



KERALA AGRICULTURAL UNIVERSITY
B.Tech.(Food Engg) 2018 Admission
II Semester Final Examination- June 2019

qu.1201

Fundamentals of Biochemistry (2+1)

Marks: 50
Time: 2 hours
(10x1=10)

Match the following

- | | |
|------------------|--------------------------|
| 1 Stachyose | a Saturated fatty acids |
| 2 Glycolysis | b Cyclic peptide hormone |
| 3 Biuret test | c Carbohydrate |
| 4 Molisch's Test | d Proteins |
| 5 Vasopressin | e Cytoplasm |
| 6 Arachidic acid | f Tetra saccharide |
| 7 PPP | g Respiration |
| 8 Phytoalexin | h Clover leaf model |
| 9 Mitochondria | i NADPH |
| 10 tRNA | j Disease resistance |

Write Short notes on any FIVE of the following

(5x2=10)

- 1 Function of rRNA
- 2 Iodine number and its significance.
- 3 Anomers with an example.
- 4 Significance of Pentose phosphate pathway
- 5 Two functions of phenolics
- 6 Mutarotation
- 7 Glyoxysomes and its importance

Answer any FIVE of the following.

(5x4=20)

- 1 Outline sequence of reactions in TCA cycle
- 2 Chemical reactions of monosaccharide
- 3 Structure of protein.
- 4 Reactions of beta-oxidation of fatty acids
- 5 Metabolism of amino acids with suitable reactions
- 6 Three dimensional structure of DNA
- 7 Classification of secondary metabolites with suitable example in each class

Answer any ONE of the following

(1x10=10)

- 1 Immobilization of enzymes. Outline methods of immobilization of enzymes with industrial applications of enzymes
- 2 Enzyme activity. Describe the different factors that effect enzyme activity with suitable diagrams.
