PAPER ID-310018

Subject Code: RCA502

Roll No: | | | | | | | | | | | | | |

MCA
(SEM-V) THEORY EXAMINATION 2020-21
SOFTWARE ENGINEERING

Time: 3 Hours ***Total Marks: 70***

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

SECTION A

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

a.	What is meant by Software and Software Engineering?
b.	What do you mean by Software Crisis?
c.	What are Software metrics and measurements?
d.	What are the testing principals needed for performing the Software Testing?
e.	Differentiate between Coupling and Cohesion.
f.	What do you mean by Software Quality Assurance (SQA)?
g.	Explain briefly about Reengineering activities.

SECTION B

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

a.	Explain about evaluation of Software engineering methodologies.
b.	Explain the Incremental process model with advantages and disadvantages.
c.	What do you mean by SEI-CMM Model?
d.	Explain the Acceptance Testing.
e.	Describe Software maintenance process in details.

SECTION C

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

(a)	Discusses the Software quality framework.
(b)	Define Software engineering. What are the challenges of Software engineering?

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

(a)	Why SRS document also known as the black-box specification of a system?
(b)	Draw the complete DFD at least up to 2-levels for a library management system.

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

(a)	Write the steps to calculate Cyclometric complexity and illustrate with an example.
(b)	Discuss the concepts of the Cohesion and Coupling of software design and also explain the different types of coupling and cohesion.

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

(a)	Explain how black box testing differs from white box testing.
(b)	Distinguish between error and failure. Which of the two is detected by testing? Justify

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

(a)	What do you mean by Risk management? Explain how to select the best risk reduction technique when there are many ways of reducing a risk
(b)	What is Software Maintenance? Describe various categories of Maintenance.