No. of Printed Pages : 4
Roll No.....

220615

1st Sem (NEP)
Branch : Chemical Engg (P & P)
Sub.: Introduction of Pulp & Paper Technology

Time : 3 Hrs. **M.M. : 60**

SECTION-A

Note: Multiple Choice Questions. All Questions are compulsory. (6x1=6)

Q.1 What was the first type of paper called?

a) Cloth Parchment
b) Wood Parchment
c) Bamboo Parchment
d) None

Q.2 What is Bath Ratio?

a) Chips to Liquor b) Chips to Solid
c) Solid to Liquor d) None

Q.3 Which of the following is a Grass Fibre:

a) Pine b) Cotton
c) Bamboo d) All of the above

Q.4 Name of the chemicals used in sulphate Pulping.

a) NaOH b) $NaOH + Na_2S$
c) $NaOH+Na_2CO_3$ d) None

Q.5 Where was the first paper made?

a) India b) USA

c) China d) Pakistan

Q.6 The reaction time of Kappa Number is

a) 2 min b) 5 min

c) 7 min d) 10 min

Section-B

Note: Objective/Completion type questions. All questions are compulsory. (6x1=6)

Q.7 What is the first material used for paper?

Q.8 Can paper be made without trees?

Q.9 Write the formula of Sulphidity.

Q.10 Which layer of fibre contains maximum fibrils?

Q.11 Expand BSW.

Q.12 Mention any one factor affecting the selection of location of Paper industry.

Section-C

Note: Short answer type Question. Attempt any Eight questions out of Ten Questions. (8x4=32)

Q.13 Write a note on selection for setting up an industry.

Q.14 Define pulp & paper.

Q.15 What is dilution factor?

Q.16 differentiate kappa number & Permanganate number

Q.17 What are the properties of cellulose?

Q.18 List various content of wood.

Q.19 What is the objective of bleaching?

Q.20 Define the refining of pulp.

Q.21 Write the developments of paper technology.

Q.22 Define white liquor.

Section-D

Note: Long answer questions. Attempt any two question out of three Questions. (2x8=16)

Q.23 Make a block diagram of paper making in detail.

Q.24 Explain in detail morphological structure of fibre.

Q.25 Write short notes on any two of the following:

a) Paper industries in India

b) Cooking cycle

c) Pulping process

d) Lignin & Extraneous components