

B.E.(PSCT) End Term Examination 2019
PT 315- Packaging Technology

Time: 3H

Max. Marks: 50

Note: **Attempt any five questions.** All questions carry equal marks.
Assume data for missing parts, if any.

- 1 (a). Write down different definitions of packaging. Describe characteristics of a good packaging material.
(b). What are the main functions of packaging? Describe protective functions in detail.
- 2 (a). Which polymer films are used in flexible packaging? Describe main characteristics of flexible packaging.
(b). What do you understand by permeability of packaging films? Define WVTR and OTR.
- 3 (a). Enlist the ancillary materials used for packaging. Give a detailed account of caps and closures used in packaging.
(b). Write a note on (i). Adhesives and (ii). Sealing systems
- 4 (a). What do you understand by modified atmosphere packaging?
(b). Describe aseptic packaging. What are the methods of sterilization of packaging?
- 5 (a). Describe PFA, FPO, MFPO and Agmark rule.
(b). Describe one method to determine water vapour transmission rate (WVTR) of a packaging film.
- 6 (a). What are the advantages and disadvantages of paper packaging?
(b). Describe grammage and basis weight of packaging. What is the ratio of thickness of paper packaging of 80 gsm and 125 gsm? Assume thickness as t_1 and t_2 respectively.

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7 (a). Which metals are used in the packaging? What are advantages of metal packaging?

(b). Describe the methods of making a two piece metal can.

8 (a). Describe the methods of making glass container for packaging.

(b). Discuss the advantages of biodegradable packaging. Name any five materials which are biodegradable and also used in packaging.

