Q.28 What is the objective of washing?

Q.29 What is the importance of high heat diffusion washing in continuous digester?

Q.30 What are dilution factor and displacement rates?

Q.31 Differentiate screening and cleaning.

Q.32 Mention any 5 variables affecting screen performance.

Q.33 Explain the working of gravity centrifugal screen.

Q.34 Define black liquor.

Q.35 Explain generation and maintenance of vacuum.

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 with neat sketch the working of high heat diffusion washing in continuous digester.

Q.38 Explain the startup and shut down procedure of brown stock washing.

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

Time : 3Hrs.   M.M. : 100

SECTION-A

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

Q.1 Where B/L is separated from pulp?

    a) Washing   b) Bleaching

    c) Screening   d) None

Q.2 Cleaning of pulp is based on_____.

    a) Density   b) Size

    c) Shape   d) None

Q.3 Which factor affects the cleaning of pulp?

    a) Color of pulp   b) Density of pulp

    c) Smell of pulp   d) Resin of pulp

Q.4 Expand DF

    a) Dry Factor   b) Dilution Factor

    c) Double Factor   d) Dead Factor

Q.5 At what stage of BSW contain higher conce
a) 4th washer
b) 2nd washer
c) 1st washer
d) 3rd washer

Q.6 Which impurity is removed during cleaning of pulp?
a) Dirt
b) Plastic
c) Shives
d) All

Q.7 What is the chemical formula of caustic soda
a) NaOH
b) $Ca(OH)_2$
c) H_2SO_4
d) $CaCO_3$

Q.8 On which principle screening is based?
a) Size
b) shape
c) Density
d) None

Q.9 Thickening factor is a function of_____.
a) Motor speed
b) Temperature
c) Rotor tip speed
d) None

Q.10 What is the time required for measuring k number of pulp?
a) 3 min
b) 4 min
c) 5 min
d) 6 min

SECTION-B

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

Q.11 Name any two pulp screen.

Q.12 What do you understand by soda loss?

Q.13 Why ESP is used?

Q.14 Give 1 function of deformer in BSW.

Q.15 Give one disadvantages of diffuse washing.

Q.16 Write a parameter in selection of screen of pulp.

Q.17 Write a variable affecting efficiency of loading factor.

Q.18 Give a purpose of solid concentration of black liquor.

Q.19 Give formula of expression of screening quotient.

Q.20 Write optimum temperature for washing of pulp.

SECTION-C

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

Q.21 Why overcooked pulp is difficult to wash?

Q.22 Mention importance of soda loss in washing.

Q.23 Write a short note on storage of pulp.

Q.24 Why pressure screen is used for pulp? Give 2 reasons.

Q.25 Write any 3 problems with their remedies encountered in operation of washing of pulp in vacuum washer.

Q.26 Explain the concept of dilution factor.

Q.27 Explain the complete procedure of determination of kappa number.