

SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR (AUTONOMOUS)

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**QUESTION BANK (DESCRIPTIVE)****Subject with Code: SOFTWARE PROCESS & PROJECT MANAGEMENT (19CI0611)****Course & Branch: COMPUTER SCIENCE & INFORMATION TECHNOLOGY****Year & Sem :IV & I****Regulation: R19**

UNIT –I
SOFTWARE PROCESS MATURITY

1	a	What are six principles of software process change?	[L2][CO1]	[6M]
	b	List out CMMI maturity levels? Explain it.	[L2][CO1]	[6M]
2	a	Define the Software Process Assessment with its levels in detail.	[L6][CO1]	[6M]
	b	Explain Principles of Software Process Change. Justify each.	[L2][CO1]	[6M]
3	a	What is the importance of Software maturity Framework?	[L2][CO1]	[6M]
	b	Distinguish between software process and software project.	[L2][CO1]	[6M]
4	a	Define Principles of Software Process Change. Explain the Six Basic Principles of SoftwareProcess Change.	[L2][CO1]	[6M]
	b	Discuss in detail the Initial process, the Repeatable process and the Managed process.	[L2][CO1]	[6M]
5	a	Explain Personal Software Process.	[L2][CO1]	[6M]
	b	What are process reference models? Explain any two of them.	[L1][CO1]	[6M]
6	a	Analyze PSP and TSP Process reference models.	[L4][CO1]	[6M]
	b	Explain different principles covered by Software maturity Framework.	[L2][CO1]	[6M]
7	a	Explain about the PCMM Process Reference Model in details.	[L2][CO1]	[6M]
	b	Give an overview of Team Software Process.	[L2][CO1]	
8		Define the following: i. Systems Engineering ii. Software Engineering iii. Integrated Product and Process Development iv. Supplier Sourcing	[L1][CO1]	[12M]
9	a	Differentiate Continuous and Staged Representations of CMMI.	[L2][CO1]	[6M]
	b	Define Managed process and Optimizing Process.	[L1][CO1]	[6M]
10	a	Explain structure of CMMI in detail.	[L2][CO1]	[6M]
	b	Identify Software Process Assessment principles. Justify each.	[L3][CO1]	[6M]

UNIT –II
SOFTWARE PROJECT MANAGEMENT
RENAISSANCE,
LIFE –CYCLE PHASES AND PROCESS ARTIFACTS

1	a	Explain Conventional Software Management.	[L2][CO2]	[6M]
	b	Explain about the Evolution of Software Economics.	[L2][CO2]	[6M]
2	a	Indicate basic parameters of the software cost model for improving software economics.	[L2][CO2]	[6M]
	b	Summarize the characteristics of a successful object-oriented project.	[L2][CO2]	[6M]
3	a	Explain the predominant cost estimation process.	[L2][CO2]	[6M]
	b	Conclude the protracted integration and late design breakage in conventional software project.	[L4][CO2]	[6M]
4	a	Explain the conventional software management approach.	[L2][CO2]	[6M]
	b	Outline the principles of modern software management.	[L2][CO2]	[6M]
5	a	Name the principles of conventional software engineering and explain each.	[L1][CO2]	[6M]
	b	Generalize the quality improvements with a modern process.	[L6][CO2]	[6M]
6	a	Define the way of Reducing Software Product Size.	[L1][CO2]	[6M]
	b	Extend the phases of the life-cycle process	[L2][CO2]	[6M]
7	a	Examine pragmatic software cost estimation.	[L4][CO2]	[6M]
	b	Summarizes the differences in emphasis between engineering and production stages.	[L2][CO2]	[6M]
8	a	Illustrate the inception phase in life cycle process.	[L3][CO2]	[6M]
	b	Distinguish the generation of software economics leading to the target objectives.	[L2][CO2]	[6M]
9	a	Explain the elaboration phase in life cycle process.	[L4][CO2]	[6M]
	b	Explain the construction phase and transition phase in life cycle process.	[L2][CO2]	[6M]
10	a	Illustrate the overview of the artifact sets.	[L3][CO2]	[6M]
	b	Discriminate the model based software architecture.	[L4][CO2]	[6M]

