

Code No: 115EM

**R13**

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD**

**B. Tech III Year I Semester Examinations, November/December - 2016**

**SOFTWARE ENGINEERING**

(Common to CSE, IT)

**Time: 3 hours**

**Max. Marks: 75**

**Note:** This question paper contains two parts A and B. Part A is compulsory which carries 25 marks. Answer any question in Part A. Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

**PART - A**

**(25 Marks)**

1. a) What is legacy software? Explain. [2]
- b) What are the advantages of unified process? [3]
- c) Write the purpose of context model. [2]
- d) What is the significance of feasibility study? [3]
- e) What is the use of interface analysis? Explain. [2]
- f) What do you mean by software design quality? Explain. [3]
- g) Differentiate between verification and validation. [2]
- h) What is regression testing? Give example. [3]
- i) Define software reliability. [2]
- j) What is the importance of software reviews? [3]

**PART - B**

**(50 Marks)**

2. a) Discuss about the changing nature of software. [5+5]
- b) Explain spiral model with its merits and demerits. [5+5]
3. a) Discuss in brief about different software myths and their consequences. [5+5]
- b) Explain CMMI model with a neat sketch. [5+5]
4. a) Differentiate between functional and non-functional requirements. [5+5]
- b) List and explain the object models in brief. [5+5]
5. a) What are the activities of requirements elicitation and analysis? Explain. [5+5]
- b) Discuss about different structured methods used in software development. [5+5]
6. a) Explain the process of mapping dataflow into software architecture. [5+5]
- b) List the golden rules of user interface design. [5+5]
7. a) Discuss about pattern based software design in detail. [5+5]
- b) Define and explain about different types of cohesion. [5+5]
8. a) Describe the framework for software product metrics. [5+5]
- b) Differentiate between Black box and White box testing. [5+5]
9. a) What are the metrics used for software maintenance? Discuss. [5+5]
- b) Briefly discuss about Integration testing strategies. [5+5]
10. a) Differentiate between Reactive Vs Proactive risk strategies. [5+5]
- b) What is the significance of formal technical review? Explain. [5+5]
11. a) Write a detailed note on ISO 9000 quality standards. [5+5]
- b) What types of risks occur during software development? Discuss. [5+5]