

T.B.E. ECS SEM VI C-scheme June 2026

Time: 3 Hours

Marks: 80

12/06/26

NB:

1. Question No. 1 is compulsory and solve any THREE questions from remaining questions
2. Assume suitable data if necessary
3. Draw clean and neat diagrams

Q1.	Attempt any four	Marks
a.	Explain the benefits of minimizing a test suite in software testing.	5
b.	Differentiate between progressive testing and regressive testing.	5
c.	What is static testing? Explain its key techniques and advantages.	5
d.	Explain object-oriented testing and its key features.	5
e.	Explain the need for test automation tools in software testing.	5
Q2.	a. A software system accepts Age as input. The valid range of age is 18 to 60 inclusive. Using: Boundary Value Checking method, write the test cases. Robustness Testing method, write the test cases. State the total number of test cases in each method.	10
	b. Explain goals of software testing.	10
Q3.	a. A system accepts Marks as input. The valid range is 0 to 100. Using Equivalence Class Partitioning, do the following: Identify valid and invalid equivalence classes. Design test cases using ECP. State the total number of test cases.	10
	b. Explain McCall's quality factors in detail.	10
Q4	a. Consider the following pseudo code: 1. Start 2. Read A, B 3. If (A > B) 4. C = A - B 5. Else 6. C = B - A 7. EndIf 8. If (C > 10) 9. Print "Large" 10. Else 11. Print "Small" 12. EndIf 13. Stop Perform the following using Basis Path Testing: Draw the Control Flow Graph (CFG). Calculate the Cyclomatic Complexity. Identify the independent paths. Design test cases for each path.	10
	b. Explain ISO 9000:2000 standard in detail.	10

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| Q5 | a. Explain Software Testing Life Cycle. | 10 |
| | b. Explain Agile Testing Life Cycle. | 10 |
| Q6 | a. Explain the validation activities performed in software testing. | 10 |
| | b. Explain mutation testing with example. | 10 |