

(Following Paper ID and Roll No. to be filled in your Answer Books)

Paper ID : 2289942

Roll No.

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## B.TECH.

Regular Theory Examination (Odd Sem-VII), 2016-17

## SOFTWARE TESTING & AUDIT

*Time : 3 Hours*

*Max. Marks : 100*

### SECTION - A

1. Attempt all parts. All parts carry equal marks. Write answer of each part in short. (2×10=20)
- What is the difference between Alpha Testing and Beta Testing?
  - What is the need of Software Validation after a change?
  - What is software testing?
  - When is used Decision table testing?
  - What is the difference between Testing Techniques and Testing Tools?
  - What is the difference between QA and testing?
  - How can you do black box testing of a database?

- h) What is website testing?
- i) What are the phases of formal review?
- j) What is the difference between software testing and debugging?

### SECTION - B

#### 2. Attempt any five questions from this section

(5×10=50)

- a) How object oriented testing is different from procedural testing?
- b) How do you measure software quality? Discuss correctness versus reliability pertaining to programs.
- c) Explain the various data flow testing criteria.
- d) What is regression testing? Differentiate between regression and development testing?
- e) Write short notes on the following:
  - i) System testing
  - ii) Acceptance testing
  - iii) Integration testing
  - iv) Mutation testing.
- f) What is structural (code based) testing? Why do we use white box testing, when black box testing is used to test conformance to requirements?

- g) How reusability features can be exploited by object-oriented testing approach?
- h) Explain Cyclomatic complexity, its properties and meaning in Tabular form.

### SECTION - C

#### Note : Attempt any two questions from this section.

(2×15=30)

- 3. What are the categories to evaluate regression test selection techniques? Why do we use such categorization?
- 4. What is the difference between equivalence partitioning and boundary value analysis methods?
- 5. Write short note on the following:
  - a) Cause-effect graphing Technique.
  - b) Test comparators
  - c) Code Walk through and Inspection.