

P P SAVANI UNIVERSITY

Sixth Semester of B. Tech. Examination

May 2022

SECE3541 Software Testing & Quality Assurance

31.05.2022, Tuesday

Time: 09:00 a.m. To 11:30 a.m.

Maximum Marks: 60

Instructions:

1. The question paper comprises of two sections.
2. Section I and II must be attempted in same answer sheet.
3. Make suitable assumptions and draw neat figures wherever required.
4. Use of scientific calculator is allowed.

SECTION - I

Q - 1 Answer the Following (Any Five) [05]

- (i) One of the fields on a form contains a text box that accepts numeric values in the range of 18 to 25. Identify the invalid Equivalence class.
- (ii) Define: Acceptance Testing
- (iii) What is Stress Testing?
- (iv) Is White Box Testing Called As Glass Box Testing? Justify your answer.
- (v) Which of the following testing is also known as white-box testing?
 - a) Structural testing
 - b) Error guessing technique
 - c) Design based testing
 - d) None of the above
- (vi) In which environment we can performed the Beta testing?
 - a) User's and developer's end
 - b) Developer's end
 - c) User's end
 - d) None of the above
- (vii) What is error guessing?

Q - 2 (a) Explain Software Testing Life Cycle in detail. [05]

Q - 2 (b) Differentiate Black Box Testing and White Box Testing. [05]

OR

Q - 2 (a) Explain the process of testing object-oriented development. [05]

Q - 2 (b) Describe Verification and Validation process. [05]

Q - 3 (a) What is Integration Testing? List out and explain approaches of an Integration Testing. [05]

Q - 3 (b) Enlist coverage in test designing. Explain any two in detail. [05]

OR

Q - 3 (a) Write down test cases for input boxes accepting numbers between 1 and 1000 using Equivalence Partitioning. [05]

Q - 3 (b) What is White Box Testing? What are the advantages and disadvantages of white box testing? [05]

Q - 4 Attempt any one. [05]

(i) Enlist Black Box Testing methods. Explain Decision Table Testing in detail.

(ii) Describe Path Testing in detail.

SECTION - II

Q - 1 Answer the Following: (Any Five) [05]

- (i) Define: Test Data
- (ii) What is the development plan?
- (iii) Enlist any 5 testing tools.
- (iv) Define Test Case.

- (v) What is Risk analysis? [05]
(vi) What does test plan consists of? [05]
(vii) What is difference between defect and bug? [05]
Q - 2 (a) What are open-source testing tools? Explain advantages and disadvantages of using testing tools. [05]
Q - 2 (b) What are guidelines for selecting a testing tool? [05]
OR
Q - 2 (a) What are skills of tester? [05]
Q - 2 (b) What is quality plan? Explain in detail. [05]
Q - 3 (a) Explain Defect Classification in detail. [05]
Q - 3 (b) Explain defect life cycle in detail. [05]
OR
Q - 3 (a) Explain Defect Management Process with suitable diagram. [05]
Q - 3 (b) What is test reporting? [05]
Q - 4 **Attempt any one.** [05]
(i) Risk Analysis.
(ii) Test Plan.
