CH405 CHEMICAL ENGINEERING DESIGN II 3-0-0-3 2016 Prerequisite : CH312 Chemical engineering design - 1 Course Objectives • To impart the basic concepts of process design of evaporators, distillat absorption and stripping columns, extraction columns, dryers and cooling towers Syllabus Process design and detailed drawing of: Evaporators- Standard short tube, Standard I tube and forced circulation evaporators. Multiple effect evaporators. Process design drawing of Cooling Towers, Rotary Dryers Process design of steady state isothermal binary component distillation columns. Deta drawing of distillation column and its accessories. Process design of steady state isother absorption and stripping column-detailed drawing. Process design and drawing of sieve single solvent extraction columns Expected outcome At the end of the course, students will be able to i. Select and design suitable equipment for the given operation. ii. Design evaporators and distillation columns. Text Books: 1 B. C. Bhattacharya, Introduction to Chemical Equipment Design, CBS Publishers Distributors, New Delhi. 2. Badger & Bancharo, Introduction to Chemical Engineering, McGraw Hill Set Codes. 3. J. M.Coulson & J.F.Richardson, Chemical Engineering, Vol.6, 3#Edn, Butterwor Heinemann, (Indian print) Set Macinal Angain V.V., Process Equipment Design, 3#Edn, Mac-Milan & C India. 4. B. Codes. J. McCabe W.L., Smith J.C., & Harriot P., Unit Operations In Ch	Course code	Course Name	L-T-P- Credits		ear of oduction		
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SECOND INTERNAL EXAMINATION					

END SEMESTER EXAMINATION

Question paper pattern

Maximum marks : 100

Exam duration : 3 hours

There shall be 3 questions uniformly covering modules I & II each carrying 50 marks of which the student has to answer any 2 questions. At the most 4 subdivisions can be there in one main question with a total of 50 marks for all the subdivisions put together. (2 x50=100 Marks)

