Reg. No. :

Question Paper Code: 31422

B.E. / B.Tech. DEGREE EXAMINATION, MAY 2016

Fourth Semester

Computer Science and Engineering

01UCS402 - SOFTWARE TESTING

(Regulation 2013)

Duration: Three hours   Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 2 = 20 Marks)

1. Differentiate verification and validation.

2. List any two classification of defect.

3. How to compute cyclomatic complexity?

4. What is a test case?

5. Define test harness.

6. What is meant by scenario testing?

7. What is the role of manager in support of test group?

8. What is the use of test log?

9. Name any two test metrics.

10. What is the purpose of test specific status meeting?

PART - B (5 x 16 = 80 Marks)

11. (a) (i) Explain in detail the various software testing principles. (8)

(ii) Explain the process of defect repository development. (8)

Or

(b) (i) Explain the tester's role in software development organization. (8)

(ii) Compare and contrast errors, faults and failures using suitable examples. (8)

12. (a) Explain the concept of equivalence class partitioning and boundary value analysis with example. (16)

Or

(b) (i) Discuss in detail about code coverage testing with example. (8)

(ii) Explain in detail code complexity testing with neat flow chart. (8)

13. (a) List and explain the various types of system testing with examples. (16)

Or

(b) Distinguish between alpha and beta testing. Explain in detail about the phase in which alpha and beta testing is done. (16)

14. (a) What are the roles of three groups in test planning and policy developments? Discuss in detail. (16)

Or

(b) (i) Discuss testing team structure for single product companies. (10)

(ii) What are the skills needed for a test specialist? Explain in detail. (6)

15. (a) (i) List and discuss metrics that can be used for defect prevention and how. (8)

(ii) List the requirements of test tool. Explain with three suitable examples. (8)

Or

(b) Write short notes on the following:

(i) Software Configuration Management (SCM) (8)

(ii) Components of review plan (8)

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