

**GEETHANJALI INSTITUTE OF SCIENCE & TECHNOLOGY**

(AN AUTONOMOUS INSTITUTION)

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QUESTION BANK (DESCRIPTIVE)

Subject Name: Software Project Management

Subject Code: 22A0522C

Course & Branch : B.Tech, CS & DS

Year & Semester: III B.Tech II Semester

Regulation: RG23

S.No	UNIT – I Descriptive Questions (Short)	[BT Level] [CO] [Marks]
1	What is Conventional Software Management?	LO1, 2M
2	Mention any two characteristics of conventional software management.	LO1, 2M
3	What is the Waterfall Model?	LO2, 2M
4	Why is software cost estimation difficult?	LO2, 2M
5	What is meant by reducing software product size?	LO2, 2M
6	Define Software Economics	LO3, 2M
7	What are peer inspections?	LO3, 2M
8	What are the limitations of conventional software management?	LO3, 2M
9	What is automation in software development?	LO4, 2M
10	What is software quality?	LO4, 2M

S.No	UNIT – I Descriptive Questions (Long)	[BT Level] [CO] [Marks]
1	Explain Conventional Software Management and discuss its characteristics and limitations.	LO1, 12M
2	Describe the Waterfall Model of software development with a neat diagram. Explain its phases, advantages, and disadvantages.	LO2, 12M
3	Discuss the major problems of the Waterfall Model in real-world software projects and explain why it is unsuitable for large systems.	LO2, 12M
4	Explain Software Economics and discuss the role of cost, effort, schedule, and productivity in software project management.	LO3, 12M
5	Describe Pragmatic Software Cost Estimation and explain why software cost estimation is difficult.	LO3, 12M
6	Explain the concept of reducing software product size and how it improves software economics	LO4, 12M
7	Explain how improving software processes leads to better software economics.	LO4, 12M
8	Discuss the role of team effectiveness in the success of a software project.	LO4, 12M
9	Explain the importance of automation in software development and its impact on cost, quality, and productivity.	LO4, 12M
10	Explain how peer inspections help in achieving required software quality and reducing defects.	LO4, 12M

S.No	UNIT – II Descriptive Questions (Short)	[BT Level] [CO][Marks]
1	What is meant by conventional software engineering?	LO1, 2M
2	State two differences between old and new software development approaches.	LO1, 2M
3	What is the Engineering stage of the software life cycle?	LO2, 2M
4	What are software artifacts?	LO2, 2M
5	What is the Iterative Software Development Life Cycle?	LO2, 2M
6	What is the Production stage?	LO2, 2M
7	What are the activities performed in the Engineering stage?	LO3, 2M
8	What is risk in software projects?	LO3, 2M
9	What is Elaboration phase?	LO4, 2M
10	Mention two goals of Inception phase?	LO4, 2M

S.No	UNIT – II Descriptive Questions (Long)	[BT Level] [CO][Marks]
1	Explain the old way and the new way of software development. Compare conventional software engineering with modern software management.	LO1, 12M
2	Discuss the principles of conventional software engineering. Why are these principles insufficient for modern large-scale systems?	LO1, 12M
3	Explain the principles of modern software management and how they address the limitations of traditional approaches.	LO1, 12M
4	Describe the need for transitioning from the Waterfall model to an Iterative development process with suitable examples.	LO2, 12M
5	Explain the Iterative Software Development Life Cycle in detail. Compare it with the Waterfall Life Cycle.	LO2, 12M
6	Describe the Engineering and Production stages of the software life cycle, including their objectives, activities, and deliverables.	LO2, 12M
7	Explain the Inception phase of the Iterative life cycle. Discuss its goals, activities, and outcomes.	LO2, 12M
8	Explain the Elaboration phase in detail. How does it help in risk reduction and architecture stabilization?	LO2, 12M
9	Explain the Construction and Transition phases of the software life cycle and discuss the activities performed in each phase.	LO2, 12M
10	Explain the artifacts of the software development process. Describe process artifacts, engineering artifacts, and programmatic artifacts with examples.	LO2, 12M

