## BACHELOR OF COMPUTER APPLICATIONS (CBCS - 2018 COURSE)

B.C.A. Sem-IV:: SUMMER - 2022 SUBJECT: SOFTWARE TESTING

Day: Thursday
Date: 26-05-2022

S-18778-2022

Time: 10:00 AM-01:00 PM

Max. Marks: 60

## N.B.:

- 1) Q4 from Section I is COMPULSORY.
- 2) Answer ANY TWO questions from Q 1, 2, 3 in Section I.
- 3) Answer ANY TWO questions from Q 5, 6, 7 in Section II.
- 4) All question CARRY EQUAL marks.
- 5) Answers to Both the sections should be written in SAME answer book.
- 6) Draw a labeled diagram WHEREVER necessary.

## **SECTION - I**

- Q.1) Answer the following: (6 Marks X 2 = 12)
  - a) Describe members involved in software development.
  - b) Differentiate between verification and validation.
- Q.2) Answer the following: (6 Marks X 2 = 12)
  - a) Explain V-testing model. State its advantages and disadvantages.
  - b) What is Validation testing? Discuss alpha and beta testing in detail.
- Q.3) Explain the following: (6 Marks X = 12)
  - a) How to do a testing of client server architecture? Discuss in detail.
  - b) Explain unit testing in detail.
- Q.4) Write short notes on the following: Attempt ANY THREE (4 Marks X = 12)
  - a) Software Testing Process
  - b) Testing Patterns
  - c) Testing of Real Time Systems
  - d) Control Structure Testing
  - e) Equivalence portioning
  - f) Goals of Testing

## **SECTION - II**

- Q.5) Answer the following: (6 Marks X 2 = 12)
  - a) Explain Basis Path testing technique.
  - b) Explain the process of debugging with the suitable diagram.
- Q.6) Answer the following: (6 Marks X = 12)
  - a) Explain Security Testing in brief.
  - b) What is Integration testing? Differentiate between bottom up integration and top down integration.
- Q.7) Explain the following: (6 Marks X = 12)
  - a) Differentiate between White Box and Black Box testing techniques.
  - b) Define the term Risk. How testing plays an important role in Risk Management?

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