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B.E / B Tech (Full- Time) DEGREE END SEMESTER EXAMINATIONS, April/May.2012
 PRINTING TECHNOLOGY BRANCH
 FIFTH SEMESTER – (REGULATIONS 2004)
PT371 – PAPER AND BOARD

Time: 3 hrs

Max Marks:100

Instructions:

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

Part – A (10 × 2 = 20 Marks)

1. Classify the types of wood and Write their properties.
2. What are the properties and applications of papers manufactured by mechanical pulping process?
3. How colour papers are made?
4. What is the importance of sizing in paper making?
5. Write the classification of paper sizes.
6. What are the advantages of twin wire forming machines?
7. What are the methods used to de ink the papers before recycling?
8. Ash content is important for which paper?Why?
9. What is supercalendering?
10. What is opacity of paper?

Part – B (5 × 16 = 80 Marks)

11. Explain with suitable flow chart the process of papermaking in detail.
- 12.(a) Explain the effect of beating and refining on paper properties in detail.
(or)
(b) Explain the types of head boxes with suitable diagram used in paper making machines their advantages and disadvantages in detail.
- 13.(a) Discuss with suitable diagram how papers are manufactured using fourdrinier machines in detail.
(or)
(b) Explain the property requirements of paper for different printing process.
- 14.(a) Explain with suitable diagram how paper and boards are coated(any four methods)
(or)
(b) Explain the relationship between grain direction, moisture content and RH of paper during printing
- 15.(a) Explain the following properties of paper and discuss how are they measured? (1)Fold Endurance (2) stiffness (3) pick resistance
(or)
(b) Discuss the paper related problems in offset printing their causes and remedies in detail.