PT 371 / PT9352 – 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 used for making paper. Give two examples in each case.

2. What is TMP? Write the advantages of TMP compared to mechanical process.

3. Write the importance of sizing in papermaking.

4. Write the classification of paper sizes.

5. What is super calendaring in papermaking?

6. What is the importance of cobb testing with respect to paperboard?

7. How the pH of paper is measured? Write the significance.

8. Name the type of colorants used for making colored papers.

9. How papers are recycled?

10. What is blistering?

Part – B (5 × 16 = 80 Marks)

11. (i) Explain with suitable flow chart the process of kraft process in detail.(10marks)
    (ii)Write the significant use of fillers and binders in papermaking? (6marks)

12.(a) Explain the types of bleaching techniques followed during the manufacturing of paper?

(or)

(b) Discuss with suitable diagram how papers are manufactured using fourdrinier machines in detail.

13. (a) Explain the types of paper coating methods and their importance with respect to applications in detail.

(or)

(b) Explain the following properties of paper which affect the printing quality during printing.(1) Dimensional stability (2) Relative humidity(3)Graindirection

14.(a) (i) Briefly discuss the types of refining process. (8marks)
       (ii) Explain how beating and refining will affect paper properties.(8marks)

(or)

(b) Explain the methods of paper handling during storage and in printing.

15 (a) Explain the following properties of paper and discuss how are they measured? (1)Fold Endurance (2) Absorbency (3) Burst strength

(or)

(b) Discuss the paper related problems in offset printing their causes and remedies in detail. (any 5 problems)