KERALA AGRICULTURAL UNIVERSITY
B.Sc. (Hons.) Ag.
Re-examination - July 2019
2015 and previous admission

Ssac.1202   Agricultural Biochemistry (2+1)   Marks: 50
Time: 2 hours

I **Fill in the blanks**   (10x1=10)

1 Total number of nitrogen atoms present in purine ring is.....................
2 .... is an essential 18 carbon fatty acid having 2 double bonds.
3 The common metabolic pathway for carbohydrate, lipid and protein metabolism is...................

State True or False

4 Double stranded left handed DNA is Z DNA.
5 Lysine is a basic amino acid.
6 Ketone bodies are produced due to excess oxidation of fatty acids.
7 The absorption maxima of protein is at 260 nm.

Choose the correct answer

8 Amylose and amylopectin are the components of
   a) Starch   b) Dextrin   c) Glycogen   d) Inulin
9 The allosteric inhibitor of an enzyme
   a) Causes the enzyme to work faster   b) Binds to the active site
   c) Participates in feedback regulation   d) Denatures the enzyme
10 Sorbitol is the alcohol of
   a) Glucose   b) Sucrose   c) Maltose   d) Lactose

II **Write Short notes on ANY FIVE of the following**   (5x2=10)

1 Enzyme class Hydrolases.
2 Substrate level phosphorylation.
3 Photorespiration.
4 Mutarotation.
5 Epimers and anomers.
6 Rancidity of Oil.
7 Genetic code.

III **Answer ANY FIVE of the following**   (5x4=20)

1 TCA cycle.
2 Water soluble vitamins and their functions.
3 DNA replication.
4 Importance of alkaloids.
5 Mechanism of enzyme action.
6 Secondary structure of proteins.
7 Structure of t-RNA.

IV **Write an essay on ANY ONE of the following**   (1x10=10)

1 Explain the reactions of photosynthesis.
2 Describe the reactions of glycolysis under aerobic and anaerobic condition.

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