Model Question Paper-1/2 with effect from 2021(CBCS Scheme)

USN | | | | | | | | | | |

Sixth Semester B.E. Degree Examination

Software Engineering and Project Management

TIME: 03 Hours **Max. Marks: 100**

Note: Answer any **FIVE** full questions, choosing at least **ONE** question from each **MODULE**.

		Module -1	*Bloom's Taxonomy Level	COs	Marks
Q.01	a	Define Software & Software Engineering. Why is it important. Explain the Software Process in Software Engineering.	L1	CO1	08
	b	Explain Waterfall and Incremental Development Process model with a neat block diagram. List its benefits and problems.	L2	CO1	07
	c	Write about the various types of specialized process models.	L1	CO1	05
		OR			
Q.02	a	What are the unique nature of software and web applications.	L1	CO1	08
	b	Explain in brief along with diagrams – 1) Evolutionary process model 2) Concurrent process model 3) Spiral model	L2	CO1	07
	c	Write about the various software myths and how it all starts.	L1	CO1	05
		Module-2			
Q. 03	a	Illustrate requirement engineering process with a neat block diagram.	L2	CO2	08
	b	What is requirement analysis. What are the various analysis rules of thumb.	L1	CO2	07
	c	Explain about the various data modeling concepts.	L2	CO2	05
		OR			
Q.04	a	Write the steps of scenario based modeling. Explain each step in brief.	L1	CO2	08
	b	Explain requirement elicitation and analysis process.	L2	CO2	07
	c	Explain about the associations and dependencies in class based modeling. Also write about the various analysis packages.	L2	CO2	05
		Module-3			
Q. 05	a	What is an agile process. Write about the agility and cost of change.	L1	CO3	08

	b	Write the names of the principles that guide each framework activity.	L1	CO3	07
	c	What are the principles that guide the software process.	L1	CO3	05
		OR			
Q. 06	a	What is Extreme Programming(XP) and Industrial XP(IXP).	L1	CO3	08
	b	Explain about the construction principles in detail.	L2	CO3	07
	c	Write about the other agile process models.	L1	CO3	05
		Module-4			
Q. 07	a	What is project management. What is the importance of project management.	L1	CO4	08
	b	What are the different activities covered by software project management.	L1	CO4	07
	c	Write about traditional versus modern project management practices.	L1	CO4	05
		OR			
Q. 08	a	What is project management life cycle. Describe each phase of it in detail.	L1	CO4	08
	b	Define project success and failure.	L1	CO4	07
	c	Write about some ways of categorizing software projects.	L1	CO4	05
		Module-5			
Q. 09	a	Define software quality. Write about the place of software quality in project management.	L1	CO5	08
	b	Compare product versus process quality management.	L4	CO5	07
	c	What are the various techniques to enhance software quality.	L1	CO5	05
		OR			
Q. 10	a	What is software quality testing. Define software reliability in detail.	L1	CO5	08
	b	Define quality plans. Write various steps and aspects of it.	L1	CO5	07
	c	Write about the different process capability models.	L1	CO5	05

*Bloom's Taxonomy Level: Indicate as L1, L2, L3, L4, etc. It is also desirable to indicate the COs and POs to be attained by every bit of questions.

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Sixth Semester B.E. Degree Examination

Software Engineering & Project Management

TIME:03Hours **Max.Marks:100**

Note: Answer any **FIVE** full questions, choosing at least **ONE** question from each **MODULE**.

