

KERALA AGRICULTURAL UNIVERSITY

B.Tech (Food.Engg) 2012 Admission
IInd Semester Final Examination- July -2013

Cat. No: Fdqu.1201

Marks: 80

Title: Fundamentals of Biochemistry (2+1)

Time: 3 hours

I. Fill up the blanks:

(10X1=10)

1. Which carbohydrate is long chain of glucose indigestible to man
a)Glycogen b)Starch c)Lactose d) Cellulose
2. Which macromolecule's functions include insulation,water proofing,energy storage and shock absorption
a)Protein b)Fat c)Carbohydrate d)Lectins
3. Which molecule gives a positive biuret test
a) Protein b)Fat c)Carbohydrate d)All three
4. Action of drug allopurinol is based on
a) Non competitive inhibition b) Competitive inhibition c) Allosteric inhibition
5. Which molecules gives a positive anthrone test test
a) Protein b)Fat c)Carbohydrate d)All three
6. Maltose comes under
a) Protein b) Disaccharide c) Monosaccharide
7. Which of the following is considered to be a fibrous protein?
a) Hemoglobin b) Immunoglobulin c) Keratin
8. Xylose is a ----- sugar
a) Triose b) Pentose c) Diose d) Hexose
9. ----- is an essential amino acid
a)Glycine b) Alanine c) Methionine
10. Father of biochemistry ?
a) Caul Neuberg b) Virchoff c) Albert Claude

II. Write short answers on any ten

(10 X 3=30)

1. How amylase functions?
2. Which are the Essential amino acids?
3. How lipids are classified?
4. Algal polysaccharides
5. Which are the factors affecting enzyme action?
6. Write on Active site
7. Lipases
8. Describe One specific test for a monosaccharide
9. Write about the enzymes having role in glycolysis
10. What do you know about amino acid Glycine
11. Write briefly on Proteolytic enzymes giving at least one example. (P.T.O)

III. Write short essays on any six

(6 X 5=30)

1. classification of enzymes
2. Sulphur containing amino acids
3. Biological importance of proteins
4. Starch – as a polysaccharide
5. Co factors
6. TCA cycle
7. Triglycerides
8. Electrophoresis of proteins

IV. Write essay on any one

(10X1=10)

1. Structure of proteins and denaturation of proteins
2. Structure, function and chemical properties of polysaccharides