## **Question Paper Code: 44202**

B.E. / B.Tech. DEGREE EXAMINATION, APRIL 2019

Fourth Semester

Computer Science and Engineering

14UCS402 - SOFTWARE TESTING

(Regulation 2014)

Duration: Three hours

Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 1 = 10 Marks)

1. Defect is a

| (a) Repair | (b) bug | (c) mistake | (d) failure |
|------------|---------|-------------|-------------|
|------------|---------|-------------|-------------|

2. Testing is

| (a) An engineering activity | (b) the responsibility of an organization |
|-----------------------------|---|
| (c) a social phenomenon     | (d) the conclusion of a software product  |

3. In the \_\_\_\_\_ Box approach, tester has no knowledge of the inner structure i.e. how the software works.

(a) White (b) Red (c) Black (d) None of these

4. \_\_\_\_\_ Box testing is also called glass box testing approach.

(a) White (b) Black (c) Red (d) None of these

5. Running the system under a live environment using Live data in order to find errors is known as

| (a) Acceptance testing | (b) Beta testing   |
|------------------------|--------------------|
| (c) Alpha testing      | (d) System testing |

- 6. Regression test is used for
  - (a) Only for upgraded software from existing version
  - (b) Only for newly created software version
  - (c) Only for existing software version
  - (d) None of these

7. The basic test plan components as described in \_\_\_\_\_\_ standard.

- (a) IEEE 829 (b) IEEE 1061 (c) IEEE 12007 (d) IEEE 730
- 8. The Test incident report is also called as

| (a) Test report     | (b) Problem report  |
|---------------------|---------------------|
| (c) Document report | (d) Validity report |

9. \_\_\_\_\_ consists of developing and applying a set of corrective actions to get a project on track when monitoring shows a deviation from what was planned.

| (a) Project monitoring | (b) Project controlling |
|------------------------|-------------------------|
| (c) Both a and b       | (d) None of the above   |

10. \_\_\_\_\_ is a group meeting whose purpose is to evaluate a software artifact or a set of software artifacts.

(a) Review (b) Audit (c) Testing (d) Quality

PART - B (5 x 2 = 10 Marks)

- 11. What is the need for analyzing defect repository?
- 12. State the inference of error guessing and reality?
- 13. What for adhoc testing is done? Who are the stake holders?
- 14. What is test log?
- 15. Differentiate between inspections and reviews.

PART - C (5 x 16 = 80 Marks)

16. (a) Summaries any five software testing principles and testers role in a software development organization. (16)

Or

- (b) Explain in detail about the various level of TMM and mention the different types of tasks performed in each level of TMM. (16)
- 17. (a) State the implications of positive and negative testing ? What are their requirements? Illustrate when do you perform boundary value analysis? Explain the status with an example. (16)

### Or

- (b) Write a quadratic equation program in any programming language and determine the outputs and draw the control flow graph and fits its Cyclomatic complexity. (16)
- 18. (a) How do you collect the results of unit tests and recorded ? Who will use these results and what are the follow up actions? Analyze with an example. (16)

#### Or

- (b) A tester wants to test the online retail application system as whole module or entire application, explain in detail what are the different types of testing to be tested in this application? (16)
- 19. (a) Explain all the IEEE 829 listed test plan components in software testing. (16)

#### Or

- (b) State the skills needed by a test specialist. Is he preferred from the same environment or different? Justify why? How a testing group will be selected in an organization? Elaborately review. (16)
- 20. (a) Explain software configuration management in detail. (16)

#### Or

- (b) Write short notes on
  - (i) Components of review plan
  - (ii) Defect prevention
  - (iii) Test maturity model (16)

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