Roll No.

Total No. of Pages :02

Total No. of Questions :18

B.Tech.(CSE/IT) (2012to 2017 E-II) (Sem.-7) SOFTWARE TESTING AND QUALITY ASSURANCE Subject Code :BTCS-905 M.Code :71897

Time: 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

- 1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
- 2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
- 3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION-A

Answer briefly :

- 1. What is software testability?
- 2. What is unit testing? Explain.
- 3. What are the software quality assurance metrics?
- 4. What do you mean by Software Validation?
- 5. What is data-flow testing? Explain.
- 6. How is beta testing useful?
- 7. List the various testing techniques.
- 8. Define Random Testing.
- 9. What are the issues in object-oriented testing?
- 10. Discuss the steps used for testing real time systems.

SECTION-B

- 11. Discuss the benefits of validation and verification in a project.
- Why do we need integration testing? Explain various approaches in integration testing. 12.
- 13. Discuss the random and partition testing for classes.
- 14. Distinguish between alpha and beta testing. How are test cases designed for these tests? Are the test cases for these types of tests necessarily identical? Explain your answer.
- 15. Describe the major software quality assurance activity and indicate their importance.

SECTION-C

16.	Differentiate between following:	
	a) Equivalence partitioning and Boundary value analysis methods	3
	b) Verification and Validation	3
	c) White-Box and Black-Box Testing	4
17.	What do you mean by ISO quality models? Explain SEJ-CMM and ISO 9000 certificati Also explain their relevance in detail.	on. 10
18.	a) What is object-oriented testing? Explain the various object-oriented testing strateg and issues in detail.	gies 5
	b) Discuss the Design Phase and Program Phase testing.	5

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.

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