

SECTION-D

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

- Q.23 Describe the construction and working of the hydropulper in detail with the help of a neat diagram.
- Q.24 What is wettability? Describe the equipment used for measurement of wettability of paper in detail.
- Q.25 Discuss the different theories of refining in brief. Describe the effect of refining on the fibre characteristics.

No. of Printed Pages : 4

Roll No.

220635

**3rd Sem. / Chemical
(Pulp & Paper)**

Subject : Stock Preparation-I

Time : 3 Hrs.

M.M. : 60

SECTION-A

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

- Q.1 Which of the following processes is used for preparation of stock in paper industry?
- a) beating and extraction
 - b) beating and refining
 - c) beating and expelling
 - d) none of these
- Q.2 The total content of dry solids in the pulp slurry is known as
- a) consistency b) accuracy
 - c) durability d) reproducibility
- Q.3 Which of the following is the main objective of beating in paper industry?
- a) to decrease surface area of fibres
 - b) to increase surface area of fibres

(20)

(4)

220635

(1)

220635

- c) to decrease length of fibres
 - d) to increase length of fibres
- Q.4 Which of the following equipments have replaced beaters in the paper industry?
- a) continuous sheets
 - b) continuous refiners
 - c) continuous discs
 - d) continuous templates
- Q.5 The main function of save alls in the paper making process is
- a) to improve fibre consistency
 - b) to increase surface area of fibre
 - c) to recover lost fibre
 - d) to recover water
- Q.6 Solids (such as salts, powders, granules, fibres etc.) ?
- a) hydropulper b) pitcher
 - c) agglomerator d) agitator

SECTION-B

Note: Objective/ Completion type questions. All questions are compulsory. $(6 \times 1 = 6)$

- Q.7 Define the term stock in context of the paper making.
- Q.8 Why thickeners are used in the paper industry?

(2)

220635

- Q.9 What is function of stuffbox?
- Q.10 Define the pH.
- Q.11 Write the name of any one type of continuous refiner used in paper industry.
- Q.12 Write the full form of °SR.

SECTION-C

Note: Short answer type questions. Attempt any eight questions out of ten questions. $(8 \times 4 = 32)$

- Q.13 Describe the Trimby consistency regulator in brief.
- Q.14 Discuss the different types of chest used in stock preparation.
- Q.15 Explain any working of PFI mill beater in brief.
- Q.16 What is the difference between wettability and freeness?
- Q.17 What is stock preparation? Discuss its importance.
- Q.18 Discuss the advantages of the disc type refiner in brief.
- Q.19 Discuss the metering and blending with reference to paper making process in brief.
- Q.20 Describe disc refiners used by paper industry in brief.
- Q.21 Define and discuss stock proportioning in brief.
- Q.22 Explain the Canadian standard freeness in brief.

(3)

220635