KERALA AGRICULTURAL UNIVERSITY

B.Tech (Agrl.Engg) 2013 Admission

IIIrd Semester Final Examination- January -2015

Cat. No: Phpt.2102

Title:Engineering properties of Biological Materials and Food Quality (2+1)

Marks: 50.00

Time: 2 hours

I Define

(10 x 1=10)

1. Roundness
2. Sphericity
3. Rheology
4. Drag coefficient
5. Angle of repose
6. TQC
7. Youngs Modulus
8. HACCP
9. Specific heat
10. Thermal conductivity

II Write short notes on any FIVE questions

(5x 2=10)

1. Differentiate bulk density and true density
2. Differentiate coefficient of internal friction and external friction
3. Enumerate aerodynamic properties of food materials
4. Write about GMP
5. Explain the principles of Abbe's refractometer
6. What is the working principle of spectrophotometer
7. Mention the panel selection procedure for the sensory evaluation

III Write short notes on any FIVE questions

(5x 4=20)

1. Describe a method to determine thermal conductivity of food material
2. Explain food safety and GAP
3. Explain the application of engineering properties in storage structures of food materials
4. Write the concept, objectives and methods of quality control in food products
5. Explain the food laws and regulations practiced in India
6. Explain in detail about the method of determination of dielectric properties of food
7. Explain the methods to determine the frictional properties of food materials

IV Write an essay on any ONE

(1 x 10=10)

1. With diagram explain the methods of determining physical properties of food materials
2. Explain the rheological models and derive their equations