S.No	UNIT – III Descriptive Questions (Short)	[BT Level] [CO] [Marks]
1	What is meant by software process workflow?	LO1, 2M
2	Define major milestones in software project management.	LO1, 2M
3	What are minor milestones?	LO2, 2M
4	What is a defect set?	LO2, 2M
5	Define management workflow.	LO2, 2M
6	What is meant by periodic status assessment?	LO3, 2M
7	Define iterative process planning.	LO3, 2M
8	What is a Work Breakdown Structure (WBS)?	LO4, 2M
9	What are planning guidelines?	LO4, 2M
10	What is pragmatic planning?	LO4, 2M

S.No	UNIT – III Descriptive Questions (Long)	[BT Level] [CO] [Marks]
1	Explain the software process workflows in detail.	LO1, 12M
2	Describe the inter-relationship between process workflows in a software project.	LO1, 12M
3	Explain major and minor milestones used in software project management.	LO2, 12M
4	Discuss the role of defect sets in monitoring software quality.	LO2, 12M
5	Explain the management workflow and its importance in software projects.	LO3, 12M
6	Describe the checkpoints for periodic status assessment in an iterative process.	LO3, 12M
7	Explain the iterative process planning approach with suitable examples.	LO4, 12M
8	Describe the concept of Work Breakdown Structure (WBS) and its importance in project planning.	LO4, 12M
9	Explain the planning guidelines used in software project management.	LO4, 12M
10	Explain cost and schedule estimation in iterative planning with reference to pragmatic planning.	LO4, 12M

S.No	UNIT – IV Descriptive Questions (Short)	[BT Level] [CO] [Marks]
1	What is meant by process automation in software project management?	LO1, 2M
2	Define automation building blocks.	LO1, 2M
3	What is a project environment?	LO2, 2M
4	Define project control.	LO2, 2M
5	What is meant by process instrumentation?	LO2, 2M
6	Define software metrics.	LO3, 2M
7	What are management indicators?	LO3, 2M
8	What are quality indicators?	LO3, 2M
9	What is meant by process tailoring?	LO4, 2M
10	Define team organization.	LO4, 2M

S.No	UNIT – IV Descriptive Questions (Long)	[BT Level] [CO] [Marks]
1	Explain process automation and discuss its importance in software project management.	LO1, 12M
2	Describe the automation building blocks used in software development.	LO1, 12M
3	Explain the concept of project environment and its role in effective project execution.	LO2, 12M
4	Discuss project control and process instrumentation in detail.	LO2, 12M
5	Explain the role of software metrics in project control.	LO3, 12M
6	Describe management indicators and quality indicators with examples.	LO3, 12M
7	Explain the concept of process tailoring and its benefits.	LO4, 12M
8	Discuss process discriminators and their role in tailoring the process.	LO4, 12M
9	Explain how managing people and organizing teams impacts project success.	LO4, 12M
10	Describe the relationship between automation, metrics, and quality improvement in software projects.	LO4, 12M

S.No	UNIT – V Descriptive Questions (Short)	[BT Level] [CO] [Marks]
1	What is meant by project organization?	LO1, 2M
2	Define Line-of-Business (LOB) organization.	LO1, 2M
3	What is a projectized organization?	LO1, 2M
4	What is meant by organizational evolution?	LO2, 2M
5	Define software project responsibilities.	LO2, 2M
6	What is a project manager profile?	LO2, 2M
7	What is meant by modern software project management?	LO3, 2M
8	Define future software project management.	LO3, 2M
9	What is meant by next-generation software economics?	LO3, 2M
10	What are modern process transitions?	LO4, 2M

S.No	UNIT – IV Descriptive Questions (Long)	[BT Level] [CO] [Marks]
1	Explain project organizations and responsibilities in software project management.	LO1, 12M
2	Describe the Line-of-Business organization structure and its advantages and disadvantages.	LO2, 12M
3	Explain project-oriented organization and compare it with Line-of-Business organization.	LO2, 12M
4	Explain project-oriented organization and compare it with Line-of-Business organization.	LO3, 12M
5	Explain the roles and responsibilities of a software project manager.	LO3, 12M
6	Describe modern software project profiles and their characteristics.	LO4, 12M
7	Explain the concept of future software project management.	LO4, 12M
8	Discuss next-generation software economics and its impact on project success.	LO4, 12M
9	Explain modern process transitions in software project management.	LO4, 12M
10	Discuss the challenges and trends in future software project management.	LO4, 12M