



Programme Name & Branch : B.Tech & IT
Course Code and Course Name : BITE307L & Software Engineering
Faculty Name(s) : Prof.Kalaivani S, Prof.Sujatha R & Prof. Santhosh Kumar S V N
Class Number(s) : 3101, 3097 & 3111
Date of Examination : 30-1-2025
Exam Duration : 90 minutes
Maximum Marks: 50

General instruction(s):

- Answer All Questions
- M - Max mark; CO - Course Outcome; BL - Blooms Taxonomy Level (1 - Remember, 2 - Understand, 3 - Apply)
- Course Outcomes
 1. Use appropriate software process models for given software project scenarios
 2. Analyse software requirements and develop software requirements specification
 3. Develop abstract models and architectural design for software development.

Q. No	Question	M	CO	BL
1.	Compare the risk-handling strategies of the Spiral Model and the V-Model. Analyse the limitations of the V-Model and spiral model in handling dynamic requirements.	10	1	1
2.	Scenario 1: Small Software Development Company A small software development company is struggling to deliver projects on time and within budget. They often skip documentation to meet deadlines, and their testing processes are informal. The company is considering adopting CMM to improve its processes. Answer the below questions considering the Scenario 1: a) At which maturity level of CMM would you categorize this company? Justify your answer. b) Highlights the key process area(s) the company must focus on, to achieve the highest level.	10	1	2
3.	Scenario 2: Online Assessment System A prestigious educational institution, Global Academy, plans to develop an Online Assessment System to conduct quizzes, assignments, and exams for students enrolled in their various programs. The goal is to streamline the evaluation process, minimize administrative workload, and provide instant feedback to students. The institution also wants to allow teachers to create quizzes with various question types, set time limits, and analyze performance metrics for better student monitoring. The system will be accessible via both web browsers and mobile devices. Identify any five functional and non-functional requirements from above-mentioned Scenario 2. Map out at-least any of the identified non-functional requirements that are achieved in each of functional requirement.	10	2	3
4.	Draw the usecase diagram for Scenario 2 in Question no. 3 by including other supporting features as usecases in more detail with appropriate notations.	10	3	3
5.	Draw the class diagram for Scenario 2 in Question no. 3 with a minimum of five attributes and operations in each class. Apply appropriate relationships, visibility, parameters, and multiplicities.	10	3	3