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02/19-11

Reg. No :

Name :

BACHELOR'S DEGREE (C.B.C.S) EXAMINATION, NOVEMBER 2024
2022 ADMISSIONS REGULAR
B.VOC SEMESTER V - SKILL (FOOD PROCESSING TECHNOLOGY)
VFPT5S14B18 - Engineering Properties of Foods

Time : 3 Hours

Maximum Marks : 80

Part A

I. Answer any Ten questions. Each question carries 2 marks

(10x2=20)

1. List out different engineering property.
2. Differentiate between oblate and oblong.
3. Interpret the applications of determining density.
4. Write the expression for specific heat and what is its unit.
5. Define specific heat.
6. Draw the experimental set up for the determination of angle of repose.
7. Define rolling resistance.
8. Differentiate between elasticity and plasticity.
9. Give all the textural properties of foods.
10. Define rheology.
11. What is optical property?
12. Trace the applications of optical property.

Part B

II. Answer any Six questions. Each question carries 5 marks

(6x5=30)

13. Write short notes on different shapes of vegetables and fruits.
14. Explain the porosity apparatus with neat diagram.
15. "Thermal property is important in food processing equipment design." Comment.
16. Write short notes on specific heat.
17. Explain wall friction and internal friction of grains.
18. Define static friction, angle of internal friction and coefficient of friction.
19. Explain in detail texture analyser.
20. Write short notes on mechanical models in rheology.
21. Write short notes on mechanical damage.

Part C

III. Answer any Two questions. Each question carries 15 marks

(2x15=30)

22. Elaborate on different thermal properties and the applications of the same.
23. Explain in detail terminal velocity, drag coefficient and angle of repose .
24. Write in detail the working of redwood, saybolt and rotating cylinder viscometer.
25. Explain in detail various applications of optical property.