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B.E. (Information Technology) Seventh Semester (C.B.S.)
Elective - II : Software Testing & Quality Assurance

P. Pages : 2

Time : Three Hours



NRT/KS/19/3589

Max. Marks : 80

- Notes :
1. All questions carry marks as indicated.
 2. Solve Question 1 OR Questions No. 2.
 3. Solve Question 3 OR Questions No. 4.
 4. Solve Question 5 OR Questions No. 6.
 5. Solve Question 7 OR Questions No. 8.
 6. Solve Question 9 OR Questions No. 10.
 7. Solve Question 11 OR Questions No. 12.
 8. Due credit will be given to neatness and adequate dimensions.
 9. Assume suitable data whenever necessary.

1. a) Explain the characteristics of good software. Explain the most common software errors in software execution. **7**

b) Explain the need of software along with its advantages. **6**

OR

2. a) What is software testing? Give a brief note on Unit Integration and Regression testing. **7**

b) Explain the sequence of testing activities performed by a test engineer in testing a program. **6**

3. a) Enlist and explain various tools for Unit Testing. **7**

b) Give three characteristics of the version control and configuration management tool. **6**

OR

4. a) What is defect prevention? What are kinds of checks that are to be performed routinely to avoid the defect. **8**

b) What is debugging & the three approaches to debugging. **5**

5. a) Explain the concept of control flow testing give proper example. **6**

b) Explain control flow graph with example. **8**

OR

6. a) Describe test data selection using example. **6**

b) Write a detailed note on path in control flowgraph. **8**

7. a) Explain the data flow anomalies in the data flow testing. **8**

- b) Explain the dynamic data flow testing with example. 5

OR

8. a) Describe global C-use. Global definition clean path loop free path and du-path a variable in dataflow testing. 7
- b) Write short notes on McCabe's complexity measure. 6
9. a) Discuss the importance of Regression testing when developing a new software release. What test cases from the test suit would be more useful in performing a Regression test? 6
- b) What are the similarities and defferences between quality assurance and safety measure. 7

OR

10. a) What is robustness test? Explain various reasonable test which are involved in robustness test. 6
- b) Give the significance of functionality test and also explain deferent categories of tests involved in it. 7
11. a) What are objective of Accepting testing. 5
- b) Why are Acceptance test cases executed in two phase. 5
- c) What is software Quality. 4

OR

12. a) Explain ISO 9001:2001 software Quality standards and its requirement. 8
- b) Draw the data flow graph for the Binary Search routine and explain the same. 6



~ Babe Ruth

