

M. Sc. DEGREE EXAMINATION, NOVEMBER 2022
INFORMATION TECHNOLOGY
FIRST SEMESTER

COURSE : MAJOR CORE
PAPER : SOFTWARE ENGINEERING
TIME : 3 HOURS

MAX. MARKS: 100

SECTION - A

Answer ALL the questions.

(10x2=20)

1. What are the various categories of Software?
2. List all the umbrella activities of Software process.
3. Draw the Class diagram for sensor.
4. State any two Arlow and Neustadt rules of Thumb.
5. What are the different ways in which Software Quality can be viewed?
6. List all the ISO 9126 Quality Factors.
7. Define Unit testing.
8. Write the formula to compute the Function Points (FP).
9. List all the Risk categories.
10. Write the formula to compute the expected value for software size.

SECTION - B

Answer any SIX of the following questions:

(6x5=30)

11. Explain Software Life Cycle. Explain waterfall model with neat diagram.
12. Explain Activity diagram Vs Swimlane diagram.
13. Explain the four basic design principles applicable to Component-level design.
14. Write short notes on Integration Testing.
15. Describe the Empirical estimation models for Software.
16. Write short notes on the following
 - i) Agility - 2 marks
 - ii) Agility principles – 3 marks
17. What is the use of Class diagram? Draw and explain the class diagram for Floor plan.
18. Explain the McCall's Quality Factors.

SECTION - C

Answer any FIVE of the following questions:

(5x10=50)

19. Explain Software Engineering Principles.
20. Discuss the various steps in Requirement engineering task.
21. Explain the set of fundamental software design concepts.
22. Discuss Software Configuration Management Process in detail.
23. Discuss Risk identification in detail.
24. Explain the set of guidelines for conducting Formal Technical Reviews.
25. Discuss the basic principles for software project scheduling and 40-20-40 rule for effort distribution.
