Answer ALL questions

PART – A   **(10×2=20 Marks)**

1. State the difference between error and defect.

2. Define software testing.

3. What is a test case ? Give example.

4. Outline the difference between white box testing and black box testing.

5. Define regression testing.

6. Outline the difference between alpha testing and beta testing.

7. State the need for testing group.

8. Define test plan.

9. State any two advantages of software test automation.

10. Name any two testing metrics.

PART – B **(5×13=65 Marks)**

11. a) Elaborate the principles of software testing. **(13)**

(OR)

b) What is the use of defect repository ? Elaborate the role of testers in developing defect repository. **(13)**

12. a) What is a cause-effect graph ? Outline the steps in constructing a cause-effect graph with an example. **(13)**

(OR)

b) i) State the difference between static testing and structural testing. **(7)**

ii) Describe the importance of coverage of code logic in testing. **(6)**

13. a) Present an outline of testing object-oriented systems. **(13)**

(OR)

b) i) Bring out the importance of testing the documentation. **(7)**

ii) What are the characteristics to be tested in a website ? Explain. **(6)**

14. a) i) Explain the components of a test plan. **(7)**

ii) Write a brief note on organisation structure for testing team. **(6)**

(OR)

b) What is the role of test specialist in test planning ? Outline the skills needed by a test specialist. **(13)**

15. a) Elaborate the features of testing tools. **(13)**

(OR)

b) i) Explain about various product and project metrics with an example. **(7)**

ii) Brief out the challenges in test automation. **(6)**

PART – C   **(1×15=15 Marks)**

16. a) Perform equivalence partitioning technique and Boundary value analysis for Student Grading System. Generate test cases for the following criteria.   **(15)**

Mark Range	Grade
Greater than 90	S
80 – 90	A
70 – 80	B
60 – 70	C
50 – 60	D
Less than 50	F

(OR)

b) Outline the steps in constructing a control flow graph and computing Cyclomatic complexity.   **(15)**

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