Reg No.: $\qquad$ Name: $\qquad$

## APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

Seventh Semester B.Tech Degree Examination (Regular and Supplementary), December 2020

## Course Code: : FT409 <br> Course Name: FOOD PACKAGING TECHNOLOGY

Max. Marks: 100
Duration: 3 Hours

## PART A

Answer any two full questions, each carries 15 marks.
1 a) Write down the levels of packaging with suitable examples.
b) Explain the packaging requirements for cereal based products.

2 Explain the manufacturing process of paper with flow chart.
3 a) Explain the extrusion techniques in plastic film manufacturing.
b) List out the advantages \& disadvantages of paper as a packaging material.
c) What is the definition of packaging given by CAC?

PART B
Answer any two full questions, each carries 15 marks.
4 a) Explain the blow and blow process in glass manufacturing.
b) Explain the surface treatment methods in glass manufacturing
c) Why beer is preferably packed in glass bottles?

5 a) Write a note on protective coatings on can containers.
b) Write a short note on vacuum packaging.

6 a) Give a detailed note on MAP.
b) Write a short note on shrink packaging
c) Explain the tin plating methods.

## PART C

Answer any two full questions, each carries 20 marks.
7 a) Explain GTR \& how do we determine GTR?
b) What are the factors to be considered while designing a packaging for dairy products?
c) Write a short note on tear strength.

8 a) What is RFID?
b) Write a note on environmental effects of plastic pollution.
c) What are the factors affecting product shelf life and quality?

9 a) How do you evaluate package performance?
b) Give a note on migration in packaging materials.
c) How do you determine puncture resistance?
d) What is permeability coefficient?

