



PRESIDENCY UNIVERSITY

BENGALURU

Roll No.													
----------	--	--	--	--	--	--	--	--	--	--	--	--	--

End - Term Examinations –May/June 2026

Date: 19-05-2026

Time: 09:30am – 12:30pm

School: SOIS-PG	Program: MCA	
Course Code: CSA4014	Course Name: Software Testing and Quality Assurance	
Semester: IV	Max Marks: 100	Weightage: 50%

CO - Levels	C01	C02	C03	C04	C05
Marks	24	24	26	26	-

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.	State the meaning of Verification and its role in the software development process.	2 Marks	L1	C01
2.	What is the Software Testing Life Cycle (STLC), and give its primary objectives?	2 Marks	L1	C01
3.	Define Structural Testing and indicate how it relates to program structure.	2 Marks	L1	C02
4.	State the concept of Equivalence Partitioning and its significance in test case design.	2 Marks	L1	C02
5.	What is a Defect Bash, and in which phase of testing is it typically conducted?	2 Marks	L1	C03
6.	Define Functional Testing and state its focus in software validation.	2 Marks	L1	C03
7.	State the importance of Compatibility Testing in multi-platform environments.	2 Marks	L1	C03
8.	What is Performance Testing?	2 Marks	L1	C04
9.	Justify the need for Regression Testing after software modifications.	2 Marks	L2	C04
10.	What is a Defect Report, and what key details are typically included in it?	2 Marks	L1	C04

Part B

Answer the Questions.

Total Marks 80M

11.	a.	In software development, verification and validation play crucial roles. Discuss their significance and how they contribute to software quality.	20 Marks	L2	CO1
Or					
12.	a.	In a structured testing environment, different phases guide testing activities. Discuss the Software Testing Life Cycle (STLC) and its role in systematic testing.	20 Marks	L2	CO1
Or					
13.	a.	A system accepts input values between 0 and 100. Apply Boundary Value Analysis to design test cases and justify their effectiveness.	20 Marks	L3	CO2
Or					
14.	a.	For a program with multiple decision paths, apply White Box Testing techniques to design test cases ensuring adequate coverage.	20 Marks	L3	CO2
Or					
15.	a.	During system development, multiple modules are combined. Apply Integration Testing techniques to ensure proper interaction among modules.	20 Marks	L3	CO3
Or					
16.	a.	A mobile application must be validated across different devices. Design test cases addressing functional, compatibility, and stress requirements.	20 Marks	L3	CO3
Or					
17.	a.	A system experiences performance issues under heavy load. Analyze how Performance Testing can be used to identify and resolve bottlenecks.	20 Marks	L4	CO4
Or					
18.	a.	In a software organization, defects are tracked and analyzed. Analyze the Defect Life Cycle and its role in improving software quality.	20 Marks	L4	CO4