PAPER ID-311251

Subject Code: KCA302

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

MCA
(SEM III) THEORY EXAMINATION 2023-24
SOFTWARE ENGINEERING

TIME: 3HRS **M.MARKS: 100**

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

SECTION A

1. Attempt *all* questions in brief.

Q no.	Question	Marks
a.	What are the advantages of incremental model?	2
b.	What are the various steps in requirement engineering process?	2
c.	List the process maturity levels in SEIs CMM.	2
d.	What are the umbrella activities of a software process?	2
e.	What is Cyclomatic Complexity?	2
f.	What are the characteristics of good tester?	2
g.	Define black box testing strategy?	2
h.	Explain the need of Software project management.	2
i.	Differentiate between reactive risk and proactive risk strategies.	2
j.	What does Level 0 DFD represent?	2

SECTION B

2. Attempt any *three* of the following:

a.	What is software engineering? Explain the layered approach to software engineering.	10
b.	Differentiate between functional and non-functional requirements of software engineering.	10
c.	What is software design? Explain the various principles and design concepts of software design.	10
d.	What is integration testing? Differentiate between top-down and bottom-up integration testing.	10
e.	What is reverse engineering? Describe reverse engineering process.	10

SECTION C

3. Attempt any *one* part of the following:

a.	What is waterfall model? Describe the activities of waterfall model and also mention its drawbacks.	10
b.	Explain the need of software life cycle models in Software Engineering.	10

4. Attempt any *one* part of the following:

a.	What are the important activities that are carried out during the feasibility study phase? Explain	10
b.	What is software quality assurance? What are the various quality concepts of SQA? Explain	10

5. Attempt any *one* part of the following:

a.	What are the main advantages of using an object-oriented design approach over a function-oriented approach? Explain	10
b.	What is meant by the term cohesion in the context of software design? Differentiate architectural design and procedural design.	10

6. Attempt any *one* part of the following:

a.	Describe the errors are commonly found during Unit Testing?	10
b.	Explain the Integration testing process and system testing process and discuss their outcomes.	10

7. Attempt any *one* part of the following:

a.	What do you understand by Software Risk Analysis and How Risk Analysis is important in software engineering.	10
b.	Explain the role of CASE tools in Software Reengineering in detail.	10