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

Paper ID: 2289942

Roll No.

## 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.  $(2\times10=20)$ 
  - a) What is the difference between Alpha Testing and Beta Testing?
  - b) What is the need of Software Validation after a change?
  - c) What is software testing?
  - d) When is used Decision table testing?
  - e) What is the difference between Testing Techniques and Testing Tools?
  - f) What is the difference between QA and testing?
  - g) 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  $(5\times10=50)$ 
  - 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 objectoriented testing approach?
- h) Explain Cyclomatic complexity, its properties and meaning in Tabular form.

#### **SECTION-C**

Note: Attempt any two questions from this section.  $(2\times15=30)$ 

- 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.