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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