MCA
(SEM V) THEORY EXAMINATION 2021-22
SOFTWARE TESTING

Time: 3 Hours *Total Marks: 70*

Note: 1. Attempt all Sections. If require any missing data; then choose suitably.

SECTION A

Attempt *all* questions in brief. 2 x 7 = 14

a.	What is the basic objective of Software Testing?
b.	Differentiate between Verification and Validation
c.	Explain SQA activities in short.
d.	Differentiate the process of debugging and testing.
e.	How to identify and refine the Risk?
f.	Define the terms Test Case and Test Suite
g.	What is Cyclomatic Complexity?

SECTION B

Attempt any *three* of the following: 7 x 3 = 21

a.	Compare and Contrast bugs, Faults and Failures using suitable examples.
b.	Explain the Data Flow and Mutation Testing.
c.	Discuss in detail the Risk Analysis.
d.	Discuss the Software testing tools and Software test plan.
e.	Briefly explain the Object oriented Integration and System testing.

SECTION C

Attempt any *one* part of the following: 7 x 1 = 7

(a)	Explain the various Software Testing Principles.
(b)	Explain the different types of Verifications methods.

Attempt any *one* part of the following: 7 x 1 = 7

(a)	What is Control flow testing how it is differs from path testing?
(b)	What are basic differences between Data Flow Testing and Mutation Testing?

Attempt any *one* part of the following: 7 x 1 = 7

(a)	Discuss in detail the different techniques for selection of test cases during Regression Testing.
(b)	What is Regression Testing? Explain the various steps of the regression testing process. Which step is the most important and why?

Attempt any *one* part of the following: 7 x 1 = 7

(a)	What is Verification and Validation in Software Testing? Also Differentiate between Verification and Validation.
(b)	Discuss the Levels of Testing and Debugging in detail.

Attempt any *one* part of the following: 7 x 1 = 7

(a)	What is Web Testing? How is different from user Interface Testing?
(b)	What is Object-Oriented Testing? How it can be performed? Discuss with suitable example.

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