QP.Code	U21ITG1 - 1A	Reg.No	

KPR Institute of Engineering and Technology
(Autonomous)
Avinashi Road, Arasur, Coimbatore - 641 407
Learn Beyond

Dept.:	CSE(AM)
Ac.Yr.: 2024 – 2025	

Course Code & Title	:	U21ITG01	Software Engineering	
Year	:	II	Semester: 04	Date: 24.03.2025 - FN
CIAT	:	I	Duration: 90 Minutes	Maximum Marks: 60

Q. No	Section – A (10X1=10 Marks) Answer All Questions	Marks	BT	CO
1	Which of the following is NOT a characteristic of software? a) Software does not wear out b) Software is developed, not manufactured c) Software components are assembled like hardware d) Software is custom-built rather than assembled	1	U	CO1
2	Which Software process model follows an evolutionary approach? a) Waterfall model b) Prototyping model c) Spiral model d) RAD model	1	U	CO1
3	What is the main disadvantage of the waterfall model? a) It is too complex for small projects b) It does not support iteration, making requirement changes difficult. c) It does not require documentation. d) It is not suitable for structures projects	1	U	CO1
4	Which of the following is NOT a key principle of agile development a) Customer collaboration over contract negotiation. b) Following a strict predefined plan. c) Delivering working software frequently d) Responding to changes over following a plan.	1	U	CO1
5	Choose option which bets defines a functional requirement. a) The system must provide process transactions within 2 seconds. b) The system should allow users to log in username and password c) The platform should support up to 1 million concurrent users. d) The system must have 99.99% uptime	1	U	CO2
6	Which of the following is an example of a non-functional requirements. a) The system should provide a search functionality b) The software should support user authentication c) The system must ensure data encryption d) The software should allow users to download reports	1	U	CO2
7	What is the main purpose of SRS? a) To define the software design and coding standards b) To specify hardware configurations for software deployment c) To act a s a contract between the client and the software developer d) The outline the maintenance procedures for the sotware	1	U	CO2

8	Which phase of the requirement engineering process involves identifying, analyzing and documenting the user needs?						1	U	CO2
	a	Requirement validation	b	Feasibility study					
	c	Requirement elicitation and analysis	d	Requirement management					
9	Modularity in software engineering is small divided part from main project						1	U	CO3
10	Which type of cohesion is considered the strongest in software design?						1	U	CO3
	a	Logical Cohesion	b	Functional Cohesion					
	c	Sequential Cohesion	d	Temporal Cohesion					

Q.No	Section – B (10X2=20 Marks) Answer All Questions	Marks	BT	CO
11	What is the significance of software process models in software engineering?	2	U	CO1
12	Define waterfall model.	2	U	CO1
13	List the advantages of spiral model over waterfall model.	2	U	CO1
14	Differentiate iterative enhancement and RAD model.	2	U	CO1
15	Define system requirement and user requirements.	2	U	CO2
16	Define feasibility study.	2	U	CO2
17	What are the key steps involved in requirement engineering process.	2	U	CO2
18	Illustrate the importance of requirement traceability.	2	U	CO2
19	Define modularity.	2	U	CO3
20	List the characteristics of good software design.	2	U	CO3

Q.No		Section – C (1X6=6 Marks & 2X12=24 Marks) Answer All Questions	Marks	BT	CO
21 a)	i	Compare prototyping model and incremental model.	6	U	CO1
	ii	Explain the various phases of spiral model.	6	U	CO1
		(Or)			
21 b)		Explain agile software development approach in detail.	12	U	CO1
22 a)	i	Differentiate functional and non-functional requirements.	6	U	CO2
	ii	List the key steps involved in the requirement engineering process.	6	U	CO2
		(Or)			
22 b)		Explain software requirement specification in detail.	12	U	CO2
23 a)		Differentiate top-down and bottom-up design approach.	6	U	CO3
		(Or)			
23 b)		Explain the concept of coupling and cohesion in software design.	6	U	CO3