N. B.: (1) **All** questions are **compulsory**.
(2) Make **suitable assumptions** wherever necessary and **state the assumptions** made.
(3) Answers to the **same question** must be **written together**.
(4) Numbers to the **right** indicate **marks**.
(5) Draw **neat labelled diagrams** wherever **necessary**.
(6) Use of **Non-programmable** calculators is **allowed**.

1.Attempt _any two_ **of the following**   **10**

    a. State phases of Fundamental Test Process. Explain Planning and Control.
    b. What is Quality? Explain Quality Viewpoints for producing and buying software.
    c. Write a note on Psychology of Testing
    d. State Principles of software testing. Explain in detail any two.

2.Attempt _any two_ **of the following**   **10**

    a. Explain Lifecycle Testing for Iterative model & RAD model.
    b. What is Integration Testing? List and explain the approaches Integration Testing.
    c. Explain Triggers for Maintenance Testing.
    d. Explain Conformance directed Testing Levels.

3.Attempt _any two_ **of the following**   **10**

    a. List down the phases of Formal Reviews. Explain any two phases in detail.
    b. Explain the characteristics and objectives of :-
          1. Walkthrough
          2. Inspection
          3. Audit
          4. Technical review
          5. Peer Review
    c. Explain the factors for successful performance of Reviews.
    d. List down the types of Static Analysis by Tools. Explain them.
          1. Coding Standards
          2. Code Metrics
          3. Code Structure

4.Attempt _any two_ **of the following**   **10**

    a. Explain, how is Equivalence Class Partitioning different from BVA?
    b. Explain Experience based testing and its types.
    c. Explain State Transition based testing with an example.
    d. Define Cyclomatic Complexity:
        Draw a Program Graph to Graphically represent the given Code
        Dim i as Integer
        Dim n as Integer

        _I=1_
        _n=1_
        while(i< - 5)
        _{_

*n= n*i*
i= i+ 1
}
output n

Also find the Cyclomatic Complexity of the Program Graph.

5.Attempt *any two* of the following 10

    a. What is Risk Based Testing? How is product risk different from project risk?
    b. Explain incident report lifecycle with the helpof a diagram.
    c. What is test control and explain configuration management?
    d. Explain test organization. What are the factors affecting test efforts?

6.Attempt *any two* of the following 10

    a. What are the benefits and risks of using tools? Explain.
    b. Explain dynamic analysis tools with performance testing.
    c. State features of test design tools and data preparation tools.
    d. List down the tool support for management testing. Explain any two.

7.Attempt *any three* of the following 15

    a. *Define the terms Risk, Error, Defect, Failure and Quality.*
    b. *Explain V- Model of testing? Explain its advantages.*
    c. *What is Static Testing? Explain the importance of Static Testing.*
    d. *Justify "100% Condition Coverage implies 100% Decision Coverage" giving an example.*
    e. *Explain various types of test strategies? How to pick up the best type of strategies for success?*
    f. *Describe any two tools in static testing. Review Process Support Tools.*