Hall Ticket Number:

Code No. : 18631 (B) N/O

VASAVI COLLEGE OF ENGINEERING *(AUTONOMOUS)*, HYDERABAD

Accredited by NAAC with A++ Grade

B.E. (I.T.) VIII-Semester Main & Backlog Examinations, May-2023

Software Project Management (PE-V)

Time: **3 hours** Max. Marks: **60**

*Note: Answer all questions from **Part-A** and any **FIVE** from **Part-B***

Part-A (10 × 2 = 20 Marks)

Q. No.	Stem of the question	M	L	CO	PO
1.	Define software project management.	2	1	1	1
2.	Are risks constant throughout the project lifecycle? Support your answer.	2	3	1	1
3.	Define artifact and list design set artifacts.	2	1	2	1
4.	How is a change request handled?	2	1	2	1
5.	Why do we need software process monitoring?	2	1	3	1
6.	List the software architecture team activities.	2	1	3	1
7.	For a project PMAQ, SPI is 0.413, what do you infer about the project progress.	2	3	4	2
8.	Differentiate between the Virtual teams and traditional teams.	2	1	4	1
9.	List the issues to be resolved by the modern process framework.	2	1	5	1
10.	Identify the factors that affect Software process improvement?	2	1	5	1
	Part-B (5 × 8 = 40 Marks)				
11. a)	Map the top 10 risks of the conventional process to the key attributes and principles of a modern process.	5	3	1	2
b)	Imagine that you have the opportunity to purchase 1,000 bars of chocolate for ₹2 each piece. You would then sell the chocolate to a grocery store for ₹ 3 per piece. In addition to the cost of purchasing the chocolate, you need to pay ₹ 100 in transportation costs. Decide whether this would be profitable to you by calculating ROI.	3	3	1	2
12. a)	Discuss the inception phase of Software development lifecycle w.r.t., the following. a) primary objectives b) essential activities	5	2	2	1
b)	Justify the importance of architecture description artifact in ensuring planned execution of a project.	3	3	2	2
13. a)	Describe about the default roles in a Line-of-business organization and summarize their responsibilities?	5	2	3	1
b)	How is evolutionary Work Breakdown Structure beneficial over conventional Work Breakdown Structure?	3	3	3	1

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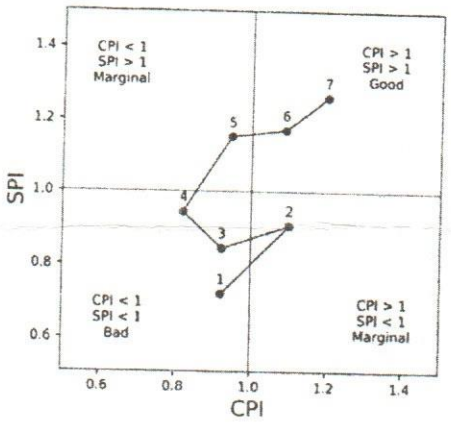
14. a)	Analyze the priorities for tailoring the process framework.	5	4	4	1
b)	The latest Earned Value (EV) report of the project shows the following : Cost Performance Index (CPI) = 1.11 Schedule Performance Index(SPI) = 0.91, Planned Value(PV) = ₹ 55,000 , Schedule Variance (SV) = - ₹ 5,000 Calculate the cost variance (CV) of the project? Is the Project ahead of schedule and under budget?	3	3	4	2
15. a)	Analyze the next-generation software cost models. List the two major improvements in next-generation S/W cost estimation models?	4	2	5	1
b)	"Some work yields better results if carried out as a team while some things are slowed down if the work is not compartmentalized on an individual basis." justify the statement.	4	3	5	2
16. a)	Explain the basic parameters of the software cost models.	4	2	1	1
b)	Illustrate artifact evolution over the life cycle.	4	2	2	1
17.	Answer any ***two*** of the following:				
a)	Discuss the lifecycle planning balance.	4	2	3	1
b)	A project progress analysis is given in the graph below. What do you infer? Substantiate your answer.	4	3	4	2
					
c)	Explain the process maturity levels for improvement of a software process in CMM with a neat diagram.	4	2	5	1

M : Marks; L: Bloom's Taxonomy Level; CO; Course Outcome; PO: Programme Outcome

i)	Blooms Taxonomy Level – 1	20%
ii)	Blooms Taxonomy Level – 2	38%
iii)	Blooms Taxonomy Level – 3 & 4	42%

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