

# KERALA AGRICULTURAL UNIVERSITY

B.Sc.Hons (Forestry) 2015 Admission  
I<sup>st</sup> Semester Final Examination-March -2016

Cat. No: Tpbr. 1104

Marks: 50.00

Title: Plant Biochemistry (1+1)

Time: 2 hours

## I Fill up the blanks

(10 x 1=10)

1. \_\_\_\_\_ is the site of chlorophyll inside a chloroplast
2. Glucose units linked by alpha 1,4 and 1,6 linkage is called as \_\_\_\_\_
3. The portion of enzyme where catalysis takes place is called \_\_\_\_\_
4. The classic structure of DNA was proposed by \_\_\_\_\_
5. \_\_\_\_\_ is the first stable product in Calvin cycle (C3)
6. \_\_\_\_\_ is an enzyme catalyzing the hydrolysis of peptide bond
7. In the process of photosynthesis \_\_\_\_\_ act as the electron donor
8. \_\_\_\_\_ is an essential amino acid
9. Fatty acids with single bonds between all carbon, known as \_\_\_\_\_ fatty acid
10. \_\_\_\_\_ of DNA is replaced by uracil in RNA structure

## II Write short notes on any Five questions

(5 x 2=10)

1. Major classification of carbohydrates with one example in each
2. Draw the diagram of Mitochondria and label
3. Role of cellulose and its structure
4. Write about essential amino acids with examples
5. Beta oxidation
6. Which are the factors affecting enzyme action?
7. Describe one specific test for a monosaccharide

## III Write short essays any Five questions

(5 x 4=20)

1. Classification of lipids
2. Structure of chloroplast
3. CAM plants
4. Components in Z scheme
5. ETC
6. Electrophoresis of proteins
7. Structure and function of DNA

## IV Write essay on Any ONE

(1 x 10=10)

1. Explain the different types of plant hormones with their mode of action
2. Explain Calvin cycle with schematic illustration

**IV Write essay on Any ONE**

(1 x 10 = 10)

1. Role of Indian forest in carbon sequestration and comment on carbon credits
2. Forest classification on the basis of method of regeneration, age, composition and management status