Subject Code
22PC1CS201

R22

VNR VIGNANA JYOTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY

(AUTONOMOUS)

B.Tech. II Year II Semester Regular Examinations, July 2024

SOFTWARE ENGINEERING

(Common to CSE, IT, CSE-AIML, CSE-DS, CSE-IoT and AIDS)

Time: 3 hours **Max. Marks: 60**

Answer ALL questions in PART-A.
Answer any ONE question from each unit in PART-B.

PART-A

5X2=10M

a)	Define Software Engineering.	2M	CO-1	BL-1
b)	Differentiate Functional and non-functional requirements	2M	CO-2	BL-2
c)	List and explain the main components of a use case diagram?	2M	CO-3	BL-2
d)	Describe the purpose of verification and validation.	2M	CO-4	BL-2
e)	List out the Software Risks.	2M	CO-5	BL-1

PART-B

5X10=50M

UNIT-I

1.	a) Explain Different types of Software Myths.	5M	CO-1	BL-2
	b) Software engineering a layered technology- Justify your answer with a suitable explanation.	5M	CO-1	BL-2
	OR			
2.	Discuss the software characteristics and also explain the changing nature of Software.	10M	CO-1	BL-2

UNIT-II

3.	a) Describe the waterfall model with neat diagram. List the advantages and disadvantages of waterfall model.	7M	CO-2	BL-2
	b) Differentiate Forward and reverse engineering.	3M	CO-2	BL-3
	OR			
4.	Explain Software requirements document with example.	10M	CO-2	BL-2

UNIT-III

5.	a) Differentiate State chart Diagram and Activity Diagram.	5M	CO-3	BL-3
	b) Explain Design Process in Software engineering.	5M	CO-3	BL-2
	OR			
6.	Describe the importance of Class diagrams and explain the components of class diagram. list out the attributes and specify their relationship between the classes : BankAccount, Customer, BankTransaction	10M	CO-3	BL-3

UNIT-IV

7.	a) Write about Black Box and White Box testing.	5M	CO-4	BL-3
	b) Describe the Metrics for software maintenance.	5M	CO-4	BL-2
	OR			
8.	Illustrate different Software testing Strategies.	10M	CO-4	BL-2

UNIT-V

9.	a) Describe Risk identification and Risk Projection.	5M	CO-5	BL-2
	b) Differentiate Reactive vs. Proactive risk strategies.	5M	CO-5	BL-3
	OR			
10.	Discuss Software Quality Assurance, explain activities in detail.	10M	CO-5	BL-2

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