

Total Marks 80

Time 3 hours

Question 1 is compulsory  
Attempt any 3 questions from the remaining.

Q1

- a. What is measuring effectiveness of prioritized test suites? Consider a program with 5 faults and a test suite of 5 test cases, as shown in table below: 10

	T1	T2	T3	T4	T5
F1			x		x
F2		x	x	x	
F3	x				x
F4			x	x	x
F5	x			x	

Calculate APFD for this program.

- b Explain STLC in detail 10

Q2

- a What is bug? Explain Life Cycle of Bug and different states of bug 10

- b Explain different regression testing types 10

Q3

- a Explain test design preparedness metrics 10

- b Consider a project with the following distribution of data and calculate its defect spoilage: 10

SDLC phase	No. of Defects	Defect age
Requirement specification	34	2
HLD	25	4
LLD	17	5
Coding	10	6

Q4

- a Differentiate between 10  
i. White box and Black box testing  
ii. Verification and Validation

Turn Over

- b A program reads an integer number within the range [0,200] and determines whether it is an even number or not. Design test cases for this program using BVC, robust and worst case testing methods. 10
- Q5
- a Explain with example class testing 10
- b Explain security testing in web based application 10
- Q6
- a What is Test Point Analysis 10
- b Explain ISO 9126 quality characteristics 10
-