

**GIET UNIVERSITY, GUNUPUR – 765022**

B. Tech (Fifth Semester Regular) Examinations, December – 2023

**21BCSPC35004 – Software Engineering**

(CSE, CSE(AIML))

Time: 3 hrs

Maximum: 70 Marks

**(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. List out the types of software myths.	CO1	K2
b. What is the use of COCOMO model?	CO1	K1
c. Define functional requirements with an example.	CO2	K2
d. List the principles of a software design.	CO3	K2
e. What is the use of white box testing?	CO4	K1

**PART – B****(15 x 4 = 60 Marks)**Answer **ALL** questions

	Marks	CO #	Blooms Level
2. a. Describe with the help of the diagram discuss in detail waterfall model. Give certain reasons for its failure.	7	CO1	L2
b. Write the purpose of Software Engineering Institution Capability Maturity Model. Briefly describe all five levels of it.	8	CO1	L2
(OR)			
c. Discuss briefly about Evolutionary Process Models with neat diagram.	7	CO1	L2
d. Find out the Effort and time duration required for a project for 600 KLOC for all type of developing mode with low software engineering capability (1.17) and high virtual machine experience (0.90).	8	CO1	L2
3.a. List out user requirements for the following functions	8	CO2	L2
i) Cash dispensing function in a bank ATM.			
ii) Spelling check and correcting function in a word processor			
b. Compare and contrast functional requirements and non-functional requirements.	7	CO2	L2
(OR)			
c. Develop the SRS for Library Automation System.	8	CO2	L2
d. Demonstrate the uses of Use cases in requirements elicitation and analysis with an example.	7	CO2	L2

4.a.	Design the Sequence diagram for Library automation System.	7	CO3	L3
b.	Discuss about various types of UML Diagrams.	8	CO3	L2
(OR)				
c.	Design the Data Flow Diagram for Mark Information System	8	CO3	L3
d.	Discuss briefly the following fundamental concepts of software design: i) Abstraction ii) Modularity iii) Information hiding.	7	CO3	L2
5.a.	Discuss software failures and faults? What are test coverage criteria? Discuss testing issues	7	CO4	L2
b.	Discuss in detail about basis path testing and explain its importance.	8	CO4	L2
(OR)				
c.	What is testing? Discuss in detail about Black-Box testing.	7	CO4	L2
d.	Describe the role of acceptance testing in modern software development methodology.	8	CO4	L2

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