UNIT –III
WORKFLOWS AND CHECKPOINTS OF PROCESS
&
PROCESS PLANNING

1	a	List the top-level workflows.	[L1][CO3]	[6M]
	b	Illustrate an activity level across the life cycle phases with software process workflows.	[L3][CO3]	[6M]
2	a	Interpret the artifacts and life cycle emphases associated with each workflow.	[L3][CO3]	[6M]
	b	Explain an iteration workflow in details.	[L2][CO3]	[6M]
3	a	Infer an iteration emphasis across the life cycle.	[L2][CO3]	[6M]
	b	Identify sequence of project check points and define it.	[L2][CO3]	[6M]
4	a	Describe major milestone with life-cycle phases	[L3][CO3]	[6M]
	b	Name the different types of joint management reviews and explain each.	[L1][CO3]	[6M]
5		Explain the following milestones. i. Life cycle objective milestones ii. Life cycle architecture milestones	[L2][CO3]	[12M]
6		Explain the following milestones: i. Initial operational capability milestone ii. Product release milestones	[L2][CO3]	[12M]
7	a	Interpret the sequence of life-cycle check points in major milestones	[L3][CO3]	[6M]
	b	Demonstrate the typical minor milestones in life cycle of an iteration	[L2][CO3]	[6M]
8	a	Explain about periodic status assessments	[L2][CO3]	[6M]
	b	Define conventional work breakdown structure and an identify it's issues	[L2][CO3]	[6M]
9	a	Evaluate the popularity fidelity in the WBS over the life cycle	[L4][CO3]	[6M]
	b	Demonstrate the iteration planning places throughout the life cycle	[L2][CO3]	[6M]
10	a	Define conventional work breakdown structures in detail.	[L1][CO3]	[6M]
	b	Illustrate about “SOFTWARE PROCESS WORKFLOWS”.	[L2][CO3]	[6M]

UNIT –IV
PROJECT ORGANIZATIONS
&
PROJECT CONTROL AND PROCESS INSTRUMENTATION

1	a	Explain default roles in a software life of business organization.	[L2][CO4]	[6M]
	b	Extends default project organization and responsibilities.	[L2][CO4]	[6M]
2	a	Identify software management team activities.	[L3][CO4]	[6M]
	b	Name the software architecture team activities.	[L1][CO4]	[6M]
3	a	Outline the software development team activities.	[L1][CO4]	[6M]
	b	List out software assessment team activities.	[L1][CO4]	[6M]
4	a	Discuss software project team evolution over the life cycle.	[L2][CO4]	[6M]
	b	Explain in details automation building blocks.	[L2][CO4]	[6M]
5	a	Describe the project environment in details.	[L3][CO4]	[6M]
	b	Define Round Trip Engineering. Explain it.	[L1][CO4]	[6M]
6		Explain the following modern iterative development process. i. Change Management ii. Stake holder environment	[L2][CO4]	[12M]
7	a	Identify the core metrics in managing a modern process. Give the over view of the core metrics.	[L3][CO4]	[6M]
	b	Explain management indicator.	[L2][CO4]	[6M]
8	a	List down Quality indicator and explain each.	[L1][CO4]	[6M]
	b	Define Pragmatic software metrics and distinguish the characteristics of a good metrics.	[L1][CO4]	[6M]
9		Examine the metrics automation.	[L3][CO4]	[12M]
10		Explain the default pattern of life-cycle metrics evolution.	[L2][CO4]	[12M]

UNIT- V
CCPDS-R CASE STUDY

1		Explain the following terms. i. Project Review Authority (PRA). ii. Project Control & Process Instrumentation.	[L2][CO5]	[12M]
2	a	Explain in detail about the Life -Cycle Expectations	[L2][CO5]	[6M]
	b	Define indicators in Project Control & Process Instrumentation?	[L1][CO5]	[6M]
3	a	Illustrate the Budgeted cost and expenditures?	[L3][CO5]	[6M]
	b	What are the principles of modern software management?	[L1][CO5]	[6M]
4	a	Explain about The Command Center Processing and Display System- Replacement project.	[L2][CO5]	[6M]
	b	Define Modern Process Transitions in detail?	[L1][CO5]	[6M]
5	a	Explain about the Next-Generation Software Economics in detail?	[L2][CO5]	[6M]
	b	What are the Key Points of An objective case study is a true indicator of amature organization?	[L1][CO5]	[6M]
6	a	Discover the CCPDS-R life-cycle	[L3][CO5]	[6M]
	b	Illustrates the software organization evolution and FSD responsibilities	[L2][CO5]	[6M]
7	a	Summarize the distinguishing characteristics of each CSCI	[L2][CO5]	[6M]
	b	Explain about the incremental design process.	[L2][CO5]	[6M]
8	a	Define component evolution. Give an example of a typical component evolution.	[L1][CO5]	[6M]
	b	Illustrates the overall flow of test activity and base line evolution.	[L2][CO5]	[6M]
9	a	Discuss about CCPDS-R case study?	[L2][CO5]	[6M]
	b	Summarize the schedule for the IPDR demonstration activities.	[L2][CO5]	[6M]
10		Summarize the numerous dimensions of improvement incorporated into the CCPDS-R project.	[L2][CO5]	[12M]

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