

SECOND SEMESTER M.Sc. DEGREE EXAMINATION, APRIL 2024
(Regular/Improvement/Supplementary)

COMPUTER SCIENCE
FCSS2C10-PRINCIPLES OF SOFTWARE ENGINEERING

Time: 3 Hours

Maximum Weightage: 30

Section A: Short answer questions. Answer any *four* questions. Each carries 2 weightage.

1. What are the important characteristics of User Interface design?
2. Explain the use of ER diagram.
3. List any four methods for collecting requirements.
4. Explain the main usage of state chart diagram.
5. Explain the concept of Software process.
6. What is software coding review?
7. Identify any four sources of information for literature survey.

(4 × 2 = 8 weightage)

Section B: Short essay questions. Answer any *four* questions. Each carries 3 weightage.

8. Write a note on "Agile model".
9. Explain the concept of Object-Oriented Modeling in Software Design.
10. Discuss the key steps involved in creating a software test plan.
11. Explain major challenges in software engineering.
12. Describe the activities performed in risk management.
13. What are the different activities in SDLC?
14. Explain the term 'coupling and cohesion' in terms of software design outcome.

(4 × 3 = 12 weightage)

Section C: Essay questions. Answer any *two* questions. Each carries 5 weightage.

15. Describe the different types of feasibility studies in software requirements analysis & specification. Discuss their roles and requirements in detail.
16. Explain the features of Waterfall model and compare it with prototype model.
17. Give a detailed account on the steps in literature survey. Analyze the key points in writing a literature review.
18. Discuss the fundamentals of component-based GUI development. How does it differ from traditional GUI design?

(2 × 5 = 10 weightage)