

construction & working of conical saveall with the help of a neat sketch.

No. of Printed Pages : 4

Roll No.

120652

Q.34 Write short note on the following:

- a) Stock flow diagram.
- b) Manufacture of AKD Size.

Q.35 Classify the different properties of various fillers in tabular form by giving the following:

- i) Name of filler ii) Chemical formula
- iii) Specific gravity iv) Refractive index
- v) Brightness vi) Uses of fillers

Q.36 A paper mill is producing 100 tons A.D. paper per day having 5% moisture content. In one of the variety. The following chemical & additives were mixed in percentage on O.D. weight of pulp.

Item	% content mixed	Rate in Rs.
i) Clay	15% on O.D. pulp	Rs.15,000/- per ton
ii) Rosin	1.5% on O.D. pulp	Rs.20,000/- per ton
iii) Alum	6.0% on O.D. pulp	Rs.8,000/- per ton
iv) Methyl violet Dye	30 gm/ton of pulp	Rs.2000/- per kg.
v) Cationic starch	1% on OD pulp	Rs.60,000/- per ton.

Calculate the per ton Cost of paper produced if the cost of bleached pulp is Rs.30,000/- per ton on O.D. basis.

(60)

(4)

120652

5th Sem. / Chem, P&P

Subject : Stock Preparation - II

Time : 3 Hrs.

M.M. : 100

SECTION-A

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

- Q.1 Write chemical formula of "fortified rosin".
- Q.2 Expand the term "SCAN".
- Q.3 Name the chemical used to reduce the Crystallization of gum rosin size.
- Q.4 Name the two forms of TiO_2 filler.
- Q.5 Expand the term "BSF".
- Q.6 Write the Commercial name of "Koolin".
- Q.7 Expand the term "CMC".
- Q.8 Name the filler used in Cigaratt tissue.
- Q.9 Name unit to express the brightness test of paper sample.
- Q.10 Name the Coloured light to which the human eye is most sensitive.

(1)

120652

SECTION-B

Note:Very short answer type questions. Attempt any ten questions out of twelve questions. 10x2=20

- Q.11 What do you mean by bleeding of paper?
- Q.12 Name four types of shapes of filler particles.
- Q.13 What do you mean by acid number in case of rosin size?
- Q.14 Write the name & chemical formula of filler used in photographic paper.
- Q.15 Name three chemicals used as Substitute of alum.
- Q.16 Write the formula of “°Be” for the measurement of concentration of alum solution.
- Q.17 Name any two types of dark rosin.
- Q.18 Define “Penoscope Test” for testing of food board sizing.
- Q.19 Define engine sizing.
- Q.20 Name any four test methods for conducting the surface size test of paper samples.
- Q.21 Name any three types of pigment Colours used in paper making.
- Q.22 Which type of fillers are detrimental for AKD sizing.

(2)

120652

SECTION-C

Note:Short answer type questions. Attempt any eight questions out of ten questions. 8x5=40

- Q.23 What are main Constituents of fortified rosin size? Write method of fortification of rosin size.
- Q.24 Discuss the important characteristics of ideal fillers.
- Q.25 What do you mean by mottling defect of paper in case of coloured paper.
- Q.26 Discuss the method of concentration measurement of alum solution.
- Q.27 What are optical whiteners?
- Q.28 What are the various Substitutes of alum?
- Q.29 Describe various applications of resin acid fraction.
- Q.30 Discuss the significance of colour kitchen.
- Q.31 Classify the different types of retention aid chemicals & discuss their importance in brief.
- Q.32 Write the testing procedure for checking a mixed dye sample.

SECTION-D

Note:Long answer type questions. Attempt any three questions out of four questions. 3x10=30

- Q.33 Classify various types of Savealls. Describe the

(3)

120652