

Elective-III : Software Testing & Quality Assurance

P. Pages : 2

Time : Three Hours



NRJ/KW/17/4769

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.

1. a) Define terms FAILURE, ERROR, FAULT and DEFECT. Discuss objectives of testing. 7
- b) Explain sources of information of test case selection. 7

OR

2. a) Explain development and testing phases in classical V model. 7
- b) Differentiate between static and dynamic unit testing. 7
3. a) Explain steps involved in code review process in unit testing. 7
- b) Explain dynamic unit test environment with suitable diagram. 7

OR

4. a) Explain tools for unit testing. 7
- b) Explain steps involved in Debugging Heuristics. 7
5. a) What is control flow graph? Explain complete statement coverage and complete branch coverage criteria in detail. 7
- b) Explain with Flow-Chart the test Generation process. 6

OR

6. a) Explain how test input is generated in control flow testing. 7
- b) Explain predicate coverage criteria in control flow test with example. 6
7. a) Explain different types of Data flow testing criteria with example. 7
- b) State and explain different types of interface errors. 6

OR

8. a) Explain advantage and disadvantage of Top-Down and Bottom-Up techniques in system integration. 7
- b) Write a note on types of data flow anomalies. 6
9. a) State and explain different types of system test. 7
- b) State and explain different types of functionality test. 6

OR

10. a) What is Robustness test? Explain tests involved in it. 7
- b) Discuss documentation test. 6
11. a) Explain acceptance criteria of system installation and upgradation process. 7
- b) Discuss Acceptance Test Report. 6

OR

12. a) Give five views of software quality. 7
- b) Explain different characteristics of ISO-9126 quality of software products. 6
