

3rd Sem. / Chemical Engg. (P&P)

Subject : Pulping processes

Time : 3 Hrs.

M.M. : 60

SECTION-A

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

Q.1 Which one is fibrous raw material for paper making

- a) Glass
- b) Stone
- c) Wood
- d) None

Q.2 What is bark ?

- a) Inner layer of wood
- b) Outer layer of wood
- c) Branch of tree
- d) None

Q.3 Select any one type of chipper.

- a) Drum
- b) Disc
- c) Norman
- d) All of the above

Q.4 Expand TA.

- a) Total alkali
- b) Total area
- c) Total acid
- d) Total affect

Q.5 Name the chemical used in soda process.

- a) NaOH
- b) Na₂S
- c) Na₂Co₃
- d) Na₂So₄

- Q.6 Which pulping gives higher yield ?
a) Chemical b) Mechanical
c) Semi-chemical d) Bio-pulping

SECTION-B

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

- Q.7 Name any one type of agriculture residue used for making paper.
Q.8 What is lignin?
Q.9 Which chemical is used in chemical debarking?
Q.10 Where white liquor is used?
Q.11 Write the name of screen used for removing knots from pulp.
Q.12 Why secondary fiber pulping is used?

SECTION-C

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

- Q.13 Write a note on introduction to paper on network of cellulose fiber.
Q.14 What is pulping?
Q.15 Draw neat sketch of morphological analysis of fiber.
Q.16 Why chipping is necessary?

- Q.17 Define consistency.
Q.18 Differentiate soda & sulfate pulping.
Q.19 Mention any four factors affecting stone ground pulping.
Q.20 What is bath ratio? Explain.
Q.21 Define white liquor.
Q.22 Write a note on cooking cycle.

SECTION-D

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

- Q.23 Explain the process of paper making with block diagram.
Q.24 List various types of chip screens. Explain any one with neat & clean diagram.
Q.25 Write short note on any two of the following:
a) Causticizing efficiency
b) Extraneous components
c) Kappa number
d) Digesters