

**Roll No.**

**Total No. of Pages : 02**

**Total No. of Questions : 09**

**B.Tech. (IT) (Sem.-7,8)**

# SOFTWARE TESTING AND QUALITY ASSURANCE

**Subject Code : BTIT 701-18**

**M.Code : 90569**

**Date of Examination : 01-06-2023**

**Time : 3 Hrs.**

**Max. Marks : 60**

**INSTRUCTIONS TO CANDIDATES :**

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

## SECTION-A

**1. Write briefly :**

- Testing can detect the presence of errors, not their absence. Why?
- Testing should begin requirements analysis phase. Why?
- Quality without timeliness and cost considerations is meaningless. Why?
- Why is it important to develop test cases for valid and invalid input conditions?
- What are the types of testing required for client server systems?
- What are the objectives of software testing? List out the various testing techniques.
- What is the difference between verification and validation?
- What is Test case? How does it differ from test plan?
- What is scenario based testing?
- What do you understand by control structure testing?

## SECTION-B

2. What are the quality assurance activities? Explain.
3. Define the terms :
  - a) Verification
  - b) Validation
  - c) Failure
  - d) Error
  - e) Fault
4. Explain the concepts of random and partition testing for classes in object oriented testing methods.
5. What are the important issues in Object Oriented testing? Explain.
6. Discuss configuration management for web engineering.

## SECTION-C

7. What are the various quality assurance standards? Explain briefly.
8. **Explain testing :**
  - a) Web based systems
  - b) Multi platform systems.
9. What are the characteristics of a good test case? Develop a set of test cases for testing the routine that reads in three integer values representing three sides of a triangle and calculate its area.

**NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.**