SC-195

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Seat No.	

B.Sc. (Part - III) (Semester - V) Examination, November - 2018
BOTANY
Plant Biochemistry (Paper - XII)
Sub. Code: 65839

Day and Date : Thursday, 15 - 11 - 2018 **Total Marks : 40**
Time : 12.00 noon to 2.00 p.m.

Instructions :
1) **All questions are compulsory.**
2) **Marks to the right indicate full marks.**
3) **Draw neat and labelled sketches wherever necessary.**

Q1) Rewrite the following sentences by choosing correct alternative: **[8]**

a) _____ is the epimer of glucose.

i) Fructose ii) Galactose

iii) Xylose iv) Erythrose

b) _____ ATP equivalents per mole of glucose input are required for gluconeogenesis.

i) 2 ii) 6

iii) 8 iv) 4

c) The smallest of the RNA's is _____.

i) mRNA ii) tRNA

iii) rRNA iv) Okazaki fragments

d) _____ amino acid starts the process of protein synthesis.

i) Alanine ii) Proline

iii) Methionine iv) Glycine

e) In eukaryotes fatty acid breakdown occurs in _____.

i) cytosol ii) cell membrane

iii) mitochondrial matrix iv) chloroplast

P.T.O.

f) The key enzyme in the regulation of fatty acid is _____.

i) AMP activated protein kinase ii) Protein phosphatase

iii) Acid phosphate iv) Acetyl CoA carboxylase

g) In tRNA molecule, the cloverleaf secondary structure consists of _____.

i) two stem loops ii) three stem loops

iii) one stem loop iv) four stem loops

h) A Zwitterion is _____.

i) positive ion ii) negative ion

iii) neutral iv) none of the above

Q2) Attempt any two of the following: **[16]**

a) Explain the primary and secondary structure of proteins.

b) What are polysaccharides?Explain their physical and chemical properties.

c) Describe the structure and role of various types of RNA.

Q3) Attempt any four of the following: **[16]**

a) Biosynthesis of starch.

b) Non protein amino acids.

c) β - oxidation of fatty acids.

d) Classification of lipids.

e) Farms of DNA.

f) Cellulose.

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