

Code No: 812AJ

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

MCA II Semester Examinations, December - 2019

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) Explain about software Legacy. [4]
- b) Describe the need of software requirements document. [4]
- c) What are the golden rules for designing user Interface? [4]
- d) Explain about graph-based testing methods. [4]
- e) Discuss about the RMMM plan in brief. [4]

PART - B**5 × 8 Marks = 40**

- 2.a) Define a process model. Explain about Prototyping process model.
- b) What is CMMI? Explain in detail. [4+4]

OR

- 3.a) Describe the changing nature of software.
- b) What are phases of the Unified process mode? Explain briefly. [4+4]

- 4.a) How to validate requirements?
- b) Explain in brief about object models. [4+4]

OR

- 5.a) Describe functional and non-functional requirements.
- b) What are feasibility studies? Explain in detail about requirements elicitation phase. [4+4]

- 6.a) What is meant by pattern? Explain its role in software design.
- b) Describe refining the architecture into components. [4+4]

OR

- 7.a) Distinguish between cohesion and coupling.
- b) Discuss about user interface design steps. [4+4]

- 8.a) Explain in detail about alpha and beta testing.
- b) What are the metrics used for design model? [4+4]

OR

- 9.a) What are debugging strategies? Explain.
- b) Describe a framework for product metrics. [4+4]

- 10. Explain the following:
a) Developing a risk table b) SQA [4+4]

OR

- 11. Explain the following:
a) Software reliability b) Risk identification [4+4]