SUBJECT CODE: 11CS/MC/ST54

B.C.A. DEGREE EXAMINATION – NOVEMBER 2013
FIFTH SEMESTER

REG. NO. _____

COURSE   : MAJOR CORE
PAPER   : SOFTWARE TESTING
TIME   : 20 MINUTES   MAX. MARKS: 20

SECTION – A
ANSWER ON THE QUESTION PAPER ITSELF

<u>**Answer all the questions**</u>   **(20 * 1 = 20)**

Choose the best answer:

1. A mistake, misconception, or misunderstanding on the part of a software developer is called _____.

   a) An error   c) A failure
   b) A fault   d) A bug

2. A document, or piece of software that allows testers to determine whether a test has been passed or failed is called _____.
   a) Test case   c) Test
   b) Test bed   d) Test Oracle

3. A model that illustrates how testing activities can be integrated into each phase of the standard software life cycle is _____.
   a) V-model   c) U-model
   b) A-model   d) K-model

4. This testing technique examines the basic program structure and it derives the test data from the program logic ensuring that all statements and conditions are executed at least once. It is called as _____.
   a) Black Box Testing   c) Gray Box Testing
   b) White Box Testing   d) Closed Box Testing

5. Tangible events that are expected to occur at a certain time in the project's lifetime are called _____.
   a) Cornerstones   c) Milestones
   b) Fault lines   d) Plan

6. _____ Diagrams are used in the defect causal analysis to identify influential factors that impact on a problem area.
   a) Ishkiara   c) Smoothening
   b) Fishbone   d) Cascading

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7. The person who has the responsibility for documenting defects, and recording review findings and recommendations is called as _____.
   a) Leader
   b) Recorder
   c) Moderator
   d) Inspector

8. The data structure used by the TMM Assessment team to check the accuracy, consistency, and objectivity of the data is _____.
   a) TMM Record Matrix
   b) TMM Traceability Matrix
   c) TMM Adjacency Matrix
   d) TMM Level Matrix

9. The measure of all the found defects per size of software entity _____.
   a) Defect Leverage
   b) Defect status
   c) Defect size
   d) Defect Density

10. Another name of statement coverage is _____.
    a) Line coverage
    b) Branch coverage
    c) Code coverage
    d) Decision coverage

Fill in the blanks:

11. _____ is the process of evaluating a software system or component during or at the end of, the development cycle in order to determine whether it satisfies specified requirements.

12. _____ is the smallest possible testable software component.

13. _____ is an approach to test data generation that requires knowledge of code structure and is also a fault-based approach

14. Beta testers are selected from the potential user population and given the _____ version of software for testing.

15. _____ document is necessary to locate and track the items that are submitted for test.

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16. _____ defects are derived from incorrect design descriptions for interfaces with external software systems, databases and hardware devices.

17. _____ are a type of technical review where the producer of the reviewed material serves as the review leader and actually guides the progression of the review.

18. _____ model was designed to be used by software development organizations to assess and improve their testing processes.

19. The formula for Defect Removal Efficiency (DRE) is _____.

20. _____ coverage reports whether every possible combination of conditions occurs.

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SECTION B

Answer ALL the questions   **(5 * 2 = 10)**

1. Define Testing.
2. What is top-down and bottom-up approach of testing?
3. Define Goal.
4. What is an Inspection?
5. List the criteria to be considered while selecting an automation tool.

SECTION C

Answer any EIGHT of the following   **(8 * 5 = 40)**

6. What are the levels of testing?
7. Explain Software quality and its attributes.
8. What are the skills needed by a test specialist?
9. Explain the integration of testing activities into the software life cycle
10. Explain Code defects in detail.
11. Explain about Defect Prevention.
12. What information should be present in the inspection review and walkthrough review reports?
13. What are the steps in the TMM Assessment Procedure?
14. Explain Reporting Tools.
15. Explain the advantages and disadvantages of automation tools.

SECTION D

Answer any three of the following   **(3 * 10 = 30)**

16. Explain the software testing principles
17. Explain the types of testing.
18. Discuss about the components of a test plan.
19. Explain the measurements for monitoring tester productivity, errors, faults and failures.
20. Discuss about the basic metrics in documentation coverage analysis.

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