

R13**Code No: 812AJ****JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD****MCA II Semester Examinations, June/July - 2018****SOFTWARE ENGINEERING****Time: 3 Hours****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) What are the various categories of software? What are the fundamental activities of a software process? [4]
- b) Compare and Contrast Functional Requirements with Non-Functional Requirements. [4]
- c) What are the various elements of data design? [4]
- d) What are the reasons behind to perform white box testing? [4]
- e) What are the different categories of risks to be considered in "Software Development Process"? [4]

PART - B**5 × 8 Marks = 40**

2. Which of the software engineering paradigms do you think would be most effective? Why? [8]

OR

- 3.a) What are the advantages of providing static and dynamic views of the software process as in the Rational Unified Process? [4+4]
- b) List the process maturity levels in SEIs CMM. [4+4]

- 4.a) What is requirement validation? Describe various methods of requirement validation. [4+4]
- b) Describe the activities of Requirements Elicitation and Analysis process in brief. [4+4]

OR

5. Develop an object model, including a class hierarchy diagram and an aggregation diagram showing the components in the banking system. [8]

6. Draw a Data-Flow Diagram to model inventory data processing involved when a customer orders items through online. [8]

OR

7. List the basic design principles of class based components and conventional components. For a case study of your choice show the architectural and component design. [8]

8. List and explain different types of testing done during the testing phase. [8]

OR

9. Define Metric. What are the different types of metrics? Explain about quality metrics.[8]

10. Explain the following:

- a) Reactive Vs Proactive Risk strategies.
- b) RMMM

[4+4]

OR

11. Explain the following

- a) ISO 9000 quality standards.
- b) Software Vs. Formal Technical reviews.

[4+4]

—00000—

firstRanker.com
www.FirstRanker.com