

**PARUL UNIVERSITY**  
**FACULTY OF ENGINEERING & TECHNOLOGY**  
**B.Tech. Summer 2023 - 24 Examination**

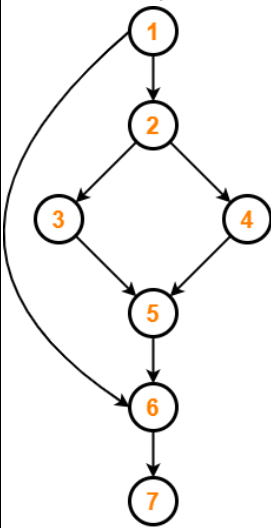
**Semester: 4**  
**Subject Code: 303105253**  
**Subject Name: Software Engineering**

**Date: 02-05-2024**  
**Time: 02:00 pm to 04:30 pm**  
**Total Marks: 60**

**Instructions:**

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

Q.1	Objective Type Questions - ( Fill in the blanks, one word answer, MCQ-not more than Five in case of MCQ) (All are compulsory) (Each of one mark)	(15)	CO	PO	Bloom's Taxonomy
	1. In which testing phase do different software modules interact with each other?		1	1	R
	2. What is a software "bug"?		1	2	R
	3. what does LOC stand for?		3	1	R
	4. what is functional testing?		3	4	R
	5. What is the simplest model of software development paradigm?		1	2	R
	6. If every requirement can be checked by a cost-effective process, then the SRS is _____ .		2	3	R
	7. One of the fault base testing techniques is _____ .		3	5	R
	8. Alpha and Beta Testing are forms of _____ .		4	6	R
	9. SRD stands for _____ .		4	5	R
	10. _____ is the most common measure for correctness?		5	1	R
	11. 79. In the Empirical Estimation Technique which model is developed by Barry W. Boehm? A. Putnam model B. COCOMO C. Both A & B D. None of the above		4	2	AN
	12. Find out which phase is not available in SDLC? A. Coding B. Testing C. Maintenance D. Abstraction		2	3	AN
	13. Project risk factor is considered in which model? A. Spiral model. B. Waterfall model. C. Prototyping model D. None of the above.		1	2	AN
	14. . Which model is not suitable for large software projects but good one for learning and experimenting? A. Big Bang model B. Spiral model C. Iterative model D. Waterfall model		1	3	AN
	15. Line of code(LOC. of the product comes under which type of measures? A. Indirect measures B. Direct measures		3	4	R

	C. Coding D. None of the above				
Q.2	Answer the following questions. (Attempt any three)	(15)			
	A) Data Flow Diagram for Hospital Management System.		5	6	C
	B) Distinguish between verification and validation		5	2	AN
	C) . What is W5HH Principle?		4	1	U
	D) Draw the ER diagram for banking system		5	6	C
Q.3	A) Explain Black box testing and White box testing.	(07)	4	2	U
	B) Define Coupling and Cohesion. What is the difference between cohesion and coupling?	(08)	5	3	U
	OR				
	B) what is incremental model ? and its advantages .	(08)	2	1	R
Q.4	A) A project size of 2000 LOC is to be developed. Software development team has average experience on similar type of projects. The project schedule is not very tight. Calculate the Effort, development time, average staff size, and productivity of the project.	(07)	3	4	AN
	OR				
	A) What is Boundary value analysis 'and Pair wise testing.	(07)	3	1	R
	B) What is Cyclomatic complexity? find Cyclomatic complexity.	(08)	5	4	AN
	 <p>Control Flow Graph</p>				