

- B) Morphological structure of fibre
- C) Kappa Number
- D) Importance of paper

No. of Printed Pages : 4

220615

Roll No. ....

**1st Sem.**

**Branch: Chemical Engg. (P&P)**

**Sub : Introduction to Pulp & Paper Technology**

Time : 3 Hrs.

M.M. : 60

### SECTION-A

**Note:** Multiple choice questions. All questions are compulsory (6x1=6)

.Q.1 Where was the first paper made?

- a) Sri Lanka                      b) India
- c) Pakistan                      d) China

Q.2 Formula of active alkali is:

- a)  $\text{NaOH} + \text{Na}_2\text{S}$                       b)  $\text{NaOH} + 1/2 \text{Na}_2\text{S}$
- c)  $\text{NaOH} + \text{Na}_2\text{CO}_3$                       d) None

Q.3 Choose any one purpose of beating of pulp:

- a) Cutting of fibre                      b) Fibrillation of fibre
- c) Mixing of fibre                      d) Removing of fibre

Q.4 Select the fruit fibre from the following

- a) Cotton                      b) Wood
- c) Eucalyptus                      d) Neem

- Q.5 Select the property of cellulose
- |              |            |
|--------------|------------|
| a) Inorganic | b) Organic |
| c) Acidic    | d) None    |
- Q.6 Where is H-Factor used?
- |             |              |
|-------------|--------------|
| a) Chipping | b) Screening |
| c) Cooking  | d) Bleaching |

### SECTION-B

**Note:** Objective/ Completion type questions. All questions are compulsory. (6x1=6)

- Q.7 Name any paper industry in India.
- Q.8 Where is white liquor used?
- Q.9 Name any one type of soft wood.
- Q.10 Why is refining of pulp necessary?
- Q.11 Which pulping of wood does not require chemical?
- Q.12 What is bath ratio?

### SECTION-C

**Note:** Short answer type questions. Attempt any eight questions out of ten questions. (8x4=32)

- Q.13 Write a note on history of paper.

- Q.14 Explain any two factors important in site selection of an industry set-up.
- Q.15 Define pulp consistency.
- Q.16 What is reduction efficiency?
- Q.17 Give the classification of fibrous raw material.
- Q.18 Differentiate cellulose & hemi-cellulose.
- Q.19 List any four advantages of sulphate pulping over soda pulping.
- Q.20 Make a neat sketch of any one type of beater used in paper industry.
- Q.21 Define displacement ratio.
- Q.22 Write the difference between paper & paper board.

### SECTION-D

**Note:** Long answer type questions. Attempt any two questions out of three questions. (2x8=16)

- Q.23 Explain in detail the scope of paper technology.
- Q.24 Give the classification of pulping process. Explain in detail.
- Q.25 Write short notes on any two of the following:
- A) BSW