

- Q.33 Find out the consistency of 200m³ pulp slurry containing 100kp OD fiber.
- Q.34 Give any five advantages of continuous digester over batch digester.
- Q.35 Explain chemical debarking.

No. of Printed Pages : 4 180636/120636/030636
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**3rd Sem / Chemical (P & P)
Subject:- Pulping Processes**

Time : 3Hrs.

M.M. : 100

SECTION-D

Note: Long answer type questions. Attempt any two questions out of three questions. (2x10=20)

- Q.36 Explain in detail morphological analysis of fiber with neat sketch.
- Q.37 Discuss construction and working principle of kamyar Continous digester with a neat diagram.
- Q.38 Write short notes on any two of the following .
 (A) Lignin & Extractives
 (B) Chip storage
 (C) White liquor
 (D) Alkaline pulping

SECTION-A

Note: Multiple choice questions. All questions are compulsory (10x1=10)

- Q.1 Choose the material for making paper.
 a) Wood b) glass
 c) stone d) plastic
- Q.2 Which part of wood does not contain fiber?
 a) Bark b) Leaf
 c) Branches d) stem
- Q.3 Explain OD.
 a) Over dry b) Oven dry
 c) Over draft d) None
- Q.4 Choose fruit fiber.
 a) Straw b) Wood
 c) Bamboo d) Cotton
- Q.5 Lignin is a _____ material.
 a) Plastic b) Inorganic
 c) Cementing d) None

(20)

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Q.6 Name the chemical used in chemical debarking.
a) NaOH b) Na₂S
c) Na₂CO₃ d) Sodium Arsenite

Q.7 What is active alkali?
a) NaOH +Na₂S b) NaOH + 1/2 Na₂S
c) NaOH + Na₂CO₃ d) None

Q.8 Name fungus used in bio pulping.
a) Ceriporiopsis b) Yeast
c) Molds d) None

Q.9 Which pulping have higher yield?
a) Chemical b) Mechanical
c) semi chemical d) None

Q.10 Choose the raw material used for secondary pulping.
a) Bamboo b) Wood
c) Waste paper d) Agriculture

SECTION-B

Note: Objective type questions. All questions are compulsory. (10x1=10)

- Q.11 Name any two paper industry in India .
Q.12 Which fiber does not require chemical for pulping.
Q.13 What is lumen?
Q.14 Expand TTA.

- Q.15 Write the formula of cellulose .
Q.16 Name any one type of chipper.
Q.17 On which principle screening is based.
Q.18 What is black liquor?
Q.19 Name any one factor affecting stone ground wood pulping .
Q.20 Write anyone type of continuous digester.

SECTION-C

Note: Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)

- Q.21 Write a note on sources of fibrous raw material.
Q.22 Define pulping .
Q.23 Explain hemicellulose
Q.24 Draw neat sketch of drum chipper.
Q.25 What is the purpose of chip screening ?
Q.26 Define causticity & sulphidity.
Q.27 Explain sulphate pulping .
Q.28 Explain stone ground wood pulping .
Q.29 Briefly describe the semi chemical pulping.
Q.30 Give the significance of bio pulping.
Q.31 Write the development of paper technology.
Q.32 Why bath ratio is maintained in the digester?