

TB205510V

Reg. No : .....

Name : .....

**B. Voc. DEGREE (C.B.C.S.) EXAMINATION, NOVEMBER 2022**  
**2020 ADMISSIONS REGULAR AND 2019, 2018 ADMISSIONS SUPPLEMENTARY**  
**SEMESTER V - SKILL COURSE ( 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. Define sphericity.
2. Which are the different physical properties of foods ?
3. Estimate the method to determine the surface area of fruit.
4. Define thermal diffusivity.
5. Define thermal conductivity.
6. Discuss how does moisture content vary with angle of repose.
7. Draw the experimental set up for the determination of angle of repose.
8. What is Hookean Body?
9. Give all the textural properties of foods.
10. Define St.Venants Body.
11. What are the causes of mechanical damage?
12. Define abrasion.

**Part B**

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

**(6x5=30)**

13. Write short notes on engineering properties of foods.
14. Explain specific gravity balance method.
15. What are the units of thermal conductivity, heat transfer coefficient, specific heat and thermal diffusivity?
16. Write short notes on specific heat.
17. Draw the diagram to estimate angle of repose of grains.
18. Write short notes on drag coefficient.
19. What are the applications of rheological classification?
20. Write short notes on textural classification of foods.
21. Illustrate the applications of electrical and optical property.

**Part C**

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

**(2x15=30)**

22. Write in detail thermal properties of foods.
23. Describe in detail various frictional properties.
24. Write in detail the rheological properties of materials.
25. Explain in detail mechanical damage of food materials.