

Code No: 812AJ

R13**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD****MCA II Semester Examinations, January – 2018****SOFTWARE ENGINEERING****Time: 3hrs****Max.Marks:60****Note:** This question paper contains two parts A and B.

Part A is compulsory which carries 20 marks. Answer all questions in Part A. Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 8 marks and may have a, b, c as sub questions.

PART – A**5 × 4 Marks = 20**

- 1.a) Discuss about the changing nature of software. [4]
- b) Distinguish between user requirements and system requirements. [4]
- c) What are the user interface design steps? [4]
- d) Discuss the significance of white-box testing. [4]
- e) Explain about RMMM plan. [4]

PART – B**5 × 8 Marks = 40**

2. Describe a generic view of process and also describe the significance of CMMI. [8]

OR

3. Explain spiral model. Discuss how it is different from incremental models. [8]

4. With a neat diagram, explain clearly the requirements engineering process. [8]

OR

- 5.a) Write the general form of a software requirements document and explain it clearly.
- b) Discuss the significance of non-functional requirements for a software project. [4+4]

6. Write brief notes on the following:
 - a) Designing conventional components
 - b) Architectural styles and patterns. [4+4]

OR

7. Discuss, why user interface design is more crucial for success of a software project. Discuss various user interface design guidelines. [8]

8. What are the metrics for software process and products? Explain them clearly. [8]

OR

9. What is meant by debugging? State and explain various debugging approaches. [8]

- 10.a) Discuss the metrics for software reliability.
- b) Explain about risk projection activity with a suitable example. [4+4]

OR

11. What is meant by SQA? Discuss about statistical software quality assurance. [8]

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