

Total number of printed pages = 3

19/6th Sem/UFET 601

2022

FOOD PACKAGING TECHNOLOGY

Full Marks – 100

Time – Three hours

The figures in the margin indicate full marks for the questions.

Answer any *five* questions.

1. (a) How the glass jars are made ? Describe each step in details with diagram. 10
- (b) Why is annealing done in manufacture of glass containers ? 5
- (c) Write the advantages and disadvantages of glass bottles over metal-cans. 5
2. (a) Define Active Packaging System. 2
- (b) How the active releasing/emitting system helps in improving the food quality and safety. 9
- (c) Write the mechanisms and reaction of oxygen, carbon-dioxide and ethylene scavengers. 9

[Turn over

3. Write short notes on any *four* of the following :

5×4=20

- (a) Laminates
- (b) Bisphenol A
- (c) Can lacquering
- (d) Can sizing
- (e) Polyethylene.



4. (a) Describe the making of two-piece tin can by DWI techniques with the neat diagram. 10

(b) Describe the making of two-piece tin can by DRD techniques with the neat diagram.

10

5. (a) What is Modified Atmosphere Packaging (MAP)? How does modified atmosphere packaging protect food? 10

(b) Why petroleum based synthetic plastics are enormously used in food packaging application? Discuss the major impacts of synthetic plastics on human health and the environment. 4+6=10

6. (a) What are bioplastics? Write the various categories of bioplastics that can be used as alternatives to synthetic plastics for food packaging applications. 10
- (b) How the bio-based plastics could be better alternatives to synthetic plastics? Explain. 10
7. Write the principles and mechanisms of any two of the following Indicators : 10×2=20
- (a) Freshness and Microbial Spoilage Indicators
- (b) Time-Temperature Indicators (TTI)
- (c) Indicators Based on Thermochromic Inks.

