Reg. No.															

Question Paper Code	13499

B.E. / B.Tech. - DEGREE EXAMINATIONS, APRIL / MAY 2025

Sixth Semester

Computer Science and Engineering

20CSEL601 - SOFTWARE PROJECT MANAGEMENT

Regulations - 2020

Duration: 3 Hours | Max. Marks: 100

PART - A (MCQ) (10 × 1 = 10 Marks)

Answer ALL Questions

		Marks	K – Level	CO
1.	Which of the following is NOT a typical activity in software project management? (a) Risk management (b) Cost estimation (c) Coding standards enforcement (d) Scheduling	1	K1	CO1
2.	In Stepwise Project Planning, what is the first step? (a) Develop the project schedule (b) Allocate resources (c) Identify project scope and objectives (d) Perform risk analysis	1	K2	CO1
3.	Which of the following is NOT a principle of Agile methodology? (a) Customer collaboration (b) Comprehensive documentation (c) Responding to change (d) Working software	1	K2	CO2
4.	RAD model is best suited for projects where: (a) Requirements are fixed (b) There is high risk (c) Quick delivery is needed (d) No user involvement is expected	1	K2	CO2
5.	Which of the following is a key component of COCOMO II? (a) Functional testing (b) Cost drivers (c) Test cases (d) Waterfall process	1	K2	CO3
6.	What does COCOMO stand for? (a) Common Cost Model (b) Constructive Cost Model (c) Computer Cost Monitor (d) Component-based Cost Model	1	K1	CO3
7.	Which of the following techniques helps in identifying the longest path in a project schedule? (a) Gantt Chart (b) Monte Carlo Simulation (c) Critical Path Method (CPM) (d) Risk Matrix	1	K2	CO4
8.	In project scheduling, what does a zero float indicate? (a) The activity can be delayed (b) The activity is not required (c) The activity is on the critical path (d) The activity is finished early	1	K1	CO4
9.	Which metric in Earned Value Analysis indicates how efficiently the budget is being used? (a) SPI (b) PV (c) CPI (d) EV	1	K2	CO5
10.	Which of the following is a common challenge of virtual teams? (a) Too much face-to-face interaction (b) Lack of skilled members (c) Communication barriers (d) High physical infrastructure cost	1	K1	CO6

PART - B (12 × 2 = 24 Marks)

Answer ALL Questions

		Marks	K – Level	CO
11.	List the characteristics of a project.	2	K2	CO1
12.	Explain project portfolio management.	2	K2	CO1
13.	Define the term ‘stepwise project planning’.	2	K1	CO2
14.	Define Rapid Application Development (RAD) in brief.	2	K1	CO2
15.	Illustrate the purpose of using prototypes in software development.	2	K2	CO3
16.	List the main advantages of using the Agile model over the Waterfall model.	2	K2	CO3

17.	List the advantages of PERT Technique.	*2*	*K2*	*CO4*
18.	Summarize the cost drivers in COCOMO II.	*2*	*K2*	*CO4*
19.	Define risk identification in project management.	*2*	*K3*	*CO5*
20.	Interpret the primary goal of a communication plan in project management.	*2*	*K2*	*CO5*
21.	List two causes of workplace stress in software teams.	*2*	*K2*	*CO6*
22.	Define motivation and explain why it's important in managing people.	*2*	*K1*	*CO6*

PART - C (6 × 11 = 66 Marks)

Answer ALL Questions

23.	a)	Elaborate the activities involved in software project management with suitable examples.	*11*	*K3*	*CO1*
		OR			
	b)	Identify the cost-benefit evaluation techniques used in software project management.	*11*	*K3*	*CO1*
24.	a)	Explain the various software process models with their advantages and disadvantages.	*11*	*K2*	*CO2*
		OR			
	b)	Illustrate the steps involved for Extreme Programming. List out its disadvantages and disadvantages.	*11*	*K2*	*CO2*
25.	a)	Outline various effort and cost estimation techniques used in software project management.	*11*	*K3*	*CO3*
		OR			
	b)	Build COSMIC Function Point methodology and how is it used in software size estimation.	*11*	*K3*	*CO3*
26.	a)	Elaborate the Critical Path Method (CPM) in detail with an example and apply its significance in project planning.	*11*	*K3*	*CO4*
		OR			
	b)	Apply the PERT technique with an example and explain how it helps in time estimation under uncertainty	*11*	*K3*	*CO4*
27.	a)	Build the various stages of contract placement in detail.	*11*	*K3*	*CO5*
		OR			
	b)	Construct the various ways in visualizing the progress of the project with neat diagram.	*11*	*K3*	*CO5*
28.	a)	Develop the ethical and professional responsibilities of a software project manager.	*11*	*K3*	*CO6*
		OR			
	b)	Interpret the different types of team structures used in the project management.	*11*	*K3*	*CO6*