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 neatly labeled diagrams wherever necessary.
6) Use of Non-programmable calculators is allowed.


1. **Attempt** *any two* **of the following.**
   a. What is software testing? Give the objectives of testing
   b. *Describe the steps of fundamental test process*
   c. *What are the causes of software defects?*
   d. *Define the term confirmation testing. Give its importance*

2. **Attempt** *any two* **of the following.**
   a. *Define and compare the concept of verification and validation*
   b. *"Nonfunctional testing emphasizes on product characteristics" Discuss*
   c. *Explain Alpha and Beta Testing with reference to acceptance Testing*
   d. *With the help of diagram explain V Model.*

3. **Attempt** *any two* **of the following.**
   a. *What is Kick of Meeting? Explain its Role and Importance*
   b. *Describe the roles and responsibilities of moderator and manager in review process*
   c. *Explain the goals of Technical*
   d. *Explain static analysis as a form of testing*

4. **Attempt** *any two* **of the following.**
   a. *What is decision table? Describe decision table testing technique*
   b. *State and explain the factors considered for choosing Test techniques*
   c. *Compare Black Box Testing Vs White Box Testing*
   d. *Write a note on Boundary Value Analysis technique with suitable example*

5. **Attempt** *any two* **of the following.**
   a. *What is a Test Plan? State and explain any four components of a Test Plan* Test
   b. *What are the skills that are needed for the test leader?*
   c. *What do you mean by Risked based testing?*
   d. *Define the terms Priority and Severity with reference to incident management.*

6. **Attempt** *any two* **of the following.**
   a. *What are the potential benefits of using tools to support testing?*
   b. *Explain the terms Stub and Driver with reference to test harness.*
   c. *Explain Dynamic analysis tools used for Performance Monitoring.*
   d. *Explain any one tool used for Static testing*

7. **Attempt** *any three* **of the following.**
   a. *Explain any 2 Testing principles.*
   b. *What is portability? Explain portability testing*
   c. *Compare Static Vs Dynamic Testing*
   d. *Explain equivalence partitioning as a test design technique*
   e. *What are the purposes of Test Monitoring?*
   f. *State and explain Risk factors associated with use of the Testing Tools*