

**R19**

Code No:863AC

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD****MCA III Semester Examinations, March/April - 2022****SOFTWARE ENGINEERING****Time: 3 Hours****Max.Marks:75**

**Answer any five questions**  
**All questions carry equal marks**

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- 1.a) What is Software? Explain software myths.  
b) Briefly discuss about capability maturity model integration (CMMI).  
c) Write short notes on process patterns and process assessment. [5+5+5]
- 2.a) Explain Various Incremental process models.  
b) Compare and Contrast evolutionary process models and unified process models. [7+8]
- 3.a) Design and analyze the software requirements document.  
b) Discuss in detail user requirements and system requirements.  
c) Write short note on requirements elicitation process. [5+5+5]
- 4.a) Write any two requirements of engineering process.  
b) Describe behavioral models with neat sketch.  
c) Explain about data models. [5+5+5]
- 5.a) What are different design concepts in design engineering? Explain in it.  
b) Elaborate models of UML. [8+7]
- 6.a) What is the function of collaboration diagram in design engineering? Discuss class diagram with an example.  
b) How sequence diagrams is helpful in architectural design. [10+5]
- 7.a) Define testing. Give information on strategic approach to software testing.  
b) Explain the following:  
i) Validation testing ii) System testing. [8+7]
- 8.a) Justify how metrics used in software quality.  
b) What are the steps involved to overcome software risks?  
c) Briefly discuss about quality management software engineering. [5+5+5]

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