USN ☐☐☐☐☐☐☐☐☐☐

13MCA33

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

Time: 3 hrs.

Max. Marks:100

Note: *Answer any FIVE full questions.*

1　a. Define software engineering. Elaborate upon the essential attributes of a good software. **(10 Marks)**

　　b. Illustrate as how software engineering concept is applied by involving a case study of an insulin pump control system. **(10 Marks)**

2　a. Describe in detail the waterfall model using a diagrammatic representation. **(10 Marks)**

　　b. Explain in detail the various phases that are involved in the rational unified process with a diagrammatic representation. **(10 Marks)**

3　a. Discuss in detail upon functional and non-functional requirements. **(10 Marks)**

　　b. Elaborate upon the requirements elicitation and analysis process. **(10 Marks)**

4　a. Discuss in detail about interaction models with diagrammatic representation. **(10 Marks)**

　　b. Describe about the architectural styles for C and C view. **(10 Marks)**

5　a. Discuss the basic elements of a component model with a diagrammatic representation. **(10 Marks)**

　　b. Describe the key CBSE processes in detail. **(10 Marks)**

6　a. Give a detailed note upon the various distributed system issues. **(10 Marks)**

　　b. Elaborate the various architectural patterns for distributed systems. **(10 Marks)**

7　a. Describe the two commonly used approaches for effort estimation. **(10 Marks)**

　　b. Discuss in detail about the concept of Risk management. **(10 Marks)**

8　a. Elaborate in detail upon Black-Box testing. **(10 Marks)**

　　b. Explain in detail about the testing process. **(10 Marks)**

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