



KERALA AGRICULTURAL UNIVERSITY
B.Sc. (Hons.) Forestry 2018 Admission
I Semester Final Examination-February 2019

bti.1102

Plant Biochemistry (1+1)

Marks: 50
Time: 2 hours

Fill up the blanks

(10x1=10)

- 1 Two monosaccharide units are linked by
- 2 Fatty acid with 18 carbon and 2 double bonds is
- 3 Carbohydrate present in DNA is
- 4 Catalytic activity of an enzyme is due to
- 5 In photosynthesis, light energy is converted to

State True or False

- 6 Change in the optical rotation is called mutarotation.
- 7 Methionine is a sulphur containing amino acid
- 8 Essential amino acids are taken only through the diet
- 9 β oxidation of fatty acid takes place in cytosol
- 10 Cytokinin is the first discovered phytohormone

Write Short notes on ANY FIVE of the following

(5x2=10)

- 1 Reducing and non reducing sugars.
- 2 Amphoteric molecule.
- 3 Give the major classes of enzyme.
- 4 Iodine number.
- 5 Secondary structure of a protein.
- 6 Significance of Pentose phosphate pathway.
- 7 Electron transport chain.

Answer ANY FIVE of the following

(5x4=20)

- 1 Classification of Carbohydrate with example.
- 2 Types and functions of phospholipids.
- 3 What is enzyme inhibition? Discuss the competitive and non competitive inhibition.
- 4 Structures of nucleoside and nucleotide.
- 5 Hill's reaction.
- 6 Structure of a chloroplast.
- 7 Allosteric enzymes and coenzymes

Answer ANY ONE of the following

(1x10=10)

- 1 Sequence reactions of TCA cycle with its significance.
- 2 Salient features of DNA and the structure of DNA double helix, with neat diagram.
