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53 (FPT 601) FPTC

2014

FOOD PACKAGING TECHNOLOGY

Paper : FPT 601

Full Marks : 100

Time : Three hours

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

Answer any five questions out of seven.

1. (a) Describe primary and secondary level of Food Packaging. 3
- (b) Write *two* properties and *two* uses of HDPE, LDPE, PVC & PET — plastic materials. 4
- (c) State the purpose of lacquered can used for food canning and list *any four* lacquers used for can. 4+2
- (d) Define packaging and enlist *five* benefits of food packaging. 2+5

Contd.

2. (a) Draw the sketches of manufacturing process of glass bottle by blow and blow process and press and blow process. Describe processing steps. 16
- (b) Give two suitable packaging materials for each of the following products : 4
- (i) Vegetable oil
 - (ii) Glucose biscuits
 - (iii) Cake
 - (vi) Mango Jam.
3. (a) Describe the procedure of determination of WVTR. 5
- (b) What is Aseptic packaging? State the purpose of aseptic packaging. 5
- (c) Describe the manufacturing process of flexible polyethylene film. 5
- (d) What is migration? Describe overall migration with migration limit. 5

4. Write notes on *any four* of the following : 5×4
- (a) Intelligent packaging
 - (b) Manufacturing process of Aluminium foil
 - (c) Barcodes
 - (d) Packaging Regulations
 - (e) Double seammer
 - (f) Hot packing or Hot filling.
5. (a) How can you define active packaging system ? How it is important for packaged food to retain their quality and improve shelflife ? 4+4
- (b) Explain how the active scavenging systems (Absorbers) and Active releasing systems (Emitters) help to improve the food safety and food quality. 12
6. (a) Draw the sketches for manufacturing of two piece can by DWI technique and DRD technique. Describe processing steps. 16
- (b) Draw labeled sketch of three piece can manufacturing steps. 4

7. (A) Write short notes on *any five* of the following : 5×2

- (a) Slip Additives
- (b) Corrosion
- (c) Plasticizer
- (d) Antiaging additives
- (e) Drop test
- (f) Compression test
- (g) Gloss
- (h) Clarity.

(B) (a) Enlist the *eight* layers of tetra packaging system and state functions of each layer. 5

(b) State the specific purpose for use of aluminium foil as a packaging material with example of food product. 5