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**Max Time : 1 hr** **Class = 11th Biology Test Max Marks : 25**

**Topic: Biomolecules**

1. Multiple choice questions : [ 1 X 3 = 3 ]
2. A secondary metabolite is :

|  |  |
| --- | --- |
| a) Lectin – Concanavalin A | b) Nucleic acid |
| c) Proteins | d) All the above |

1. Which of the following biomolecules have phosphodiester bonds

|  |  |
| --- | --- |
| a) fatty acid in a diglyceride | b) monosaccharides in a polysaccharides |
| c) amino acid in a polypeptide | d) Nucleotides in a nucleic acid |

1. Which of the following is the most abundant protein in the animals?

|  |  |  |  |
| --- | --- | --- | --- |
| a) Collagen | b) Lectin | c) insulin | d) haemoglobin |

1. Define Epimers with examples? [ 2 ]
2. Draw the structure of sucrose. [ 2 ]
3. Define Zwitter ion ? [ 2 ]
4. Draw the Haworth projection of the following structures : [ 3 ]

(a) Ribose (b) Glucose (c) fructose

1. (a) Name the chemical that cements animal cells. [ 3 ]

(b) Name two contractile proteins.

(c) What is the difference between RNA and DNA in their nitrogen bases.

1. What are secondary metabolites? Name two important secondary metabolites [ 3 ]
2. Illustrate a glycosidic , peptide and phosphodiester bond. [ 3 ]
3. Give a brief description of different structures of proteins. [ 4 ]