

FACULTY OF INFORMATICS

M.C.A. (2 Years Course) III- Semester (CBCS) (Main) Examination, April/May 2023

Subject: Software Engineering

Time: 3 Hours

Max. Marks: 70

Note: I. Answer one question from each unit. All questions carry equal marks.

II. Missing data, if any, may be suitably assumed.

Unit – I

1. (a) Define software engineering. What are the major objectives of software engineering?
(b) Explain cost schedule and quality of software.

(OR)

2. (a) Write about waterfall model and its disadvantages.
(b) Explain about project management process.

Unit-II

3. (a) Give a use case scenario with an example.
(b) Explain the general structure of an SRS.

(OR)

4. (a) Write short note on shared data styles.
(b) Explain peer to peer and publish subscribe styles.

Unit-III

5. (a) Explain project monitoring.
(b) Briefly describe about quality planning.

(OR)

6. (a) Describe about function oriented design.
(b) Explain about design process in software development process.

Unit-IV

7. (a) Explain the testing objectives and its principles.
(b) Explain code inspection and summarize the report of an inspection.

(OR)

8. (a) What do you mean by system testing? Explain in detail.
(b) Write short note on white box testing?

Unit-V

9. (a) Justify the statement “ Software maintenance is costlier”.
(b) What is reengineering?

(OR)

10. Write short note on:
(a) CMMI (b) SPI trends

FACULTY OF INFORMATICS

M.C.A. II-Year I-Semester (NON-CBCS) (Backlog) Examination, April/May 2023

Subject: Software Engineering

Time: 3 Hours

Max. Marks: 80

**Note: I. Answer one question from each unit. All questions carry equal marks.
II. Missing data, if any, may be suitably assumed.**

Unit – I

1. (a) Explain the software quality attributes in detail.
(b) Discuss the waterfall life cycle model.
(OR)
2. (a) Write about software processes.
(b) Explain about Project Management Process.

Unit-II

3. (a) Explain functional specifications with use cases.
(b) Write a note on data flow diagrams.
(OR)
4. (a) Write about component and connector views.
(b) Explain documenting architecture design.

Unit-III

5. (a) Explain top down and bottom up approaches.
(b) Explain about Risk Management Planning.
(OR)
6. (a) Discuss about various levels of cohesion.
(b) Explain the role of function-oriented design in planning a software project.

Unit-IV

7. (a) Write about structured programming.
(b) Explain complexity metrics with an example.
(OR)
8. (a) Explain testing concepts in detail.
(b) Write about white box testing.

Unit-V

9. (a) Explain about software re-engineering.
(b) Difference between Forward Engineering and Reverse Engineering.
(OR)
10. (a) Discuss approaches to SPI in detail.
(b) Write a short note on people CMM.