

Register No.: Name:

SAINTGITS COLLEGE OF ENGINEERING (AUTONOMOUS)

(AFFILIATED TO APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY, THIRUVANANTHAPURAM)

FIFTH SEMESTER B.TECH DEGREE EXAMINATION (Regular), DECEMBER 2022**(2020 SCHEME)****Course Code : 20FTT395****Course Name: Advances in Food Packaging****Max. Marks : 100****Duration: 3 Hours****PART A*****(Answer all questions. Each question carries 3 marks)***

1. What is the characteristic of an ideal package?
2. Explain the levels of packaging
3. Summarize the advantages of metal packaging materials
4. Explain the limitations of paper-based packaging materials
5. Differentiate between High Density and Low-Density Poly-Ethylene
6. Expand PET. What is its importance?
7. Explain the advantages and limitations of vacuum packaging
8. Write a note on shrink packaging
9. How packaging influences storage and handling?
10. What are the impacts of rancidity in fat and oil due to packaging?

PART B***(Answer one full question from each module, each question carries 14 marks)*****MODULE I**

11. Discuss the commercial significance of food packaging systems (14)

OR

12. a) Explain the relationship between packaging and shelf life of food (7)
b) Describe the basic functions of food packaging (7)

MODULE II

13. a) Discuss the different forms of packaging materials (7)
b) Elaborate the steps involved in the manufacture of paper (7)

OR

14. Summarize the manufacturing and importance of Tinsplate containers and Tin free steel containers. (14)

MODULE III

15. a) How plastic films are manufactured? (7)
b) Explain the advantages and disadvantages of plastic packaging materials in food industry. (7)

OR

16. Discuss retort pouches and its manufacturing (14)

MODULE IV

17. a) Differentiate between Controlled and Modified atmosphere packaging (7)
b) What are the steps involved in aseptic packaging? (7)

OR

18. Elaborate the technologies involved in active packaging (14)

MODULE V

19. a) Describe the packaging requirements for fruits and vegetables (7)
b) Summarize the packaging requirements for carbonated beverages (7)

OR

20. a) Describe the packaging requirements for Fish and fish products (7)
b) Discuss how the characteristics of packaging materials helps the food products. (7)
