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# Gandhi Institute of Engineering and Technology University, Odisha, Gunupur (GIET University)



B. Tech (Fifth Semester - Regular) Examinations, November – 2024

**22BCSPC35004/22BCMPC35004- Software Engineering**

(CSE, CSE(AIML))

Time: 3 hrs

Maximum: 70 Marks

**Answer ALL questions**

(The figures in the right hand margin indicate marks)

## PART – A

(2 x 5 = 10 Marks)

Q.1. Answer **ALL** questions

	CO #	Blooms Level
a. What are the disadvantages of waterfall model?	CO1	K1
b. Explain the types of documents in SQA	CO2	K1
c. What is data modeling? Give 3 examples for data modeling	CO3	K1
d. What is user acceptance testing? Explain different testing's in user acceptance testing.	CO4	K2
e. What is generalization? Give an example of generalization.	CO3	K2

## PART – B

(15 x 4 = 60 Marks)

Answer **ALL** the questions

	Marks	CO #	Blooms Level
2. a. What are the differences between verification and validation in software development?	8	CO1	K1
b. Explain the concept of data flow diagram (OR)	7	CO3	K2
c. Explain in detail the following s/w process models with a neat diagram. i) Evolutionary process model. ii) Incremental Process model	8	CO1	K2
d. Explain the steps involved in the prototyping	7	CO1	K2
3.a. List and explain different types of testing done during the testing phase	8	CO4	K2
b. Draw and explain the sequence diagram for Library Management System. (OR)	7	CO3	K3
c. Explain the different phases involved in waterfall life cycle	8	CO1	K1
d. List the process maturity levels in SEIs CMM and their characteristic	7	CO4	K2
4.a. What are the various types of traceability in software engineering?	8	CO2	K1
b. What are the various Rapid prototyping techniques? Explain anyone. (OR)	7	CO1	K2
c. What is cardinality in data modeling? What does modality in data modeling indicates?	8	CO3	K1
d. What are the elements of Analysis model? What are the elements of design model	7	CO2	K1
5.a. Explain in detail about Structural Modeling	8	CO3	K2
b. What is coupling? What are the various types of coupling? (OR)	7	CO3	K1
c. Explain in detail about Heuristic Architectural Design	8	CO3	K2
d. What is COCOMO model? Give the procedure of the Delphi method.	7	CO1	K2

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