Course Code: 23CS0538 **R23**

SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR (AUTONOMOUS)
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QUESTION BANK (DESCRIPTIVE)

Subject with Code: Software Project Management (20CS0538)
Course & Branch: B.Tech -CSE, CAD, CCC and CIC
Year & Sem: III/II **Regulation:** R23

UNIT-I
CONVENTIONAL SOFTWARE MANAGEMENT

1	a)	Define Conventional Software Management.	[L1][CO1]	[2M]
	b)	List out the two essential steps common to computer programs.	[L1][CO1]	[2M]
	c)	List out the 5 basic parameters in software economics.	[L1][CO1]	[2M]
	d)	Define the basic units of Functional Points.	[L1][CO1]	[2M]
	e)	What is meant by Peer Inspections.	[L1][CO1]	[2M]
2		Describe about Conventional Project Management.	[L2][CO1]	[10M]
3	a)	Explain about water fall model with neat architecture	[L2][CO1]	[5M]
	b)	List out the drawbacks of waterfall model and explain it.	[L2][CO1]	[5M]
4	a)	Illustrate the 5 basic parameter of software economics	[L3][CO1]	[5M]
	b)	List out the parameters for software cost models and explain it.	[L2][CO1]	[5M]
5	a)	How to reduce the size of the software product ? Analyze with examples.	[L4][CO1]	[5M]
	b)	Discuss about Three levels of Process and their attributes in software development.	[L2][CO1]	[5M]
6		Interpret the following terms i) Improving the team effectiveness ii) Boehm's staffing principles	[L4][CO1]	[10M]
7		State and explain how to Achieve the required quality in software product.	[L2][CO1]	[10M]
8	a)	Outline the Peer inspections : a Pragmatic view in software project	[L2][CO1]	[5M]
	b)	List out and explain the reusable components in software product development.	[L2][CO1]	[5M]
9		Illustrate how to improve automation through software environments.	[L3][CO1]	[10M]
10	a)	Explain Barry Boehm's software metrics for conventional software management performance.	[L2][CO1]	[5M]
	b)	Illustrate the three generations of software development process.	[L3][CO1]	[5M]
11		Analyze the steps for improving the software economics.	[L4][CO1]	[10M]

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UNIT-II
THE OLD WAY AND THE NEW

1	a)	List out any 4 Principles Of Conventional Software Engineering	[L1][CO2]	**[2M]**
	b)	Define COCOMO-II model.	[L1][CO2]	**[2M]**
	c)	Define characteristic of a successful software development process.	[L1][CO2]	**[2M]**
	d)	What are the two stages of Life Cycle Process.	[L1][CO2]	**[2M]**
	e)	Differentiate construction and transition stage.	[L1][CO2]	**[2M]**
2		Illustrate the principles of convention al software Engineering,	[L3][CO2]	**[10M]**
3		Explain briefly principles of modern software management	[L2][CO2]	**[10M]**
4		Discuss about transitioning to an iterative process: COCOMO –II model.	[L2][CO2]	**[10M]**
5		Explain the goal of Inception phase, Elaboration phase, Construction phase and Transition phase	[L3][CO2]	**[10M]**
6		Analyze the overview of Artifacts of the process.	[L4][CO2]	**[10M]**
7	a)	Explain about the artifact sets with simple examples.	[L2][CO2]	**[5M]**
	b)	Discurss Management artifacts with examples.	[L2][CO2]	**[5M]**
8		Analyze the Engineering artifacts with simple examples	[L4][CO2]	**[10M]**
9		Interpret the Artifact evaluation over the life cycle.	[L4][CO2]	**[10M]**
10		Illustrate the programmatic artifacts in software process.	[L3][CO2]	**[10M]**
11		Explain the following terms (a) Management Artifacts (b) Engineering Artifacts (c) Pragmatic Artifacts	[L2][CO2]	**[10M]**

