

- Q.33 Write any five types of dyes used in paper industry.
- Q.34 Define acid number of rosin size.
- Q.35 Discuss the various types of strength improving chemicals used in papermaking.

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**5th Sem., Branch : P & P
Subject : Stock Preparation - II**

Time : 3 Hrs.

M.M. : 100

SECTION-A

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

- Q.36 A cheat is having 100 m³ pulp slurry of 3% consistency. How much water will be required to make its consistency.
- Q.37 Classify the acid, basic, direct dyes in context to use for chemical pulps, Kraft pulp and ground wood pulp.
- Q.38 Discuss the role of starch, guar gum, CMC additives (in detail).

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

- Q.1 What is the purpose of Agitator?
- a) Stirring
 - b) Cutting
 - c) Bleaching
 - d) Slushing
- Q.2 Expand pH
- a) Potential hydrogen
 - b) Power hydrogen
 - c) Pure hydrogen
 - d) None
- Q.3 Choose the consistency of PFI mill.
- a) 6%
 - b) 8%
 - c) 10%
 - d) 7%
- Q.4 Write the formula of abietic acid.
- a) C₁₉H₂₉COOH
 - b) C₁₆O₁₇COOH
 - c) CH₃COOH
 - d) C₁₈H₁₉COOH
- Q.5 Choose the chemical used for making cigarette paper
- a) TiO₂
 - b) Soap stone
 - c) Al₂O₃
 - d) CaCO₃

- Q.6 What is the consistency of valley beater?
 a) 1.57% b) 2.5%
 c) 3% d) 6%
- Q.7 How much OD pulp are required for valley beater?
 a) 145gm b) 348gm
 c) 267gm d) 363gm
- Q.8 Choose the chemical used as alum
 a) HCl b) FeCl₂
 c) Al₂O₃ d) All of the above
- Q.9 Choose any sizing material used in paper industry
 a) CaCO₃ b) Alum
 c) TiO₂ d) None
- Q.10 Choose the formula of cellulose
 a) CHO b) C₃H₄O₁₀
 c) CH₁₀O₄ d) (C₆H₁₀O₅)_n

Section-B

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

- Q.11 What is the color of CaCO₃?
- Q.12 Expand the term CMC.
- Q.13 Name any two sizing materials?
- Q.14 Which method is used to check a mixed dye?
- Q.15 Name the two forms of TiO₂ filler.
- Q.16 Expand AKD.

- Q.17 What is the function of save-all?
- Q.18 How many grams of OD pulp is required in PFI mill for beating?
- Q.19 What is the purpose of dyes?
- Q.20 Why retention aids are used?

Section-C

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

- Q.21 What is the function of retention aids?
- Q.22 Explain the qualities of filler in context of good quality of paper production.
- Q.23 Differentiate internal & surface sizing.
- Q.24 Find out the consistency of 150m³ pulp slurry containing 10kg OD pulp?
- Q.25 Draw a neat sketch of any one type of stock chest agitator.
- Q.26 Describe any one type of beater additives.
- Q.27 Explain any one method of preparing resin size.
- Q.28 What do you understand by two sidedness of paper.
- Q.29 How is alum solution prepared for a known concentration?
- Q.30 Briefly explain about fiber recovery system.
- Q.31 Discuss the role of china clay, calcium, carbonate and Titanium dioxide in the paper industry.
- Q.32 Discuss the significance of color kitchen.