

Time: 2 ½ Hour

[Marks:75]

Please check if you have got the right question paper

N.B.:

- 1) All questions are compulsory
- 2) Make suitable assumptions wherever necessary and state the assumptions made
- 3) Answer to the same question must be written together
- 4) Numbers to the right indicate marks
- 5) Draw neat labelled diagram wherever necessary
- 6) Use of Non-Programmable calculator is allowed

1. Attempt any three of the following:

[15]

- a. Differentiate between tools and techniques.
- b. List and explain any five requirements of a product.
- c. Explain types of products based on criticality to the users?
- d. Explain the relationship between mission, policy, goal, objective, strategy and value of organization.
- e. Explain the relationship between mission, policy, goal, objective, strategy and value of organization.
- f. What is quality? Explain its core component

2. Attempt any three of the following:

[15]

- a. Differentiate between verification and validation.
- b. List and explain any two approaches of software testing team with its advantages and disadvantages.
- c. Define Testing and give reasons why testing is necessary.
- d. List the skills required by the tester.
- e. What is test strategy? Explain different stages involve in process of developing test strategy.
- f. Explain gray box testing with its advantages and disadvantages

3. Attempt any three of the following:

[15]

- a. Write a short note on DD path testing.
- b. Explain slice-based testing with an example.
- c. Explain the test case for the Triangle Problem using normal boundary value.
- d. Write short note on Data flow testing.
- e. Write a short note on Decision Tables.
- f. Explain Path testing with example.



**4. Attempt any three of the following:**

**[15]**

- a. What is Verification? Write the methods of verification
- b. What are the roles and responsibilities in Inspection?
- c. Write short note on process of In-Process Review.
- d. What are the software development verification and validation activities?
- e. What are the levels of validation?
- f. What comprises of audit report?

**5. Attempt any three of the following:**

**[15]**

- a. Differentiate between debugging and testing.
  - b. Explain complexity testing.
  - c. What are major concerns in multiplatform testing? Write types of compatibility.
  - d. Write note on security testing.
  - e. What are the risks associated with new technologies?
  - f. Write the testing approach of web application.
-