

Roll No.

Total No. of Questions : 09]

[Total Pages : 08

(2035)

2501406

**UG (CBCS) (Third Year) (Annual)
EXAMINATION, 2025**

B.A. (COMPUTER APPLICATION)

Software Engineering (SEC)-4

**(Common with Computer Science and
Physical Science COMP 303TH)**

COMP308 TH

Time : 3 Hours]

[Maximum Marks : 70

The candidates shall limit their answer precisely
within the answer-book (40 pages) issued to them and
no supplementary/continuation sheet will be issued.

Note : Attempt *Five* questions in all, selecting *one*
question each from Unit-I to Unit-IV.
Q. No. 1 (Part (A) and (B)) is compulsory.

P.T.O.

(3-325-11/13) R-2501406

Part A

(Compulsory Question)

1. (a) Attempt all the ten objective type questions of 1 mark each : $1 \times 10 = 10$

(i) What is the primary characteristic of the spiral model ?

- (1) Linear and Sequential approach
- (2) Iterative and Incremental approach
- (3) Emphasis on testing
- (4) Focus on rapid prototyping

(ii) Which of the following is a phase in the SDLC ?

- (1) Planning
- (2) Requirement gathering
- (3) Design
- (4) All of the above

(iii) Which of the following testing techniques involves testing software without knowing its internal workings ?

- (1) Black box testing
- (2) White box testing
- (3) Grey box testing
- (4) None of the above

(iv) What assesses project costs and benefits ?

- (1) Economic Feasibility
- (2) Technical Feasibility
- (3) Operational Feasibility
- (4) All of the above

(v) Which testing type focuses on individual components ?

- (1) Unit Testing
- (2) Integration Testing
- (3) System Testing
- (4) Acceptance Testing

(vi) Which of the following is a type of project risk ?

- (1) Technical risk
- (2) Operational risk
- (3) Financial risk
- (4) All of the above

(vii) SDLC stands for.....

(viii) The software development model that follows a linear and sequential approach is called the.....model.

(ix) Testing is only done after the software is fully developed.

(True/False)

(x) System testing is done after the integration testing. (True/False)

Part B

(b) Attempt all the *five* Short answer type questions of 4 marks each : $4 \times 5 = 20$

(i) What is SRS document ?

(ii) Write a short note on regression testing.

- (iii) Differentiate between functional and non-functional requirements.
- (iv) Differentiate between unit testing and integration testing.
- (v) What are the reasons for the failure of waterfall model ?

Unit I

2. What do you understand by software development life cycle models ? Explain waterfall model in detail. 10

Or

3. Explain the following : 10
- (a) Data Dictionary
 - (b) Software Prototyping.

Unit II

4. Explain in detail the software design concepts and processes. 10

Or

5. Explain the following : 10
- (a) Modular design
 - (b) Real Time software design.

Unit III

6. Explain SCM process in detail. 10

Or

7. Write short notes on the following : 10
- (a) Project Scheduling
 - (b) Software Complexity.

Unit IV

8. What is software testing ? Explain unit testing, integration testing, system testing and acceptance testing in detail. 10

Or

9. Write short notes on the following : 10
- (a) Reverse Engineering
 - (b) Case Study of CASE tools.

