RAMAIAH
Institute of Technology

Dept. of Computer Science and Engineering (AI & ML) & Computer Science and Engineering (Cyber Security)

Programme: B E – Computer Science and Engineering (AI&ML) & Computer Science and Engineering (Cyber Security)
Internal Assessment – I

TERM: 3/10/2024 to 25/1/2025	COURSE NAME: Software Engineering
DATE: 27/11/2024 TIME:3.00-4.00PM	COURSE CODE: CI54/CY54
MAX MARKS: 30	PORTIONS: L1-L19


Mobile Phones are banned

Instructions to Candidates: Answer any TWO full questions. Marks: 15x2=30

Q. NO	Questions	BL (L1 to L6)*	CO	Marks
1.a	Which software process model—Waterfall, Incremental, iterative or Spiral—would you choose for an e-commerce project with evolving requirements? Justify your choice, with the neat diagram describe the process model include its advantage and its disadvantage.	L2	CO1	6
b	Explain requirement discovery using MHC-PMS use case diagram.	L2	CO2	3
c	Discuss different architectural view. Assume that you developing a E-commerce website for online medicine delivery application, Construct and explain the architecture using MVC pattern.	L3	CO3	6
2.a	Explain why Boehm's spiral model is an adaptable model that can support both change avoidance and change tolerance activities. In practice, this model has not been widely used. Suggest why this might be the case?	L2	CO1	6
b	How would you approach analyzing functional and non-functional requirements for a new hospital management system? Highlight key differences and provide examples for each.	L2	CO2	4
c	Discus using a neat diagram of language processing system with an example.	L1	CO3	5
3.a	Describe why test-first development helps the programmer to develop a better understanding of the system requirements? What are the potential difficulties with test-first development?	L2	CO1	5
b	Discus the requirement engineering activities with the neat diagram which is in common to all process models.	L2	CO2	4
c	You are tasked with designing a data processing system that reads raw data from various sources, processes it in multiple steps (such as filtering, sorting, and aggregating), and outputs the final results in a structured format. To this given scenario which architectural pattern is suitable and explain with a neat diagram.	L3	CO3	6

* L1 – Remember, L2 – Understand, L3- Apply, L4- Analyze, L5-Evaluate, L6-Create