		Module-1	*Bloom's Taxonomy Level	COs	Marks
Q.01	a	Define Software Engineering. Explain Software code of Ethics.	L2	CO1	(08 Marks)
	b	Explain the key challenges of Software Engineering.	L2	CO1	(08 Marks)
	c	Define i) Feasibility study ii) Functional Requirement.	L1	CO1	(04 Marks)
		OR			
Q.02	a	Illustrate the Waterfall Model.	L2	CO1	(08 Marks)
	b	Explain the Requirement Elicitation and Analysis Process.	L2	CO1	(08 Marks)
	c	Discuss the fundamental activities of Software Engineering.	L2	CO1	(04 Marks)
		Module-2			
Q.03	a	Discuss the importance of Requirement Engineering and list the Tasks involved in it.	L2	CO2	(10 Marks)
	b	Explain the activities and steps involved in Negotiation Software Requirements.	L2	CO2	(10 Marks)
		OR			
Q.04	a	Why Requirement Elicitation is difficult? Discuss the Problems in Requirement Elicitation.	L2	CO2	(10 Marks)
	b	Illustrate the UML models that supplement the use cases.	L2	CO2	(10 Marks)
		Module-3			
Q.05	a	Discuss in detail of agile process model.	L2	CO3	(08 Marks)
	b	Elaborate the framework activity of Agile model.	L2	CO3	(08 Marks)
	c	Infer the toolset of agile process.	L2	CO3	(04 Marks)
		OR			
Q.06	a	Define agility. Explain the core Principles of Agile process.	L2	CO3	(08 Marks)
	b	Summarize the Extreme Programming(XP) of Agility.	L2	CO3	(08 Marks)
	c	Briefly explain the Software Engineering Knowledge.	L1	CO3	(04 Marks)
		Module-4			
Q.07	a	Define the Project. Discuss the importance of Project Management.	L2	CO4	(08 Marks)
	b	Illustrate the Project Management life cycle.	L2	CO4	(08 Marks)
	c	Interpret the Contract Management in Project Management.	L3	CO4	(04 Marks)
		OR			

Q.08	a	Differentiate between Traditional Vs Modern Project Management Practices.	L2	CO4	(08 Marks)
	b	Explain different ways of categorizing Software project.	L2	CO4	(08 Marks)
	c	Infer the Methods of Project Management.	L2	CO4	(04 Marks)
Module-5					
Q.09	a	Interpret the Importance of Software Quality in Software Planning.	L2	CO5	(08 Marks)
	b	List and Explain the Techniques to enhance Software Quality and Software Reliability.	L2	CO5	(08 Marks)
	c	Write the Sequencing and Scheduling Algorithm.	L1	CO5	(04 Marks)
OR					
Q.10	a	Define ISO 9126. List and Explain its characteristics.	L2	CO5	(08 Marks)
	b	Explain the Following i)Quality Management. ii) Quality plan	L2	CO5	(08 Marks)
	c	Compare Product Quality and Process Quality.	L2	CO5	(04 Marks)

*Bloom's Taxonomy Level: Indicates as L1, L2, L3, L4, etc. It is also desirable to indicate the Cos and Pos to be attained by every bit of questions.

Model Question Paper-1/2 with effect from 2021(CBCS Scheme)

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Sixth Semester B.E. Degree Examination

SOFTWARE ENGINEERING & PROJECT MANAGEMENT

TIME: 03 Hours **Max. Marks: 100**

Note: 01. Answer any **FIVE** full questions, choosing at least **ONE** question from each **MODULE**.

		Module -1	*Bloom's Taxonomy Level	COs	Marks
Q.01	a	Explain the different software application domains.	L2	CO1	10
	b	Explain the different attributes are encountered in the vast majority of WebApps.	L2	CO1	10
		OR			
Q.02	a	Describe the five activities that a generic process framework for software engineering encompasses.	L2	CO1	10
	b	Compare and contrast Waterfall model and spiral model.	L2	CO1	10
		Module-2			
Q. 03	a	Explain the different tasks which Requirements Engineering encompasses.	L2	CO2	10
	b	Write the UML activity diagrams for eliciting requirements.	L2	CO2	10
		OR			
Q.04	a	Explain the different rules of thumb that should be followed when creating the analysis model.	L2	CO2	10
	b	With an example, describe the Class-Responsibility-Collaborator (CRC) modeling.	L2	CO2	10
		Module-3			
Q. 05	a	Explain the key traits must exist among the people on an agile team and the team itself.	L2	CO3	10
	b	With a neat diagram, explain the Extreme Programming process.	L2	CO3	10
		OR			
Q. 06	a	Effective communication is among the most challenging activities that you will confront. Justify this statement by discussing about the principles that apply for communication within a software project	L3	CO3	10
	b	Explain any two agile process models other than XP that have been proposed	L2	CO3	10
		Module-4			
Q. 07	a	What are the characteristics of a project? How software projects are different from other projects?	L2	CO4	10
	b	Explain the different activities involved in project management.	L2	CO4	10

