

# KERALA AGRICULTURAL UNIVERSITY

B.Tech (Agrl.Engg) 2014 Admission  
III<sup>rd</sup> Semester Final Examination-December -2015

Cat. No: Phpt 2102

Marks: 50.00

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

Time: 2 hours

**I Define the following**

(10 x 1=10)

1. Sphericity
2. Roundness
3. Thermal diffusivity
4. Internal friction
5. Sampling
6. CODEX
7. FPO
8. ISO
9. GMP
10. HACCP

**II Write short notes on any Five questions**

(5 x 2=10)

1. What are the methods used for measurement of specific heat
2. What is plastic flow?
3. Differentiate kinematic and dynamic viscosity
4. What is Total Quality Management?
5. Discuss Rheological models
6. Write about the FPO standards
7. Discuss briefly about various AGMARK standards

**III Answer any Five questions**

(5 x 4=20)

1. Discuss need for quality control
2. What are methods used for measurement of viscosity?
3. Explain working of colour meter
4. Explain textural measurements by sensory method
5. Discuss aerodynamic properties
6. Discuss briefly about sanitation in food industries
7. Explain seven principles of HACCP

**III Answer any one question**

(1 x 10=10)

1. Discuss application of engineering properties in design of storage structures
2. Discuss various national and international standards for food processing

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