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3rd Sem / Chem. P&P
Subject:- Pulp Washing & Cleaning

Time : 3Hrs. M.M. : 100

SECTION-A

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

Q.1 Which impurity is removed during cleaning of pulp?

a) Dirt b) Plastic
c) Shives d) All

Q.2 Choose the chemical formula of sulphuric acid

a) Na_2SO_4 b) H_2SO_4
c) $CaSO_4$ d) $BaSO_4$

Q.3 What is the chemical formula of caustic soda?

a) NaOH b) Ca(OH)2
c) H_2SO_4 d) $CaCO_3$

Q.4 What is the unit of temperature?

a) Newton b) Pascal
c) Second d) Kelvin

Q.5 On which principle screening is based?

Q.30 Write any three problems with their remedies encountered in operation of washing of pulp in vacuum washer

Q.31 Explain the different variables that affect screen performance.

Q.32 Explain the concept of dilution factor.

Q.33 Differentiate between screening and cleaning.

Q.34 Explain the complete procedure for determination of kappa no.

Q.35 Explain in brief the advantage of high heat diffusion washing.

SECTION-D

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

Q.36 Describe the washing principle and construction of brown stock washer in detail.

Q.37 Explain various factors involved in high heat diffusion washing in continuous digestor.

Q.38 List various types of pulp screen; explain any 3 of them in detail with a suitable diagram of one screen.

a) Size b) Shape

c) Density d) None

Q.6 What is the unit of vacuum?

a) Kelvin b) Milibar

c) Points d) Decibel

Q.7 Thickening factor is a function of_____

a) Motor speed b) Temperature

c) Rotor tip speed d) None

Q.8 Can centricleaner remove plastic materials?

a) Yes b) No

Q.9 What is time required for measure K No. of pulp?

a) 3 min b) 4 min

c) 5 min d) 6 min

Q.10 _____is used to determine the degree of delignification

a) Copper No. b) K No.

c) Hypo No. d) None

SECTION-B

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

Q.11 What is objective of washing?

Q.12 Name any two pulp screen.

Q.13 Define thickening factors.

Q.14 What do you understand by soda loss?

Q.15 Expand BSW.

Q.16 Why ESP is used?

Q.17 Write the advantages of vacuum washer.

Q.18 Give one function of deformer in BSW.

Q.19 What is the percentage of final rejection from three stage centre cleaner?

Q.20 Give one disadvantage of diffuse washing.

SECTION-C

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

Q.21 Mention the effects of wood species on screen capacity.

Q.22 Why overcooked pulp is difficult to wash?

Q.23 What is biometric leg?

Q.24 Write disadvantages of measuring kappa no.

Q.25 Mention the importance of soda loss in washing.

Q.26 Write a note on storage of pulp.

Q.27 List any five advantages of maintenance of vacuum.

Q.28 Why pressure screen is used for pulp? Give two reasons.

Q.29 Differentiate Kappa no. and KMnO4 no.