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**B.E / B.Tech ( Full Time ) DEGREE END SEMESTER EXAMINATIONS, APR / MAY 2013**

**PRINTING TECHNOLOGY**

**SIXTH SEMESTER**

**PT 9352 – PAPER AND BOARD**

**(Regulation 2008)**

20

Time : 3 Hours

Max. Marks 100

Answer ALL Questions  
**PART-A (10 x 2 = 20 Marks)**

1. What are the components of wood?
2. Write the difference between fiber and non fibrous additives?
3. Name some defects in calendering process.
4. What is dewatering? Mention it types
5. What are coarse and fine papers?
6. What is the function of coating ingredients?
7. List some of the defects caused due to moisture content.
8. What is tear factor?
9. What is blistering?
10. What is McKee Formula?

**Part – B ( 5 x 16 = 80 marks)**

11. List some common paper related printing problems along with some probable causes and solution
12. a) (i) Describe the paper manufacturing process by fourdrinier method? (10)  
(ii) Mention the types of calendering process? (6)

**OR**

- b) Discuss about forming, press and dryer section with neat diagram?
13. a) Discuss briefly the following basic properties with ASTM/ISO standards;
  - (i) Grammage
  - (ii) Thickness and Density
  - (iii) Ash content
  - (iv) Moisture content

**OR**

- b) Discuss briefly the following strength properties with ASTM/ISO standards;
  - (i) Tearing resistance
  - (ii) Tensile strength
  - (iii) Bursting strength
  - (iv) Stiffness

14. a) Discuss about coating methods and coating ingredients for paper board used in packaging

**OR**

b) Explain in detail about different types of paperboard with suitable applications

15. a) (i) Explain in detailed about various Pulping methods with neat sketch

**OR**

b) (i) Write in detail about various sources available for paper manufacturing process? (10)

(ii) Discuss briefly about bleaching technique? (6)