R13

Code No: **RT41054**

Set No. 1

IV B.Tech I Semester Supplementary Examinations, October/November - 2019 SOFTWARE TESTING METHODOLOGIES

(Computer Science and Engineering)

Time: 3 hours Max. Marks: 70

Question paper consists of Part-A and Part-B Answer ALL sub questions from Part-A Answer any THREE questions from Part-B ****

| | | <u>PART-A</u> (22 Marks) | |
|----|----|---|-----|
| 1. | a) | Explain about test strategy matrix. | [3] |
| | b) | How to verify low-level design? | [3] |
| | c) | Describe structured walkthroughs. | [4] |
| | d) | What is beta testing? Explain. | [4] |
| | e) | Describe Paul Goodman for SMP. | [4] |
| | f) | Write general guidelines for usability testing. | [4] |
| | | $\underline{\mathbf{PART-B}} \ (3x16 = 48 \ Marks)$ | |
| 2. | a) | Explain about STLC with a neat diagram. | [8] |
| | b) | Define software testing. What are goals of software testing? | [8] |
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| 3. | a) | What are verification activities? Explain verification of requirements. | [8] |
| | b) | A program reads three numbers, A, B, and C, with a range [1, 50] and prints the | |
| | | largest number. Design test cases for this program using BVC, robust testing, and | ro1 |
| | | worst case testing methods. | [8] |
| 4. | a) | What are benefits of inspection process? Explain. | [8] |
| | b) | What is mutation testing? Explain with suitable example. | [8] |
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| 5. | a) | Define integration testing. Explain about path-based integration. | [8] |
| | b) | Explain about regression testing techniques. | [8] |
| 6. | a) | What are software quality metrics? Explain with examples. | [8] |
| | b) | Explain about coverage-based test case prioritization. | [8] |
| | 0) | Explain about coverage based test case promization. | [Մ] |
| 7. | a) | Describe traditional software and Web-based software. | [8] |
| | b) | What is inheritance testing? Explain in detail. | [8] |