

**Note:**

1. Question No. 1 is compulsory.
2. Attempt any three questions out of remaining five questions.
3. Assume suitable data wherever necessary.
4. Figures to right indicate full marks.

- Q.1 Answer the following ( **Any four**)
- |    |  |   |
|----|--|---|
| a. | Explain forming operation in paper manufacture from pulp.              | 5 |
| b. | What are the types of flute in CFB?                                    | 5 |
| c. | How the drying of paper sheet is done?                                 | 5 |
| d. | Which type of paper is used for packaging of hygroscopic food product? | 5 |
| e. | What are wet end and dry end operations in paper manufacturing?        | 5 |
- Q.2
- |    |   |    |
|----|---|----|
| a. | What are the advantages and disadvantages of mechanical and chemical pulping? | 10 |
| b. | How barking is done using rotary parallel drum barker?                        | 10 |
- Q.3
- |    |   |    |
|----|---|----|
| a. | Discuss the recovery of chemicals in kraft pulping.     | 10 |
| b. | Discuss the applications of wax paper and coated paper. | 10 |
- Q.4
- |    |  |    |
|----|--|----|
| a. | Differentiate between solid bleached and unbleached board. | 10 |
| b. | Give the classification of paper sacks.                    | 10 |
- Q.5
- |    |  |    |
|----|--|----|
| a. | Explain the CFB box manufacturing process in detail.                               | 10 |
| b. | What are the factors affecting refining of pulp? What are the effects of refining? | 10 |
- Q.6 Write a short note on any four
- |    |                        |   |
|----|------------------------|---|
| a. | Secondary fibers       | 5 |
| b. | Cylinder formers       | 5 |
| c. | Wood handling          | 5 |
| d. | Deinking process       | 5 |
| e. | STE with side hang tab | 5 |

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