

**PARUL UNIVERSITY**  
**FACULTY OF ENGINEERING & TECHNOLOGY**  
**B.Tech. Summer 2021-22 Examination**

**Semester: 8**  
**Subject Code: 03105484**  
**Subject Name: Software Testing and Quality Assurance**

**Date: 30/03/2022**  
**Time: 10:30 am to 01:00 pm**  
**Total Marks: 60**

**Instructions:**

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

**Q.1 Objective Type Questions - ( Fill in the blanks, one word answer, MCQ-not more than Five in case of MCQ) (All are compulsory) (Each of one mark) (15)**

1. What determines level of risk?
2. What is alpha testing?
3. List static testing techniques?
4. An input field takes the year of birth between 1900 and 2004 what the boundary values for testing this field are?
5. What are the tools used by a tester while testing?
6. Write Full form of CRUD.
7. Which of the following abbreviation is correct for the terms SPICE?
  - a. Software Process Improvement and Control Determination
  - b. Software Process Improvement and Capability Determination
  - c. Software Process Improvement and Compatibility Determination
  - d. None of the above
8. \_\_\_\_\_testing is a testing technique where the actual data verified in the real environment.
9. Whether the given statement is true or false:  
"Requirement specification, design, coding, testing, Installation and maintenance is the various phases of SDLC (software development life cycle).
10. Which of the following approaches are the part of Integration testing?
  - a) Top-down approach
  - b) Bottom-up approach
  - c) Big-bang approach
  - d) All of the above
11. "Automation testing should be performed before starting the manual testing" is the true statement or false?
12. \_\_\_\_\_is the process of re-testing the modules that connected to the program or components after the modification has occurred.
13. \_\_\_\_\_ Plan is used to overcome the risk.
14. Which of the following quality assurance approaches are usually measured?
  - a) Preventive
  - b) Detective
  - c) Proactive
  - d) Corrective
15. \_\_\_\_\_ is not a part of performance testing?
  - a) Recovery testing
  - b) Measuring the response time
  - c) Simulating many users
  - d) Generating many transactions

**Q.2 Answer the following questions. (Attempt any three) (15)**

- A) Discuss principles of TQM.
- B) Explain CMM in details.
- C) Discuss roll of quality assurance engineer.
- D) Define the following with example. i) Failure ii) Fault ili) Error

**Q.3 A) Explain what are test driver and test stub and why it is required? (07)**

- B) Explain Object oriented testing. Discuss issues of OO testing. (08)**

**OR**

- B) List test design techniques? Explain any one technique with example. (08)**

**Q.4 A) What is a Test Metric in software testing and what information does it contains? (07)**

**OR**

- A) What is the need of software measurement? Explain different size metrics. (07)**

- B) Mention what are the types of documents in SQA? Explain any two documents in brief. (08)**