

(FOR THE CANDIDATES ADMITTED
DURING THE ACADEMIC YEAR 2022-23 ONLY)

SUBJECT CODE **22 UCT 3A3**

REG.NO.

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

END-OF-SEMESTER EXAMINATIONS : NOVEMBER – 2023

B.Sc. – COMPUTER TECHNOLOGY

MAXIMUM MARKS: 50

III SEMESTER

TIME : 3 HOURS

PART – III

SOFTWARE ENGINEERING

SECTION – A

(10 X 1 = 10 MARKS)

ANSWER THE FOLLOWING QUESTIONS. MULTIPLE CHOICE QUESTIONS.

1. What is Software Engineering?
 - a) Designing a software
 - b) Testing a software
 - c) Application of engineering principles to the design a software
 - d) none of the above
2. The requirement model refers to
 - a) A set of models
 - b) Technical representation of a system
 - c) Abstract view of proposed system
 - d) All of the mentioned above
3. ----- is the process that groups data and procedures into an entity called objects.
 - a) Object development methodology
 - b) Linear programming
 - c) Object oriented system development
 - d) It stores the addresses of the next and the previous node.
4. Which software model is the combination of the waterfall model and iterative model?
 - a) Spiral Model
 - b) RAD model
 - c) Prototype Model
 - d) Incremental Model
5. Cyclomatic complexity is
 - a) White-box testing
 - b) Black box testing
 - c) Grey box testing
 - d) All of the above

ANSWER THE FOLLOWING IN ONE (OR) TWO SENTENCES

6. Explain any two Disadvantages of Waterfall model.
7. Explain system engineering.
8. Explain any two advantages of Scenario-Based Modeling.
9. Explain software design .
10. Explain any two advantages of stress testing.

(CONTD 2)

SECTION – B**(5 X 3 = 15 MARKS)****ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS.****(K3)**

11. a) Describes software myths.

(OR)

b) Describe Layered technology.

12. a) Describe the features of requirements elicitation:

(OR)

b) Describe Requirements engineering process. :

13. a) Describe Sequence diagram.

(OR)

b) Describe Data Flow Diagram.

14. a) Describe the characteristics of software architecture.

(OR)

b) Describe Interface design.

15. a) Describe Validation testing,

(OR)

b) Describe Basis path Testing.

SECTION – C**(5 X 5 = 25 MARKS)****ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS.****(K4 (Or) K5)**

16. a) Discuss CMMI with a neat diagram

(OR)

b) Explain the structure of waterfall model.

17. a) Discuss the system engineering Hierarchy.

(OR)

b) Discuss Requirements Engineering Tasks.

18. a) Discuss Class-Based Modeling.

(OR)

b) Discuss Flow Oriented Modeling.

19. a) Explain Design process .

(OR)

b) Discuss Design quality.

20. a) Explain Software Testing Lifecycle with a diagram.

(OR)

b) Discuss Black - Box and White-Box Testing
