School of Computer Science

SUBJECT: NR21: CS4116PE-SOFTWARE PROJECT MANAGEMENT

Unit 1

S.no	Questions	BT	CO
	Part–A(Short Answer Questions)		
1	Define Software maturity Framework.	L1	CO1
2	Give a note on Capability Maturity Model (CMM).	L1	CO1
3	Define software process.	L1	CO1
4	Compare the PSP and TSP.	L1	CO1
5	What is meant by CMMI?	L1	CO1
6	Define PCMM.	L1	CO1
7	Define Initial Process.	L2	CO1
8	Describe about Repeatable Process	L1	CO1
9	Explain about Managed Process	L2	CO1
10	Define Optimizing Process.	L1	CO1
	Part–B(Long Answer Questions)		
1	Distinguish between software process and software project	L2	CO1
2	Discuss in detail the Initial process, the repeatable process and the managed process	L3	CO1
3	What are process reference models? Explain any two of them?	L4	CO1
4	Explain about the Optimizing Process in details.	L2	CO1
5	Explain about the PCMM Process Reference Model in detail.	L2	CO1
6	Discuss the Capability Maturity Model (CMM).	L4	CO1
7	List and explain the Principles of Software Process Change.	L2	CO1
8	Elaborate the Software Process Assessment.	L3	CO1
9	Discuss the Software maturity Framework	L2	CO1
10	Explain the terms CMMI, PCMM, PSP, TSP.	L4	CO1

Unit-II

S.no	Questions	BT	CO
	Part–A(Short Answer Questions)		
1	Write the Evolution of Software Economics.	L1	CO2
2	Describe about Life-Cycle Phases.	L1	CO2
3	Describe about inception phase.	L1	CO2
4	How an operational artifact of a management set differs from planning artifacts?	L1	CO2
5	Describe about transition phase.	L1	CO2
6	Define management artifacts.	L1	CO2

7	What are the five components of software cost models?	L1	CO2
8	Give an overview of the artifact sets.	L1	CO2
9	Explain waterfall model in practice	L1	CO2
10	What are the five components of software cost models?	L1	CO2
	Part–B(Long Answer Questions)		
1	Explain the risk profile of a conventional software project across its life cycle.	L4	CO2
2	What is meant by Elaboration phase? Discuss the primary objectives and essential activities of Elaboration phase.	L3	CO2
3	Discuss briefly the Engineering artifact sets.	L4	CO2
4	Explain with a neat diagram how various artifacts evolved over the life cycle.	L2	CO2
5	Explain the pragmatic software metrics.	L2	CO2
6	What are the top ten risks in conventional process of software development? Explain.	L4	CO2
7	Discuss the results of conventional software project design reviews.	L1	CO2
8	Explain water fall model with late design breakage and late risk resolution.	L3	CO2
9	Discuss the artifacts in management set	L2	CO2
10	Describe the model-based software architectures.	L4	CO2

Unit-III

S.no	**Questions**	**BT**	**CO**
	Part–A(Short Answer Questions)		
1	Explain about Iteration workflows	L1	CO3
2	What is meant by Major milestones?	L1	CO3
3	Define Minor milestones.	L1	CO3
4	Give a note on software process work flows.	L1	CO3
5	Define Work breakdown structures.	L1	CO3
6	Define Pragmatic planning	L1	CO3
7	What are the seven workflows in the life cycle?	L1	CO3
8	Define the terms ‘model’ and ‘view’.	L1	CO3
9	Define periodic status assessment.	L1	CO3
10	What is the need of status assessment in software life cycle?	L1	CO3
	Part–B(Long Answer Questions)		
1	What are the major milestones that occur at the transition points between life-cycle phases? Explain them?	L2	CO3
2	Discuss about typical minor milestones in the life cycle of an iteration	L3	CO3
3	Explain in detail about periodic status assessments	L4	CO3
4	Explain about iteration planning process?	L3	CO3

5	Describe about Process Planning in details?	L2	CO3
6	What levels of activity takes place in these workflows during each of the four phases (inception, elaboration, construction and transition).	L4	CO3
7	What does each of the views (design, process, component, deployment) address in the software architecture? Explain with an example.	L4	CO3
8	Discuss in detail about the minor milestones in the life cycle of iteration.	L3	CO3
9	Explain the workflows and check points of process.	L2	CO3
10	Define periodic status assessment. What is the need of status assessment in software life cycle? Also discuss the default content of periodic status assessments.	L4	CO3

Unit-IV

S.no	Questions	BT	CO
	Part–A(Short Answer Questions)		
1	Explain about evolution of organizations.	L1	CO4
2	Describe about process automation.	L1	CO4
3	Define about core metrics.	L1	CO4
4	What are the key practices that improve overall software quality?	L1	CO4
5	Describe about life-cycle expectations.	L1	CO4
6	List the main features of the default line-of-business organization.	L1	CO4
7	What are the steps in identifying project roles?	L1	CO4
8	How does the emphasis in the four teams evolve over the course of the entire project?	L1	CO4
9	List the seven-core metrics.	L1	CO4
10	Name metrics for reliability. SW cost, effort, SW complexity with examples.	L1	CO4
	Part–B(Long Answer Questions)		
1	Explain about management indicators.	L2	CO4
2	Describe about Pragmatic software metrics.	L3	CO4
3	Discuss the seven-core metrics.	L4	CO4
4	Explain in detail about metrics automation.	L4	CO4
5	Explain Project Control and process instrumentation in detail.	L3	CO4
6	What are the four component teams in a default line-of-business organization and their responsibility? Explain	L4	CO4
7	Discuss the four component teams in a default project organization and their responsibility.	L2	CO4
8	Discuss the reason for looking at organizations from project as well as line-of-business perspective.	L3	CO4
9	What are the steps in identifying project roles? Name any five	L2	CO4

	project roles and the skills needed for them.		
10	Explain the main features of the default line-of-business organization.	L4	CO4

Unit-V

S.no	Questions	BT	CO
	Part–A(Short Answer Questions)		
1	State advantages Next-Generation software Economics.	L1	CO5
2	Explain about Modern Process Transition.	L1	CO5
3	Describe the future Software Project Management Practices.	L1	CO5
4	Describe the CCPDS-R Case Study.	L1	CO5
5	Define Modern Project Profiles.	L1	CO5
6	What are modern project profiles?	L1	CO5
7	What are modern project profiles?	L2	CO5
8	What are the effects of architectural risk on process discriminators?	L1	CO5
9	Distinguish between small-scale projects and large-scale projects.	L1	CO5
10	Define the SEI-CMM maturity levels of organizations.	L1	CO5
	Part–B(Long Answer Questions)		
1	Discuss clearly the software management team activities, software architecture team activities also software development team activities.	L2	CO5
2	Write short notes on the Next-Generation software economics.	L3	CO5
3	Write short notes on the Modern process transitions.	L4	CO5
4	Explain in details about Modern Project Profiles.	L2	CO5
5	Discuss about CCPDS-R Case Study.	L3	CO5
6	Elaborate the Modern Project Profiles.	L4	CO5
7	Discuss the trends in improving software economics.	L2	CO5
8	Explain the Next generation Software economics.	L3	CO5
9	What is the transition process in project management? Describe	L3	CO5
10	Distinguish between small-scale projects and large-scale projects. Define the SEI-CMM maturity levels of organizations. How do processes differ because of process flexibility and process maturity?	L4	CO5