		OR			
Q. 08	a	With relevant diagram, explain the activities covered by project management.	L2	CO4	10
	b	Write short notes on : i) SMART objectives ii) Management control with project control cycle.	L2	CO4	10
		Module-5			
Q. 09	a	Explain Product operation qualities, revision qualities and transition qualities.	L2	CO5	10
	b	Explain the six software quality characteristics identified by ISO-9126.	L2	CO5	10
		OR			
Q. 10	a	Explain the different levels of Capability process models.	L2	CO5	10
	b	What are the advantages of carrying out Inspection? List the general principles to be followed during inspection.	L2	CO5	10

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Model Question Paper (CBCS Scheme)
SIXTH Semester B.E. Degree Examination

SOFTWARE ENGINEERING AND PROJECT MANAGEMENT

TIME: 03 Hours **Max. Marks: 100**

Note: Answer any **FIVE** full questions, choosing at least **ONE** question from each **MODULE**.

		Module -1	Bloom's Taxonomy Level	Marks
Q.01	a	Define process and explain generic process framework for software engineering.	L2	10
	b	Demonstrate the waterfall model spiral and model with real time example.	L3	10
		OR		
Q.02	a	Explain characteristics that differentiate WebApps from other software.	L2	10
	b	Discuss the David Hooker's seven principles of software engineering practice.	L2	10
		Module-2		
Q. 03	a	Develop a UML use case diagram for home security function.	L3	10
	b	Narrate the steps to be followed for building the requirement model.	L2	10
		OR		
Q.04	a	Explain the steps to be followed for validating requirements in detail.	L2	10
	b	Draw the Swimlane diagram for access camera surveillance via the Internet and explain its functions.	L2	10
		Module-3		
Q. 05	a	Explain Adaptive Software Development (ASD) Model with sketch.	L2	10
	b	Narrate the core principles can be applied to the framework in all software process.	L2	10
		OR		
Q. 06	a	Elucidate the concepts of extreme programming (XP) with its functional diagram	L2	10
	b	What is design modelling? Explain design modelling principles.	L2	7

		Module-4	Bloom's Taxonomy Level	Marks
Q. 07	a	Explain the software development life cycle with block diagram	L2	10
	b	List the characteristics of projects and show the differences between Contract management and project management	L2	10
		OR		
Q. 08	a	Discuss the ways of categorizing the software projects with real time examples.	L2	10
	b	Elucidate the concepts in activity planning in software project management.	L3	10
		Module-5		
Q. 09	a	Explain Quality Management Systems with Principles of BS EN ISO 9001:2000	L1	10
	b	Explain Structured programming and clean-room software development.	L2	10
		OR		
Q. 10	a	Identify how Automation testing is preferred over manual testing, with different tools used for Automation Testing.	L2	10
	b	Explain the place of software quality in project planning	L1	10

Model Question Paper-(CBCS Scheme)

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Sixth Semester B.E. Degree Examination
SOFTWARE ENGINEERING AND PROJECT MANAGEMENT

TIME: 03 Hours **Max. Marks: 100**

Note: Answer any **FIVE** full questions, choosing at least **ONE** question from each **MODULE**.

