 (a)  
Animal starch is glycogen, a polysaccharide having glucose units and is synthesized in

liver.

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**(d)**

Fructose is  $\text{CH}_2\text{OH} \cdot \text{CO} \cdot (\text{CHOH})_3 \text{CH}_2\text{OH}$ .

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**(b)**

A mixture of amylase and amylopectin is called starch. Amylase is a water soluble fraction while amylopectin is water insoluble fraction.

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**(d)**

Proteins are soluble in benzene.

PE

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

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