USN | | | | | | | | | | **16MCA34**

Third Semester MCA Degree Examination, June/July 2018
Software Engineering

Time: 3 hrs.   Max. Marks: 80

Note: Answer any FIVE full questions, choosing one full question from each module.

Module-1

1 a. What are the attributes of good software? Explain.   **(05 Marks)**
   b. What is software engineering? Explain professional responsibilities of a software engineering.   **(06 Marks)**
   c. Explain the principles of agile methods.   **(05 Marks)**

OR

2 a. Explain incremental development model with its merits and demerits.   **(06 Marks)**
   b. Explain extreme programming in detail.   **(10 Marks)**

Module-2

3 a. What is requirement engineering? Explain functional and non-functional requirement.
                                                                             (08 Marks)
   b. Explain requirement discovery in detail.   **(08 Marks)**

OR

4 a. What is CBSE? Explain the basic elements of component model.   **(06 Marks)**
   b. What is SRS document? Explain structure of SRS document.   **(06 Marks)**
   c. Explain requirement validation.   **(04 Marks)**

Module-3

5 a. Explain interaction model in detail.   **(08 Marks)**
   b. Explain the following:
       i) Class diagram
       ii) Context diagram.   **(08 Marks)**

OR

6 a. Explain architectural styles of competent and connectors (CC) in detail. **(12 Marks)**
   b. Explain architectural views.   **(04 Marks)**

Module-4

7 a. Explain software as a service.   **(04 Marks)**
   b. Explain the following:
       i)   Master and slave architecture
       ii) Peer-to-peer architecture
       iii) Two-tier client-server architecture   **(12 Marks)**

OR

8 a. What is distributed system? Explain the issues of distributed systems. (08 Marks)
   b. Explain about matrix in functional orientated design. (08 Marks)

Module-5

9 a. Explain black box testing and white box testing. (10 Marks)
   b. Explain testing process. (06 Marks)

OR

10 a. What is quality plan? With a neat diagram, explain defect injection and removal cycle in detail. (06 Marks)
   b. Explain project scheduling and staffing. (06 Marks)
   c. Explain project monitoring plan. (04 Marks)

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