

- Q.28 What is the function of retention aids?
- Q.29 Write any five types of dyes used in paper industries.
- Q.30 Describe fiber recovery system.
- Q.31 Define stock system.
- Q.32 Explain the qualities of filler in context to good quality of paper production.
- Q.33 Discuss the various types of strength improving chemicals used in paper making.
- Q.34 Write the method for testing of aging of paper sample.
- Q.35 What do you understand by two sidedness of paper?

#### SECTION-D

- Note:** Long answer type questions. Attempt any two questions out of three questions. (2x10=20)
- Q.36 Describe the various types of chest and agitators with neat diagram.
- Q.37 Discuss the role of starch, guar gum, CMC additives (in detail).
- Q.38 Write short note on any two of the following:
- Introduction to sizing material
  - Different types of loading materials
  - Maintenance of paper machinery
  - Concentration measurement of alum.

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### 5th Sem / Chemical ( P & P ) Subject:- Stock Preparation II

Time : 3Hrs.

M.M. : 100

#### SECTION-A

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

- Q.1 Choose any sizing material used in paper industry.
- $\text{CaCO}_3$
  - Alum
  - $\text{TiO}_2$
  - None
- Q.2 Choose formula of Alum
- $\text{Al}_2\text{SO}_4$
  - $\text{Al}_3(\text{SO})_2\text{H}_2\text{O}$
  - $\text{Al}_2(\text{SO}_4)_2$
  - None
- Q.3 Name any loading material used in paper industry.
- $\text{Na}_2(\text{SO}_4)$
  - $\text{CaCO}_3$
  - $\text{H}_2\text{SO}_4$
  - None
- Q.4 What is stock preparation?
- Loading
  - Beating
  - Refining
  - All
- Q.5 Expand MVT.
- Moisture vapor time
  - Moisture vapor temperature

c) Moist at various time

d) None

Q.6 Write the formula of Cellulose.

a)  $(C_6H_{10}O_5)_n$

b)  $C_6H_{10}O_8$

c)  $C_6H_5O_3$

d)  $CH_3COOH$

Q.7 What is the brightness of Clay?

a) Meter

b) Micrometer

c) Candela

d) None

Q.8 Choose the consistency of PFI mill.

a) 8 %

b) 7%

c) 6%

d) 10%

Q.9 Choose the property of  $CaCO_3$

a) Toxic

b) Non-Toxic

c) Poison

d) None

Q.10 Expand pH.

a) Potential hydro

b) Potential hygro

c) Potential hydrogen

d) None

### SECTION-B

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

Q.11 Write the formula of soap stone.

Q.12 Name any one method used to prepare alum solution.

Q.13 What is the purpose of using starch in stock preparation?

Q.14 What is the color of  $CaCO_3$ ?

Q.15 Expand AKP.

Q.16 Write any one purpose of using wet strength chemical.

Q.17 Name any two types of beaters.

Q.18 How many gm of OD pulp is required in PFI mill for beating ?

Q.19 What is the function of save all?

Q.20 What is the purpose of dyes?

### SECTION-C

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

Q.21 Define pH.

Q.22 Find out the consistency of  $150m^3$  pulp slurry containing 10kg OD pulp.

Q.23 Write a note of preparation of resin size by hot process.

Q.24 Define process of internal sizing.

Q.25 What are the substitutes for alum?

Q.26 List types of loading material.

Q.27 Draw a neat sketch of any one type of beater or refiner.