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. Define and Compare the terms Test Policy and Test Strategy.
   b. What are the causes of software defects?
   c. Describe Test analysis and Design activities.
   d. Explain the Test implementation and execution process.

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

   a. State and explain the characteristics of non-functional testing.
   b. Write a note on Regression Testing.
   c. Explain Alpha and Beta Testing with reference to acceptance Testing.
   d. What is impact analysis with reference to Maintenance Testing?

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

   a. List and explain the phases of formal review.
   b. Describe the roles and responsibilities of moderator, scribe and manager in review process.
   c. Compare Static and Dynamic Testing.
   d. Explain Inspection as a formal review technique.

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

   a. What is decision table? Describe decision table testing technique.
   b. State and explain the factors considered for choosing Test techniques.
   c. What is white box testing technique? Write a note on statement coverage testing.
   d. Do the Equivalence Partitioning and Boundary value Analysis and design test cases for testing the program that reads an arbitrary number of temperatures (as integer numbers) within the range 600C … +60oC and prints their mean value.

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

   a. What are the skills that are needed for the test staff?
   b. What are the purposes of Test Monitoring?
   c. Define the terms Priority and Severity with reference to incident management.
   d. What is a Test Plan? State and explain any four components of a Test Plan

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

    a. State and explain characteristics of Requirements Management Tools.
    b. Explain Dynamic analysis tools used for Performance Monitoring.
    c. State and explain Risk factors associated with use of the Testing Tools.
    d. What are the potential benefits of using tools to support testing?

7.Attempt _any three_ **of the following**   **15**

    a. Explain any two Testing principles.
    b. With the help of diagram explain the V Model of testing.
    c. Explain the goals of Technical Review.
    d. Write a note on State Transition Testing technique with suitable example.
    e. Write a note on Risk based Testing.
    f. Explain any one tool used for Static Testing.