

B.E. Computer Science & Engineering (Model Curriculum) Semester-VII
BE102CS - Software Testing and Quality Assurance

Time : Three Hours



GUG/S/25/14232

Max. Marks : 80

- Notes : 1. All questions carry equal marks.
2. All questions are compulsory.

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| 1. | a) | Describe Defect Repository and Developer/Tester support for developing Defect Repository. | 8 |
| | b) | Recall Software Testing Principles. | 8 |

OR

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|----|------|---|---|
| 2. | a) | What are objective of Testing? Write different issues in Testing? | 8 |
| | b) | Describe following terms- | 8 |
| | i) | Failure | |
| | ii) | Fault | |
| | iii) | Errors | |
| | iv) | Test cases | |

3. a) Design Control Flow Graph and Data Flow Graph and compare it. **8**
- b) Describe circumstances under which you would apply White Box Testing, Black Box Testing or both. **8**

OR

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| 4. | a) | Compare Static Testing with Structural Testing. | 8 |
| | b) | Discuss the Test Case Design Strategies in detail. | 8 |
| 5. | a) | Describe levels of Testing with suitable diagram. | 8 |
| | b) | Describe following terms- | 8 |
| | i) | Alpha Testing and Beta Testing | |
| | ii) | Ad-hoc Testing | |

OR

6. a) What is Recovery Testing and Regression Testing. 8
- b) Describe Types of System Testing with proper diagram. 8
7. What are the people and organizational issues in Testing? Also explain in detail organizational structure for Testing Team. 16

OR

8. Write short note on- 16
- i) Test Plan components ii) Test process
- iii) Test plan attachments iv) Test planning
9. a) Discuss the scope of Automation in Software Testing. 8
- b) What are the skills that are needed for using Automated Testing Tools. Explain in detail. 8

OR

10. a) Discuss the different criteria for Test Completion & also explain Defect Prevention. 8
- b) What are various Software Quality Metrics? Explain them. 8
