



# PRESIDENCY UNIVERSITY

BENGALURU

## End - Term Examinations –May/June 2026

Date: 19-05-2026

Time: 09:30am – 12:30pm

|                      |                               |                |
|----------------------|-------------------------------|----------------|
| School: SOIS         | Program: BCA                  |                |
| Course Code: CSA2508 | Course Name: Software Testing |                |
| Semester: IV         | Max Marks: 100                | Weightage: 50% |

| CO - Levels | C01 | C02 | C03 | C04 | C05 | C06 |
|-------------|-----|-----|-----|-----|-----|-----|
| Marks       | 10  | 10  | 20  | 20  | 20  | 20  |

### Instructions:

- (i) Read all questions carefully and answer accordingly.
- (ii) Do not write anything on the question paper other than roll number.

### Part A

Answer ALL the Questions. Each question carries 2marks.

10Q x 2M=20M

|   |                                                                                                                                  |         |    |     |
|---|----------------------------------------------------------------------------------------------------------------------------------|---------|----|-----|
| 1 | List the test cases which can be automated.                                                                                      | 2 Marks | L1 | C01 |
| 2 | Define bug.                                                                                                                      | 2 Marks | L1 | C01 |
| 3 | What is meant by test execution?                                                                                                 | 2 Marks | L1 | C01 |
| 4 | Define software testing metrics.                                                                                                 | 2 Marks | L1 | C01 |
| 5 | Identify equivalence partitioning for an online shopping site where each of products has a specific product ID and product name. | 2 Marks | L3 | C01 |
| 6 | What is Unit Testing?                                                                                                            | 2 Marks | L1 | C02 |
| 7 | List the advantages of White box testing.                                                                                        | 2 Marks | L2 | C02 |
| 8 | Define process metric.                                                                                                           | 2 Marks | L1 | C02 |
| 9 | Explain about defect in software testing.                                                                                        | 2 Marks | L2 | C02 |

|    |                                                                                                                                                                                                                         |         |    |     |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|----|-----|
| 10 | Suppose a developer build an App consists of total 400 test cases in which 318 test cases are passed, 45 test cases are failed and 37 test cases are blocked due to some error in App. Determine test tracking metrics. | 2 Marks | L3 | CO2 |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|----|-----|

## Part B

| Answer ALL Questions. Each question carries 20 marks. |    |                                                                                                                                                                                                                                                                                                                                                                                                       |          | 4QX20M=80M |     |
|-------------------------------------------------------|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------------|-----|
| 11                                                    | a. | Explain the different Methodologies in Agile Development Model?                                                                                                                                                                                                                                                                                                                                       | 20 Marks | L3         | CO3 |
| or                                                    |    |                                                                                                                                                                                                                                                                                                                                                                                                       |          |            |     |
| 12                                                    | a. | Compare the Iterative model, Spiral model and V-model                                                                                                                                                                                                                                                                                                                                                 | 20 Marks | L3         | CO3 |
| 13                                                    | a. | Explain black-box testing techniques in detail, including equivalence partitioning, decision table and boundary value analysis.                                                                                                                                                                                                                                                                       | 20 Marks | L2         | CO4 |
| or                                                    |    |                                                                                                                                                                                                                                                                                                                                                                                                       |          |            |     |
| 14                                                    | a. | Differentiate the AI-based test automation from traditional test automation?                                                                                                                                                                                                                                                                                                                          | 20 Marks | L2         | CO4 |
| 15                                                    | a. | Explain STLC in detail with all phases and deliverables.                                                                                                                                                                                                                                                                                                                                              | 20 Marks | L3         | CO5 |
| or                                                    |    |                                                                                                                                                                                                                                                                                                                                                                                                       |          |            |     |
| 16                                                    | a. | Describe about defect life cycle with a neat diagram and explanation of each stage.                                                                                                                                                                                                                                                                                                                   | 20 Marks | L3         | CO5 |
| 17                                                    | a. | Consider an ATM system and study its specification and construct a bug report on the same.                                                                                                                                                                                                                                                                                                            | 20 Marks | L2         | CO6 |
| or                                                    |    |                                                                                                                                                                                                                                                                                                                                                                                                       |          |            |     |
| 18                                                    | a. | Consider a scenario where you have the following data from test case development and using this data, solve test tracking metric, test case preparation productivity, test design metrics and test execution productivity.<br>Total Number of test cases: 360<br>Number of requirements: 246<br>Effort spent: 50 hours<br>Test cases mapped to the requirements: 72<br>Total Test Cases Executed: 170 | 20 Marks | L2         | CO6 |