

Code No: 155GC

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD****B. Tech III Year I Semester Examinations, January/February - 2023****SOFTWARE REQUIREMENTS AND ESTIMATION****(Computer Engineering – Software Engineering)****Time: 3 Hours****Max. Marks: 75****Note:** i) Question paper consists of Part A, Part B.

ii) Part A is compulsory, which carries 25 marks. In Part A, Answer all questions.

iii) In Part B, Answer any one question from each unit. Each question carries 10 marks and may have a, b as sub questions.

**PART – A****(25 Marks)**

- 1.a) What are essential Software requirements? [2]
- b) What is requirements elicitation? [3]
- c) What are requirements management principles? [2]
- d) What are requirements attributes? [3]
- e) What are components of Software Estimations? [2]
- f) What are the key project factors that influence estimation? [3]
- g) What is Productivity? [2]
- h) What is the purpose of COCOMO II? [3]
- i) What are the benefits of using a requirements management tool? [2]
- j) What are desirable features in software estimation tools? [3]

**PART – B****(50 Marks)**

2. Explain how requirements process could be improved. [10]  
**OR**
3. What are various requirement elicitation techniques? Explain them. [10]
4. What is requirements traceability matrix? Explain its usage in requirement management. [10]  
**OR**
5. What is class diagram? Draw class diagram for library management system. [10]
6. Explain various software estimation methods. [10]  
**OR**
7. How to perform LOC estimation? Explain with example. [10]
8. Explain putnam estimation model. [10]  
**OR**
9. Explain Cost Estimation for a software product. [10]
10. Explain commercial requirements management tool used in industry. [10]  
**OR**
11. Explain Caliber – RM features in detail. [10]