CBCS SCHEME

USN

Fifth Semester B.E. Degree Examination, Dec.2019/Jan.2020 Introduction to Software Testing

Time: 3 hrs. Max. Marks: 100

Note: Answer any FIVE full questions, choosing ONE full question from each module.

Module-1

1	a.	Determine the following with on example.						
		i) Error	ii) Fault	iii) Failure	iv) Incident			(10 Marks)
			**** **				- No	

Explain White Box Testing and Black Box Testing. Mention their advantages and disadvantages.

OK

2 a. Explain the static and dynamic attributes in software quality.

b. With a neat diagram, explain the levels of testing.

(10 Marks)

Module-2

a. Explain the following equivalence testing types:
i) Weak Normal ii) Strong Normal iii) Weak Robust iv) Strong Robust. (10 Marks)
b. Design Decision Table for the triangle problem and explain the test cases. (10 Marks)

OR

a. Write a pseudocode for the commission problem.
 b. Justify the usage of boundary value analysis with an example and also mention its limitations?

Mottule-3

5	a.	Explain test coverage metrics.	(10 Marks)
	b.	Explain du-path test coverage matrices with a data flow diagram.	(05 Marks)
	c.	Explain McCabe's basic path method	(05 Marks)

OR

6 a. Define Slice based testing and explain the style and techniques of data flow testing.

(10 Marks)

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b. Write a triangle program. Draw the program graph and find the DD paths, DD path graph (10 Marks)

Module-4

		Define scaffolding. Explain Generic versus specific scaffolding.	(10 Marks)
	b.	Define Test Oracle. Explain with a neat diagram the concept of test harness.	(10 Marks)

OR

	a.	Explain the following: i) Risk Planning	ii) Process Monitoring.	(10 Marks)
	b.	Describe the two main steps of orthogona	d defect classification.	(10 Marks)

Module-5

9 a.	What is system Acceptance and Regressing Testing? Explain briefly.	(10 Marks)
b.	Write context diagram and Level.1 dataflow diagram of SATM system.	(10 Marks)

OR

10 a. Define: i) Module execution path ii) Message iii) MM Path iv) MM - Path graphs.

b. With an example, define the following:

i) Top Down Integration ii) Bottom up Integration iii) Sandwich Integration. (06 Marks)

Describe the Pairwise and Neighborhood Integration with examples. (10 Marks)

a) Note: 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 - 50, will be treated as mulpractice.