Code No.: ETCS 413   **L**   **T**   **C**

Paper: Requirements & Estimation Techniques   **3**   **1**   **4**

INSTRUCTIONS TO PAPER SETTERS: **MAXIMUM MARKS: 75**

1.   Question No. 1 should be compulsory and cover the entire syllabus. This question should have objective or short answer type questions. It should be of 25 marks.
2.   Apart from question no. 1, rest of the paper shall consist of four units as per the syllabus. Every unit should have two questions. However, student may be asked to attempt only 1 question from each unit. Each question should be of 12.5 marks.

UNIT – I

Requirements engineering: Requirements Elicitation, Requirement Elicitation techniques, Requirement Analysis, Requirement Analysis Models, Requirement Documentation, Requirement Management, IEEE Std. For SRS   **[No. of Hrs.: 10]**

UNIT - II

Size Estimation: Function Point Analysis, Mask II FPA, LOC estimation, Conversion between size measures   **[No. of Hrs.: 12]**

UNIT - III

Effort, schedule & cost estimation: Estimation factors, COCOMO-II, Putnam Estimation Model, Estimation by Analogy, Validating Software Estimates   **[No. of Hrs.: 12]**

UNIT - IV

Introduction to software life cycle, management activities in software project
Tools: Software Estimation Tools

Industry Resources; IFPUG, UQAM-SEMRL, COSMIC, IEEE, COCOMO **[No. of Hrs.: 10]**

TEXT BOOKS:

1.   Swapna Kishore, Rajesh Naik, "Software Requirements and Estimation", TMH, 1992.

REFERENCE BOOKS:

1.   K.K. Aggarwal & Yogesh Singh, "Software Engineering", 2nd Ed., New Age International Publishers, New Delhi, 2005.
2.   Roger Pressman, "Software Engineering: A Practitioiner's Approach", 3rd Edition, McGraw Hill, 1992.