

16/11/13

--	--	--	--	--	--	--	--	--	--

B.E. / B.Tech (Full Time) DEGREE END SEMESTER EXAMINATIONS, NOV / DEC 2013

PRINTING TECHNOLOGY BRANCH

SEVENTH SEMESTER

PT 9401 - PACKAGING MATERIALS

(REGULATIONS 2008)

Time: 3hrs

Max Marks: 100

Answer ALL Questions

Part - A (10 X 2 = 20 Marks)

1. What is the importance of Glass transition temperature?
2. What are the Processing techniques of PET?
3. What is Fumigation?
4. What are the qualities needed for the timber to make a wooden container?
5. Why Glass is 100% recyclable material?
6. Why aluminium foil is having good barrier properties?
7. What are the adhesives used in Labelling?
8. What is mean by Closure?
9. Write the abbreviations for ASTM, TAPPI, ISO, BIS.
10. What is the use to find the burst strength for packaging materials?

Part - B (5 X16 = 80 Marks)

11. Explain in detail about the recycling of Plastics packaging materials.
12. a. (i) Explain the Mechanical Properties of a wooden container. (8)
(ii) Explain in detail about the effects of microorganism in wood packaging. (8)
(Or)
b. Explain in detail about the Properties of Paperboard used for Packaging.
13. a. Explain in detail about the use of glass in food packaging.
(Or)
b. Explain in detail about the metallization process.
14. a. Explain in detail about the properties needed for Cushioning materials.
(Or)
b. Describe the manufacturing process of collapsible tube. Mention its advantages and limitations.
15. a. (i) Explain the Tensile test of PP. (8)
(ii) Explain the Tear test. (8)
(Or)
b. (i) Explain the Optical property: Haze (8)
(ii) Explain any two Hardness Test for Metals. (8)