

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VII (NEW) - EXAMINATION – SUMMER 2017

Subject Code: 2171404

Date: 06/05/2017

Subject Name: Food Packaging Technology(Departmental Elective - II)

Time: 02.30 PM to 05.00 PM

Total Marks: 70

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1 A Justify the following: 7
i. Packaging helps in marketing the product
ii. Packaging is influenced by market place
B Differentiate: 7
i. LDPE and LLDPE
ii. Smart Packaging and Active Packaging
- Q.2 A What are the expectations from an ideal packaging material? 7
B Discuss different deterioration take place in packed snack foods? How it can be minimized? 7
- OR
- B Discuss various defects their causes and remedies in packed chocolates? 7
- Q.3 A What causes deterioration of cheese? Suggest suitable packaging material. 7
B Develop a typical label of packed precooked ready to eat food as per FSSA requirement. 7
- OR
- Q.3 A What are the deterioration take places in the flours? Suggest suitable packaging material to enhance shelf life of flours? 7
B A cylinder (60 cm in diameter and 100 cm in height) used for packing the 120 kg bulk juice powder in general. Due to error in the balance 116 kg powder is filled in the cylinder. Calculate percent change in the porosity if true density of milk powder is 1110 kg/m^3 . What are probable hazards it may cause? 7
- Q.4 A Write a note on: Semi rigid packaging material and Blister packaging 7
B Explain the working of the FFS machine used for packaging of food products? 7
- OR
- Q.4 A What are the qualities of papers required for primary and secondary packaging in food industry? 7
B Write a note on researchable issues on: Glass as packaging material and Plastic as packaging material 7
- Q.5 A Compare the following packaging materials(i) Plastic, (ii) glass and (iii) metal for (a) Vapour permeability, (b) Odor barrier and (c) Weight per unit contents. 7

- B "Packaging means PAISE." Justify? 7
- OR
- Q.5 A What are the precautions to be taken while placing the order for metal cans? 7
- B Why coating on the glasses are done? List the different coating materials used and discuss their effect? 7
