GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER–VII (NEW) EXAMINATION – SUMMER 2024

Subject Code: 3171609   **Date:28-05-2024**

Subject Name: Software Project Management

Time:02:30 PM TO 05:00 PM   **Total Marks:70**

Instructions:
1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**
4. **Simple and non-programmable scientific calculators are allowed.**

			MARKS
Q.1	**(a)**	Explain the concept of project charter and its role in initiating software projects.	**03**
	(b)	Assess the impact of stakeholder involvement on the success or failure of software projects, providing examples.	**04**
	(c)	Provide overview of the COCOMO model, including its different variants and explain how each variant addresses the complexities of software projects.	**07**
Q.2	**(a)**	Define the CMM and its purpose in assessing and improving the maturity of an organization's software development processes.	**03**
	(b)	What project closure? What are the reasons for premature closure of the projects?	**04**
	(c)	Differentiate between Scrum and Extreme programming project models.	**07**

OR

	(c)	Differentiate between Spiral and Iterative project models.	**07**
Q.3	**(a)**	Explain the PERT and its significance in project management	**03**
	(b)	Explain the importance of Work Breakdown Structure (WBS) in project management	**04**
	(c)	Illustrate the use of Gantt Chart for project scheduling with example.	**07**

OR

Q.3	**(a)**	Explain the CPM and its significance in project management	**03**
	(b)	Describe the steps involved in process improvement within software project management	**04**
	(c)	Explain SEI CMM with all its level.	**07**
Q.4	**(a)**	Explain the Software Development Life Cycle (SDLC).	**03**
	(b)	Discuss the risk categories in software project management and their significance in project planning and risk management	**04**
	(c)	Discuss how EVA integrates cost, schedule, and scope metrics to provide a comprehensive view of project performance. Evaluate the challenges associated with implementing EVA in practice and propose strategies for maximizing its benefits.	**07**

OR

Q.4	**(a)**	Define project metrics and explain their significance in project management	**03**
	(b)	Explain the significance of Software Configuration Management (SCM) in software project management	**04**
	(c)	Explain the importance of standards in software. Briefly explain ISO standards for software organization.	**07**

Q.5	(a)	Give three software maintenance problems in software project management	03
	(b)	Compare and contrast redevelopment and reengineering approaches in software project management	04
	(c)	Explain Capability Maturity Model (CMM) in detail.	07

OR

Q.5	(a)	Explain version control in software configuration management.	03
	(b)	Discuss the importance of software maintenance	04
	(c)	Explain Software Configuration Management (SCM) process with suitable diagram.	07

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