

Register No.: ..... Name: .....

**SAINTGITS COLLEGE OF ENGINEERING (AUTONOMOUS)**

(AFFILIATED TO APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY, THIRUVANANTHAPURAM)

**FIFTH SEMESTER B.TECH DEGREE EXAMINATION (R), DECEMBER 2023****FOOD TECHNOLOGY****(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. Differentiate between package and packaging
2. How shelf life plays an important role in processed foods?
3. Write the difference between rigid and semi rigid packaging
4. Write the importance of Lacquers packaging
5. Explain the characteristics of flexible packaging material
6. Write the merits and demerits of High Density and Low Density Poly Ethelene
7. Discuss the principles of Gas packaging
8. Explain the benefits of Biodegradable plastics in food industry
9. Enlist any three-packaging materials usage in carbonated beverage industry
10. Illustrate the relationship between storage and packaging

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

11. a) Discuss the criteria for the selection of packaging material for a product (7)
- b) Elaborate the importance and functions of packaging system in a food industry (7)

**OR**

12. a) Write the difference between traditional packaging system and modern packaging system in India (7)
- b) Compare primary packaging and secondary packaging (7)

**MODULE II**

13. Discuss the steps involved in the manufacture of tin can. Give reasons for can corrosion. What type of lacquer should be used for canning of meat. What is Tin Free Steel? (14)

**OR**

14. Explain the importance and types of plastic films usage in packaging (14)

**MODULE III**

15. Explain the growth of plastic industries for sustainable development of society. How can plastic waste be properly managed? State uses of recycled plastics. What are eco-friendly packaging materials? (14)

**OR**

16. a) Elaborate the importance of Poly-Ethylene Terephthalate in food industry (7)  
b) Enlist the merits and demerits of Ethylene Vinyl Acetate polyester (7)

**MODULE IV**

17. a) Write the details about retort packaging (7)  
b) Give a note on vacuum packaging (7)

**OR**

18. a) Summarize about gas packaging (7)  
b) Discuss various coatings in packaging (7)

**MODULE V**

19. a) Describe the packaging requirements of meat and meat products (7)  
b) Discuss the packaging requirements of fruits and vegetables (7)

**OR**

20. a) Summarize it, how packaging materials help to increase shelf life of the products (7)  
b) Explain, how packaging materials properties support the food items (7)

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