

**B.TECH**  
**(SEM VII) THEORY EXAMINATION 2018-19**  
**SOFTWARE TESTING AND AUDIT**

Time: 3 Hours

Total Marks: 100

Note: 1. Attempt all Sections. If require any missing data; then choose suitably.

## SECTION A

1. Attempt *all* questions in brief. 2 x 10 = 20
- What is SLDC?
  - Define the term validation in software testing
  - When we use decision table testing?
  - What is path testing?
  - Define graphing technique.
  - Explain risk analysis in brief.
  - What is software test plan?
  - What is positive testing?
  - What do you understand from genetic algorithm?
  - Define test data.

## SECTION B

2. Attempt any *three* of the following: 10 x 3 = 30
- Explain Error, Fault, and Failure in terms of software testing.
  - What are the phases of formal review? Explain in brief.
  - What is Control flow testing how it is differ from path testing
  - What is software quality? Explain all the dimensions of software quality in brief?
  - Describe Class Testing with the help of an example

## SECTION C

3. Attempt any *one* part of the following: 10 x 1 = 10
- What is Web testing? How it is differ from User interface Testing?
  - Explain the role of Object Oriented Integration and System Testing in software testing and audit.
4. Attempt any *one* part of the following: 10 x 1 = 10
- Discuss the Levels of Testing and Debugging in detail.
  - List the various Software Testing Tools. Give the functionality of each tool in brief.
5. Attempt any *one* part of the following: 10 x 1 = 10
- What is Regression Test cases selection? How we can reduce the number of test cases in Regression Testing?
  - Explain the role of cyclomatic Complexity in Structural Testing.

6. Attempt any *one* part of the following: 10 x 1 = 10

- (a) What is Functional Testing? Why it is important?
- (b) What are basic differences between Data Flow Testing and Mutation Testing?

7. Attempt any *one* part of the following: 10 x 1 = 10

- (a) What is Verification and Validation in software testing? Also Differentiate between Verification and Validation.
- (b) Define SRS. What is source code reviews and user documentation verification in software testing?

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