

(FOR THE CANDIDATES ADMITTED

24UIT4A1

DURING THE ACADEMIC YEAR 2024-2025 ONLY)

REG.NO.

N.G.M.COLLEGE (AUTONOMOUS) : POLLACHI

END-OF-SEMESTER EXAMINATIONS : MAY 2026

B.Sc. Information Technology

MAXIMUM MARKS: 75

SEMESTER -IV

TIME : 3 HOURS

PART - III

SOFTWARE ENGINEERING

SECTION – A

(10 X 1 = 10 MARKS)

ANSWER THE FOLLOWING QUESTIONS.

(K1)

1. Software is said to be engineered and not manufactured because:
a) It is assembled in factories
b) It is built using machines
c) It is developed through design and coding
d) It is hardware dependent
2. Requirement analysis mainly focuses on _____
a) Coding
b) Testing
c) Understanding customer needs
d) Deployment
3. _____ is an iterative process through which requirements are translated into a “blueprint” for constructing the software.
a) Software design
b) Requirement Analysis
c) Data Diagram
d) Software Quality
4. The software quality dilemma mainly refers to:
a) Choosing programming language
b) Balancing quality with time and cost constraints
c) Selecting database
d) Writing more code
5. _____ is called glass-box testing or structural testing, and uses the control structure as part of component-level design to derive test cases.
a) Block Box Testing
b) Component Testing
c) White-Box Testing
d) Violet Box Testing

ANSWER THE FOLLOWING IN ONE (OR) TWO SENTENCES

(K2)

6. What is meant by Agile development in Software Engineering?
7. What is meant by DFD?
8. What is Software Architecture in Design Concepts?
9. Define Software Quality .
10. Write a short note on White Box Testing.

SECTION – B

(5 X 5 = 25 MARKS)

ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS. (K3)

11. a) Articulate the nature and characteristics of software .
(OR)
b) Discover the Three types of Myths in Software Engineering.
12. a) Explain Data Modeling in Requirement Analysis.

- b) Describe Flow Oriented (DFD, Activity and ER) Requirements Modeling.
13. a) Relate the Design Process in Software Engineering Design Concepts.
(OR)
b) Describe about Software Interface Design Steps in Software Design Concepts
14. a) Sketch Elements of Software Quality Assurance.
(OR)
b) Enumerate Software Reliability in SQA.
15. a) Describe types of System Testing.
(OR)
b) Narrate Control Structure Testing in Software Engineering.

SECTION – C **(5 X 8 = 40 MARKS)**
ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS.
(K4 (Or) K5)

16. a) Relate the concept of Agility in software development and discuss its key principles.
(OR)
b) Discuss about Prescriptive Process Models.
17. a) Illustrate importance of Requirement Analysis in Software Engineering.
(OR)
b) Elaborate Requirements Modeling for Web Apps.
18. a) List out the Design Concepts of Software Engineering and Explain.
(OR)
b) Connect Golden Rules of User Interface Design and Explain.
19. a) Discuss the Software Quality Dilemma in Software Engineering.
(OR)
b) Elaborate about Software Quality Assurance (SQA) Tasks, Goals, and Metrics.
20. a) Categorize the various types of Integration Testing .
(OR)
b) Appraise Black-Box Testing in Software Engineering.
