

# KERALA AGRICULTURAL UNIVERSITY

B.Tech (Food . Engg) Degree Programme 2015 Admission

II<sup>nd</sup> Semester Final Examination- June – July 2016

Cat. No: Fdqu 1201

Title: Fundamentals of Biochemistry (2+1)

Marks: 50.00

Time: 2 hours

## I Fill up the blanks

(10 x 1 =10)

1. Egg yolk is rich in \_\_\_\_\_
2. Oxaloacetate is converted to \_\_\_\_\_ first in TCA cycle.
3. Fatty acids are broken down to \_\_\_\_\_ in beta oxidation
4. Ribose is a \_\_\_\_\_ sugar.  
a) Triose    b) Pentose    c) Diose    d) Hexose
5. Natural seed gums are  
a) Proteins    b) fats    c) Dioses    d) polysaccharides

## State whether true or false

6. Tyrosine gives a positive xanthoproteic test
7. Pectin is water insoluble.
8. Enzyme action is not affected by change in pH.
9. Arginine is a basic amino acid.
10. Co enzymes are basically proteins.

## II Write short notes ANY FIVE

(5 x 2 =10)

1. Influence of temperature on enzyme action.
2. Which are the acidic amino acids?
3. How sugars are classified?
4. Phospholipases.
5. Algal polysaccharides.
6. What is iodine test? How it is performed?
7. Nutritional quality of milk.

## III. Explain ANY FIVE of the following

(5 x 4 =20)

1. Properties of reducing sugars.
2. Essential fatty acids.
3. Glycolysis.
4. Enzyme inhibition.
5. Proteolytic enzymes.
6. Classification of fatty acids.
7. Test for the presence of protein.

## IV. Write essay on ANY ONE

(1 x 10=10)

1. Describe cellular respiration
2. Explain structure of proteins.