B. TEGH. (F. T. B. E.) FINAL EXAMINATION, 2006

2nd Semester

FOOD PACKAGING TECHNOLOGY

Time: Three hours Full Marks: 100

Use a separate Answer-Script for each part.

PART-I

(Marks: 60)

Answer any three questions.

- 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 T.F.S.?
 Discuss quality control tests carried out for tin cans.
- 2. Why is annealing done in manufacture of glass containers?

 How are glass container manufactured? Discuss various closures for glass container with their components. Mention various techniques for the manufacture of rigid plastic container.
- 3. 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 ecofriendly packaging materials ? State the primary function

[Turn Over]

- of the following packaging materials. (i) Aluminium foil (ii) Paper (iii) LDPE (iv) P.V.C. (v) Nylon (vi) Polyester. Out of these pick out thermosetting plastic.
- 4. Explain various properties of packaging film considered for use in foods. How is watervapor pemeability of packaging film determined? How are laminates prepared? What are pillow, skin and blister packs?
- 5. Write short notes on (any four):

 $5 \times 4 = 20$

- i)Two piece cans.
- ii) Ethylene copolymers.
- iii) Packaging material for potato chips.
- iv) Polypropylane films and their types.
- v) Film liner for MAP.
- vi) Safety of plastic film.

PART-II

(Marks: 40)

6. What are retortable packaging. Discuss the different steps involved in the retort food production. Discuss the counter and constant differential pressure method of sterilization of retort pouch. What is the function of residual air in retort food package?

- 7. What is aseptic food ? Give a few example of aseptically packaged food. What is the difference between semi aseptic and complete aseptic packaged foods. Mention the sterilization techniques used in aseptic packaged foods in flexible packaging materials.
- 8. Write short notes on (any *four*):

5×4=20

- a) Vacuum packaging
- b) Long-life milk
- c) Factors affecting sterility of retort foods.
- d) Free oxygen scavenging packaging method.
- e) Sterility of retort foods.
- f) Packaging materials for retort foods.