

**MCA**  
**(SEM V) THEORY EXAMINATION 2018-19**  
**SOFTWARE TESTING**

Time: 3 Hours

Total Marks: 70

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

**SECTION A**

1. Attempt *all* questions in brief. 2 x 7 = 14
- a. What is software testing? Why it is necessary?
  - b. Define Errors, faults and failures.
  - c. Differentiate between testing and debugging.
  - d. Define Test Management.
  - e. Discuss the GUI Testing.
  - f. What are Test cases, Testing suite and Test oracles?
  - g. Differentiate between Static and Dynamic Slicing.

**SECTION B**

2. Attempt any *three* of the following: 7 x 3 = 21
- a. Discuss the black-box, white-box and gray box testing.
  - b. Explain the Boundary Value Analysis (BVA) with an example.
  - c. What is regression testing? When and how it is performed?
  - d. Explain the software testing life cycle?
  - e. What is web testing? List the goal of quality process.

**SECTION C**

3. Attempt any *one* part of the following: <http://www.aktuonline.com> 7 x 1 = 7
- (a) Differentiate between Verification and Validation.
  - (b) Write short note on Walkthrough and Code Inspection.
4. Attempt any *one* part of the following: 7 x 1 = 7
- (a) Explain Decision Table Based testing with an example.
  - (b) Explain cyclomatic complexity with its significance.
5. Attempt any *one* part of the following: 7 x 1 = 7
- (a) What are the different methodologies of integration testing?
  - (b) Write short note on the following:
    - (i) Tools for regression testing.
    - (ii) Progression testing.
6. Attempt any *one* part of the following: 7 x 1 = 7
- (a) Explain the Exploratory testing and worst case testing with example.
  - (b) Explain the following:
    - (i) Software testing tools.
    - (ii) Software test plan.
7. Attempt any *one* part of the following: 7 x 1 = 7
- (a) Explain Load testing and Smoke testing with suitable example.
  - (b) Explain the following:
    - (i) Deployment testing.
    - (ii) Beta Testing.