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UNIT-III

WORK FLOWS OF THE PROCESS

1	**a)**	List out the different Life-cycle software artifacts.	[L1][CO3]	**[2M]**
	b)	What are the indications of Software Development Plan?.	[L1][CO3]	**[2M]**
	c)	What is meant by Work break Down Architecture?	[L1][CO3]	**[2M]**
	d)	Define Engineering artifacts.	[L1][CO3]	**[2M]**
	e)	What are the four different views in Architecture Framework?	[L1][CO3]	**[2M]**
2		Define Model-Based software architecture. Explain it.	[L1][CO3]	**[10M]**
3		Explain various process workflows?	[L2][CO3]	**[10M]**
4		Define typical sequence of life cycle checkpoints? Explain it.	[L2][CO3]	**[10M]**
6		Analyze the general status of plans, requirements and product across the major milestones.	[L4][CO3]	**[10M]**
7		Interpret the conventional and Evolutionary work break down structures.	[L4][CO3]	**[10M]**
8		Explain briefly planning balance throughout the life cycle.	[L2][CO4]	**[10M]**
9		Illustrate The Cost and Schedule Estimating Process.	[L3][CO4]	**[10M]**
10	**a)**	Explain the Product hierarchy in conventional work break down structure.	[L2][CO4]	**[5M]**
	b)	List out various issues in conventional work break down structure. Explain it.	[L2][CO4]	**[5M]**
11	**a)**	Illustrate the Minor Milestones in workflows of the process.	[L3][CO4]	**[5M]**
	b)	Describe about the Periodic status assement	[L3][CO4]	**[5M]**

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UNIT –IV
PROCESS AUTOMATION

1	**a)**	What is process automation in software engineering?	[L1][CO4]	**[2M]**
	b)	List any two automation building blocks	[L1][CO4]	**[2M]**
	c)	Define a Softwre Metric.	[L1][CO4]	**[2M]**
	d)	What is meant by tailoring the process?	[L1][CO4]	**[2M]**
	e)	What is meant by team organization?	[L2][CO4]	**[2M]**
2		Describe the automation building blocks in software engineering.	[L2][CO4]	**[10M]**
3	**a)**	Explain the concept of project environment.	[L2][CO4]	**[5M]**
	b)	List and explain any three core metrics. Explain it.	[L2][CO4]	**[5M]**
4	**a)**	Illustrate the role of project control in software projects.	[L3][CO4]	**[5M]**
	b)	Explain the relationship between process automation and productivity.	[L2][CO4]	**[5M]**
5		Discuss project control mechanisms and the role of process instrumentation	[L5][CO4]	**[10M]**
6		Explain the seven core metrics used in project management.	[L2][CO4]	**[10M]**
7	**a)**	Explain quality measurement in software projects	[L2][CO4]	**[5M]**
	b)	Write a short note on managing people in software projects. Analyze it.	[L4][CO4]	**[5M]**
8		Interpret the concept of tailoring the software process.	[L4][CO4]	**[10M]**
9		Compare management indicators and quality indicators with examples	[L5][CO4]	**[10M]**
10		Describe different ways of organizing software teams	[L2][CO4]	**[10M]**
11		Analyze the importance of process discriminants.	[L4][CO4]	**[10M]**

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UNIT –V
PROJECT ORGANIZATIONS AND RESPONSIBILITIES

1	**a)**	What is a Line-of-Business (LOB) organization?	[L1][CO5]	**[2M]**
	b)	What is meant by organizational evolution?	[L1][CO5]	**[2M]**
	c)	What are modern project profiles?	[L1][CO5]	**[2M]**
	d)	What is next-generation software economics?	[L1][CO5]	**[2M]**
	e)	What is CCPDS-R?	[L1][CO5]	**[2M]**
2		Analyze the Line-of-Business organizations and project organizations.	[L4][CO5]	**[10M]**
3		Describe the evolution of organizations in software engineering.	[L2][CO5]	**[10M]**
4		Interpret the concept of modern project profiles in detail.	[L4][CO5]	**[10M]**
5	**a)**	Explain next-generation software economics.	[L2][CO5]	**[5M]**
	b)	Explain the importance of software economics in modern projects.	[L2][CO5]	**[5M]**
6		Explain the different types of organizational structures used in software projects and their evolution.	[L2][CO5]	**[10M]**
7		Discuss the characteristics of future software projects.	[L3][CO5]	**[10M]**
8		Explain the objectives and challenges of CCPDS-R.	[L2][CO5]	**[10M]**
9	**a)**	Illustrate the role of risk management in large software projects.	[L3][CO5]	**[5M]**
	b)	Write a brief note on CCPDS-R. Explain it	[L2][CO5]	**[5M]**
10		Discuss the role of iterative development in large projects.	[L2][CO5]	**[10M]**
11		Compare traditional and modern software project management approaches.	[L6][CO5]	**[10M]**

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