

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**
- a. What is SLDC?
 - b. Define the term validation in software testing
 - c. When we use decision table testing?
 - d. What is path testing?
 - e. Define graphing technique.
 - f. Explain risk analysis in brief.
 - g. What is software test plan?
 - h. What is positive testing?
 - i. What do you understand from genetic algorithm?
 - j. Define test data.

SECTION B

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

SECTION C

- 3. Attempt any *one* part of the following: 10 x 1 = 10**
- (a) What is Web testing? How it is differ from User interface Testing?
 - (b) 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**
- (a) Discuss the Levels of Testing and Debugging in detail.
 - (b) 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**
- (a) What is Regression Test cases selection? How we can reduce the number of test cases in Regression Testing?
 - (b) 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?