



PRESIDENCY UNIVERSITY

BENGALURU

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End - Term Examinations – May / June 2026

Date: 20- 05-2026

Time:01:00pm – 04:00pm

School: SOIS	Program: BCA	
Course Code: CSA3049	Course Name: Software Metrics and Quality Management	
Semester: VI	Max Marks: 100	Weightage: 50%

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

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.	Define defect – oriented Problem	2 Marks	L1	C01
2.	Define Failure	2 Marks	L1	C01
3.	A company sets a quality goal of ≤ 1 defect/KLOC during machine testing. A product of 25 KLOC reports 35 defects. Has the quality goal been met?	2 Marks	L4	C02
4.	List the Metrics used to measure the S/W quality In- Process	2 Marks	L3	C02
5.	Define Defect tracking	2 Marks	L1	C02
6.	Draw the Defect Life cycle	2 Marks	L2	C03
7.	Identify any four Functional requirements of product quality	2 Marks	L1	C03
8.	Define Verification	2 Marks	L1	C03
9.	List any four roles involved in the software inspection process.	2 Marks	L1	C04
10.	Draw a neat diagram of the SDLC V-Model	2 Marks	L2	C04

Part B

Answer the Questions.

Total Marks 80M

11.	a.	1. A software company conducted a survey of 250 customers to measure satisfaction with its latest software product. The responses were: 80 customers were Very Satisfied, 90 customers were Satisfied, 40 customers were Neutral, 25 customers were Dissatisfied, 15 customers were Very Dissatisfied. Calculate the Customer Satisfaction (CSAT) percentage. Interpret the result. 2. A software product has 200 licensed users and is observed over a period of 1 month. During this time, customers reported 30 software defects and 10 usability/documentation issues. Calculate the Problems per User Month (PUM).	6 Marks 4 Mark	L2	CO1
	b.	Analyze the role of Product quality metrics in ensuring long-term quality control over the s/w products.	10 Mark	L2	CO1
Or					
12.	a.	Explain the seven basic Quality Control (QC) tools with suitable diagrams.	20 Marks	L3	CO1
13.	a.	Illustrate McCall's Software Quality Model. Explain the various quality factors involved.	10 Marks	L4	CO2
	b.	Analyze the technical, managerial, and organizational challenges in developing quality software	10 Marks	L4	CO2
Or					
14.	a.	Analyze the impact of functional requirements on overall software quality	10 Marks	L2	CO2
	b.	Illustrate the Defect/Bug Life Cycle and analyze its stages with neat diagram.	10 Marks	L2	CO2
15.	a.	Explain the process of defect discovery and classify software defects with suitable examples.	20 Marks	L2	CO3
Or					
16.	a.	Discuss the different types of metrics used in the inspection process	10 Marks	L2	CO3
	b.	Discuss the different categories of challenges encountered in software inspections with suitable examples.	10 Marks		
17.	a.	What is Acceptance Testing? Describe its various types	10 Marks	L4	CO4
	b.	Explain the testing hierarchy in software development with suitable examples	10 Marks		
Or					
18.	a.	Write briefly common methods used to do the Verification	20 Marks	L2	CO4