

Total No. of Questions: 06

Total No. of Printed Pages: 02

PRN No.	
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PAPER CODE	U314 - 234 (ESE)
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(AY:2024-25) December 2024 (ENDSEM) EXAM

TY B.TECH (SEMESTER - I)

**COURSE NAME:** Software Engineering and Project Management

**Branch:** COMPUTER ENGINEERING

**COURSE CODE:** CSUA31204

**T.Y (PATTERN 2020)**

**Time:** [1Hr 30 Min]

**[Max. Marks: 40]**

Instructions to candidates:

- 1) Figures to the right indicate full marks. Use of scientific calculator is allowed
- 2) Use suitable data wherever required
- 3) All questions are compulsory. Solve any two sub question each from Questions 1 and 2
- 4) Solve any one sub question (2 marks) from Questions 3 ,4 ,5 and 6 and sub question of 4 marks is compulsory from questions 3,4,5,and 6

Q. No.	Question Description	Max. Marks	CO mapped	BT Level
Q.1	a) Apply Waterfall model for online shopping system.	[4]	[CO1]	Apply
	b) Apply Incremental model with suitable example.	[4]	[CO1]	Apply
	c) Identify Customer myths and explain their reality.	[4]	[CO1]	Apply
Q2	a)Employ use-case diagram for Student Assessment Management System.	[4]	[CO2]	Apply
	b) Apply 4 steps of requirement engineering process for any sample project.	[4]	[CO2]	Apply
	c) Employ State chart diagram for Order management system and mention finish state in it.	[4]	[CO2]	Apply
Q3.	a)Interpret Sprint Backlog for ERP project system in brief.	[2]	[CO3]	Understand
	OR b) Classify the role of Scrum master for any project.	[2]	[CO3]	Understand
	c) Apply Agile design principles to a hypothetical project. Identify the key phases and describe how collaboration and adaptability are fostered.	[4]	[CO3]	Apply

Q.4	a) Summarize four key phases of a Project management life cycle.	[2]	[CO4]	Understand
	OR			
	b) Enlist various categories of Risk in project development.	[2]	[CO4]	Understand
	c) Identify the type/category of following risk: Risk of high staff turnover. Prepare the risk mitigation strategy of the Risk.	[4]	[CO4]	Apply
Q.5	a) Demonstrate use of Gantt Chart in brief.	[2]	[CO5]	Understand
	OR			
	b) Demonstrate use of PERT Chart in brief.	[2]	[CO5]	Understand
	c) Consider a software project using semi-detached mode ( $a_1 = 3.0$ , $a_2 = 1.12$ , $b_1 = 2.5$ , $b_2 = 0.35$ ) with 27,000 lines of code and the salary for each software engineer is 20,000/- per month. Calculate Effort Estimation, Development time estimation, Cost Estimation.	[4]	[CO5]	Apply
Q.6)	a) Discover the different techniques to manage customer expectations in brief.	[2]	[CO6]	Understand
	OR			
	b) Interpret the challenges in team communication in brief.	[2]	[CO6]	Understand
	c) Identify the various User roles in various stages of Software Development?	[4]	[CO6]	Apply