



B.E / B Tech (Full - Time) DEGREE END SEMESTER EXAMINATIONS, Nov./Dec-2011  
 PRINTING TECHNOLOGY BRANCH  
 SEVENTH SEMESTER – (REGULATIONS 2004)  
**PT471 – PACKAGING MATERIALS**

Time: 3 hrs

Max Marks:100

Instructions:

1. Answer all questions.
2. All questions carry equal marks.

**Part – A (10 × 2 = 20 Marks)**

1. What are thermoplastic and thermoset polymers?
2. What is the application of rigid packaging?
3. What are the materials used for textile packaging? Write its applications?
4. Name the types of wooden pallets used in packaging.(any four)
5. What are the components of clear glass?
6. What are the applications of aluminium foil in packaging?
7. What is lamination in packaging?
8. Classify the types of paper boards used in packaging and write their properties.
9. Why corrosion tests are important for metals used in packaging?
10. How moulded pulp containers are made? Write its application.

**Part – B (5 × 16 = 80 Marks)**

11. Briefly discuss the following materials used in packaging with their properties in detail.(a) polyethylene (b) polyamides (c) PET
12. (a) Discuss the types of surface treatment used for polymeric surface before printing.  
(or)  
(b) Explain how corrugated fibreboard are manufactured and write their applications
13. (a) Explain how glass are manufactured and write their applications in detail.  
(or)  
(b) Explain in detail how metal cans are manufactured? Write their applications.
14. (a) Explain the types of cushioning materials and its applications in packaging.  
(or)  
(b) Discuss the types of labeling materials used in packaging.
15. (a) Explain the importance of barrier properties of flexible films with respect to packaging and discuss how are they measured.  
(or)  
(b) Explain the importance of impact strength with respect to packaging and how are they measured.