U.S.N.

BMS College of Engineering, Bangalore-560019

(Autonomous Institute, Affiliated to VTU, Belgaum)
June 2016 Semester End Make Up Examinations

Course: SOFTWARE ENGINEERING   **Duration: 3 Hours**
Course Code: 10CI6GCSWE   **Max Marks: 100**
                                                         Date: 04.06.2016

Instructions: Answer FIVE FULL questions, choosing one from each unit.

UNIT-1

1. a) List the four important attributes which all software products should have? Suggest four other attributes that may sometimes be significant.   **06**
    b) Explain a spiral model of requirement and design with neat diagram.   **06**
    c) Explain the structure of a software requirement document.   **08**

OR

2. a) Discuss the key challenges faced by software engineering.   **06**
    b) Explain the different types of Non-functional requirements.   **08**
    c) Elicitating and understanding stake holder requirements is difficult for several reasons? Justify?   **06**

UNIT-2

3. a) Explain the components of CASE TOOLS for structured support with a neat diagram.   **07**
    b) Explain the following with suitable example: **06**
            (i) Object behavior modeling
            (ii) Data flow models
            (iii) Context models
    c) Explain risk management process with a neat diagram   **07**

UNIT-3

4. a) Explain with neat diagram the two main strategies used to decompose a subsystem Into modules.   **08**
    b) Explain the Object Oriented strategies used throughout the development process.   **06**
    c) Explain in detail repository model of system organization with a neat diagram.   **06**

UNIT-4

5. a) List and explain the roles in the inspection process. **05**
    b) Discuss the Principles of agile methods. **05**
    c) Explain the activities of re-engineering process in detail. **10**

OR

6. a) Discuss the difficulties with iterative development and incremental delivery. **06**
    b) Illustrate the flow graph for a binary search routine. **06**
    c) Explain any two system testing approaches. **08**

UNIT-5

7. a) Explain system engineering process with a neat diagram. **08**
    b) Design state machine model of a washing machine equipped with buttons to set the power, timer and to start the system. **06**
    c) Suggest a suitable control model for real time system. Justify your suggestion. **06**

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