B.VOC DEGREE (C.B.C.S.S.) EXAMINATION, OCTOBER 2017
SEMESTER V-CORE COURSE (FOOD PROCESSING TECHNOLOGY)
VFP5S18TB – ENGINEERING PROPERTIES OF FOODS

Time: Three Hours   **Maximum Marks: 80**

PART A

I.   Answer all questions. Each question carries 1 mark.

1.   Define Newtonian liquid?
2.   Define specific heat.
3.   What is terminal velocity?
4.   Define enthalpy.
5.   What isViscoelasticity?
6.   Define porosity.

(6×1 = 6)

PART B

II.   Answer any seven questions. Each question carries 2 marks.

7.   Define specific gravity and explain any method to determine it.
8.   Differentiate between angle of repose and coefficient of friction.
9.   What is drag coefficient?
10.   Differentiate thermal conductivity and thermal diffusivity.
11.   Write a brief note on optical properties.
12.   What are the causes of mechanical damage?
13.   Explain in detail physical properties of food material.
14.   Give any two applications of thermal property of foods.
15.   What are the methods to determine surface area of fruit?
16.   Give all the textural properties of foods.

(7×2 = 14)

PART C

III.   Answer any five questions. Each question carries 6 marks.

17.   Explain aerodynamic property of food material and write its application.
18.   Describe an apparatus and its working procedure to find angle of repose with neat
       sketch.
19.   Write short notes on Differential Scanning Calorimetry.
20.   How mechanical damage can be detected?
21.   Explain thermal conductivity probe method.
22.   Describe in detail textural properties
23.   Write short notes on mechanical models.

24. Describe platform scale method.

<div align="right">(5×6 = 30)</div>

PART D

IV. Answer any two questions. Each question carries 15 marks.

25. Explain the methods to determine the texture of a food material?
26. Explain rheology, its classification and rheological classical ideal bodies with neat sketch?
27. Explain the determination methods to find specific gravity.
28. Explain any two types of viscometers.

<div align="right">(2×15 = 30)</div>