Seat No.: __ Enrolment No._ GUJARAT TECHNOLOGICAL UNIVERSITY DIPLOMA ENGG.- VIth SEMESTER-EXAMINATION – MAY/JUNE- 2012 Subject code: 360505 Date: 30/05/2012 Subject Name: Pulp & paper Technology Time: 10:30 am - 01:00 pm **Total Marks: 70 Instructions:** 1. Attempt all questions. 2. Make suitable assumptions wherever necessary. 3. Figures to the right indicate full marks. 4. English version is considered to be Authentic Q:1(a) Discuss about raw material for paper manufacture. 07 (b) Write the types of paper products and their application. 07 Q:2(a) Explain wet process for manufacturing of paper with neat figure. 07 (b) Explain economics of paper industries. 07 (b) Compare three types of pulps. 07 Q:3(a) Explain major engineering problems of pulp industry. 07 (b) Explain sulphite pulping with figure. 07 Q:3(a) Explain black liquor recovery process with neat figure. 07 (b) Write a note on R.A.G pulping. 07 Q:4(a) Write about the properties of cellulose with its chemical structure. 07 (b) Discuss pollution problems and remedies of pulp and paper industries. 07 OR Q:4(a) Write about the scope of pulp and paper industries in india. 07 (b) Discuss enzymology for lignin waste treatment. 07 Q:5(a)Write the properties of various lignin chemicals. 07 (b) Explain manufacturing of Dimethyl sulfide with flow diagram. 07 OR Q:5(a) write about the preparation of chemical cellulose. 07

(b) Explain kraft puping process with flow diagram.

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