

T4 B.Sc IT (V) / Software Testing / (100)

Q.P. Code :01765

[Time: $2\frac{1}{2}$ Hours]

[Marks:75]

Please check whether 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. Answers to the same question must be written together.
 4. Numbers to the **right** indicate **marks**.
 5. Draw **neat labeled diagrams** wherever **necessary**.
 6. Use of **non-programmable** calculators is **allowed**.

- Q.1 **Attempt any two of the following:** (10)
- a. What is software testing? Give the objectives of testing.
 - b. Describe the fundamental test process.
 - c. What are the causes of software defects?
 - d. Define the term confirmation testing. Give its importance.
- Q.2 **Attempt any two of the following:** (10)
- a. Define and compare the concept of verification and validation.
 - b. 'Non-functional testing emphasizes on product characteristic" Discuss.
 - c. Explain Alpha and Beta Testing with reference to acceptance Testing.
 - d. With the help of diagram explain V Model.
- Q.3 **Attempt any two of the following:** (10)
- a. What is kick-off 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 review.
 - d. Explain static analysis as a form of testing.
- Q.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. Compare Black Box Testing and White Box Testing.
 - d. Write a note on Boundary Value Analysis technique with suitable example.
- Q.5 **Attempt any two of the following:** (10)
- a. What is a Test Plan? State and explain any four components of a test plan.
 - b. What are the skills that are needed for the test leader? Discuss.
 - c. What do you mean by Risked based testing?
 - d. Define the terms Priority and Severity with reference to incident management.

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- Q.6 **Attempt any two of the following:** (10)
- What are the potential benefits of using tools to support testing?
 - Explain the terms stub and Driver with reference to test harness.
 - Explain Dynamic analysis tools used for Performance Monitoring.
 - Explain any one tool used for Static Testing.

- Q.7 **Attempt any three of the following:** (15)
- Explain any two testing principles.
 - What is portability? Explain portability testing.
 - Compare Static and Dynamic Testing.
 - Explain equivalence partitioning as a test design technique.
 - What are the purposes of Test Monitoring?
 - State and explain risk factors associated with use of the testing tools.