



KERALA AGRICULTURAL UNIVERSITY

B.Tech.(Food Engg) 2017 Admission

II Semester Final Examination- July 2018

Fdqu.1201

Fundamentals of Biochemistry (2+1)

Marks: 50
Time:2 hours

I Fill up the blanks

(10x1=10)

- 1 Carbohydrate which does not digest by humans is.....
- 2 Example for nonstandard amino acid is.....
- 3 Protein synthesis occurs at
- 4 The molecule which acts directly on an enzyme to lower its catalytic rate is.....
- 5 The end product of glycolysis is pyruvate, which enters the citric acid cycle after being converted into

State True or False

- 6 Cane sugar is known as sucrose.
- 7 The secondary structure of protein is maintained by peptide bond.
- 8 The function of an enzyme is to change the rate of chemical reactions
- 9 Triacylglycerols are insoluble in water.
- 10 Oxidation of a molecule involves in gain of proton.

II Write Short notes on any FIVE of the following

(5x2=10)

- 1 Racemisation
- 2 Fermentation
- 3 Syneresis
- 4 Denaturation
- 5 Essential amino acids
- 6 Simple lipids
- 7 Enzyme unit

III Answer any FIVE of the following.

(5x4=20)

- 1 Write structure of monosaccharide's and explain about open chain structure.
- 2 Classify amino acids based on their reaction in solution.
- 3 Give an overview of deamination process in protein metabolism.
- 4 Nutritional value of milk proteins.
- 5 Describe the types of specificity of enzymes.
- 6 Different types of rancidity.
- 7 Role of pectin in food industry.

IV Write an essay on any ONE of the following

(1x10=10)

- 1 Define lipids and classify them with suitable examples.
- 2 Describe the steps involved in aerobic and anaerobic glycolysis.
