R17

Code No: 842AE

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
MCA II Semester Examinations, April/May - 2019
SOFTWARE ENGINEERING

Time: 3hrs   Max.Marks:75

Note: This question paper contains two parts A and B.

Part A is compulsory which carries 25 marks. Answer all questions 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

5 × 5 Marks = 25

1.a) Define software. Explain software evolution.   [5]
  b) Explain about use cases with suitable examples.   [5]
  c) Draw and explain a class diagram for library management system.   [5]
  d) Distinguish between black-box testing and white-box testing.   [5]
  e) What is RMMM? Explain RMMMI plan.   [5]

PART - B

5 × 10 Marks = 50

2.a) Explain in detail about process assessment.
  b) What are the phases of Unified process? Explain.   [5+5]

OR

3.a) Distinguish between the incremental model and the RAD model.
  b) Explain in detail about process patterns.   [5+5]

4.a) Who should be involved in a requirements review? Draw a process model showing how a requirements review might be organized.
  b) Describe the structure of a requirements document.   [5+5]

OR

5.a) Develop an object model, including a class hierarchy diagram and a data flow diagram showing the principle components of a personal computer system and its system software.
  b) Explain about requirements validation.   [5+5]

6.a) Distinguish between sequence diagram and collaboration diagram with examples.
  b) What are interface design elements? Explain.   [5+5]

OR

7.a) Explain terms and concepts of component diagrams.
  b) What are architectural styles? Explain.   [5+5]

8.a) Discuss about the art of debugging.
  b) Explain about function-based metrics.   [5+5]

OR

9.a) What is integration testing? Explain.
  b) Explain about architectural design metrics.   [5+5]

10.a) Distinguish between LOC and FP metrics.
  b) What are SQA activities? Explain.   [5+5]

OR

11.a) Explain about software reviews.
  b) Discuss about statistical SQA.   [5+5]

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