PAPER ID-310016

Subject Code: NMCA512

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

MCA

(SEM-V) THEORY EXAMINATION 2020-21

SOFTWARE ENGINEERING

Time: 3 Hours ***Total Marks: 100***

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

SECTION A

1. Attempt *all* questions in brief. 2 x 10 = 20

a.	What are the characteristics of the software?
b.	What are the benefits of prototyping?
c.	What are the elements/components of design model?
d.	What are the objectives of testing?
e.	What is equivalence partitioning?
f.	How to compute the cyclomatic complexity?
g.	Write about drivers and stubs?
h.	Distinguish between alpha and beta testing?
i.	What is Software Requirement Engineering?
j.	What are the advantages of Modularization?

SECTION B

2. Attempt any *three* of the following: 10x3=30

a.	Explain how Unit testing of a Software System is performed?
b.	Write the advantages and disadvantages of classic waterfall life cycle model?
c.	Explain the process of ' Risk Analysis and Management.'?
d.	Explain the types of coupling and cohesion?
e.	What is software reuse? Explain the various aspects of software reuse?

SECTION C

3. Attempt any *one* part of the following: 10x1=10

a.	Differentiate between Validation and Verification of a Software Product?
b.	Differentiate between Structural testing and Functional testing?

4. Attempt any *one* part of the following: 10x1=10

a.	Describe the levels of CMM?
b.	List the levels or phases of testing?

5. Attempt any *one* part of the following: 10x1=10

a.	What are the factors affecting less than 100% degree of coverage?
b.	What is the impact of requirement changes during development of a software product?

6. Attempt any *one* part of the following: 10x1=10

a.	Explain the maintenance activities and maintenance problems. How is the cost of maintenance estimated?
b.	a) What is Halsted's software science metric. Define? b) Explain about function point metric in detail?

7. Attempt any *one* part of the following: 10x1=10

a.	Compare the object oriented and function-oriented design?
b.	Explain in detail about integration testing? How integration testing is different from system testing?