		Module -1	Level	COs	Marks
Q.01	a	Define software engineering. Explain characteristics of software.	L1	CO1	5
	b	With a neat diagram, explain the waterfall model of software development process	L2	CO1	10
	c	Explain Umbrella activities in software engineering development process	L1	CO1	5
		OR			
Q.02	a	With a neat diagram, explain Bohem's spiral model. List its advantage and disadvantages	L1	CO1	8
	b	Define process framework? Explain generic process framework activities.	L2	CO1	7
	c	Explain concurrent development models with a neat diagram	L1	CO1	5
		Module-2			
Q. 03	a	Define requirement engineering. Explain major tasks of requirement engineering.	L1	CO2	7
	b	Explain elements of analysis model with neat diagram.	L2	CO2	7
	c	Illustrate scenario based modeling with safe home surveillance example.	L3	CO2	6
		OR			
Q.04	a	Explain requirement model with neat diagram.	L2	CO2	8
	b	Briefly explain data modeling.	L2	CO2	6
	c	Draw and explain class diagram for floor plan.	L1	CO2	6
		Module-3			
Q. 05	a	What is agility? How does cost of change reduce from conventional software development? Explain the principles of agile software development.	L2	CO3	10
	b	Explain in detail: a) Association and dependency b) CRC modeling.	L2	CO3	5
	c	Illustrate in detail about XP programming? How IXP incorporates new practices to ensure project success.	L3	CO3	5

		OR			
Q. 06	a	Explain feature driven development with a neat diagram.	L2	CO3	8
	b	With a neat diagram explain adaptive software development	L2	CO3	5
	c	Narrate the core principles can be applied to the framework in all software process.	L3	CO3	7
		Module-4			
Q. 07	a	Why software project management is crucial in ensuring the success of software development projects.	L2	CO4	8
	b	What is contract management? How does it contribute to the successful execution and delivery of software projects?	L2	CO4	6
	c	Discuss the ways of categorizing the software projects with real time examples	L3	CO4	6
		OR			
Q. 08	a	Explain with necessity block diagram how a project management life cycle (PMC) drives a software development lifecycle.	L2	CO4	8
	b	Elucidate the concepts in activity planning in software project management	L3	CO4	7
	c	List the different types of stakeholders responsible for successful completion of software project.	L3	CO4	5
		Module-5			
Q. 09	a	Explain SEI capability maturity model (CMM).	L2	CO5	5
	b	Explain Structured programming and clean-room software development.	L2	CO5	8
	c	Explain Quality Management Systems with Principles of BS EN ISO 9001:2000	L2	CO5	7
		OR			
Q. 10	a	Explain metrics used to check the reliability of software product,	L2	CO5	6
	b	Identify how Automation testing is preferred over manual testing, with different tools used for Automation Testing.	L2	CO5	8
	c	Explain the place of software quality in project planning	L2	CO5	6

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Sixth Semester B.E. Degree Examination

Subject Title Software Engineering and Project Management

TIME: 03 Hours **Max. Marks: 100**

Note: Answer any **FIVE** full questions, choosing at least **ONE** question from each **MODULE**.

		Module -1	*Bloom's Taxonomy Level	COs	Marks
Q.01	a	What is Software, Software Engineering? List the applications of software	CO1	L2	06M
	b	Discuss the umbrella of activities in software Engineering process	CO1	L2	07M
	c	Demonstrate the Evolutionary model and Rapid Application model with diagram.	CO1	L2	07M
		OR			
Q.02	a	Explain the use of a framework activity with neat diagram.	CO1	L2	06M
	b	What do you mean by Component based development in software development process?	CO1	L2	07M
	c	Explain the Spiral model with diagram and write advantages and disadvantages.	CO1	L2	07M
		Module-2			
Q. 03	a	Explain Domain Analysis with suitable diagram.	CO2	L2	06M
	b	Explain the steps required to establish the groundwork for an understanding of software requirements.	CO2	L2	07M
	c	Explain the principles that guide the software engineering practice.	CO2	L2	07M
		OR			
Q.04	a	Explain XP Process with a neat diagram.	CO2	L2	06M
	b	Define requirement engineering? Explain briefly the seven tasks of requirement engineering.	CO2	L2	07M
	c	Discuss the various principles that guide the Deployment activity.	CO2	L2	07M
		Module-3			
Q. 05	a	Explain XP Process with a neat diagram.	CO3	L2	06M
	b	Outline the various activities that are addressed by AUP during each iteration.	CO3	L2	07M
	c	Explain the following with a neat diagram: i. Adaptive Software Development Model ii. Scrum Model	CO3	L2	07M
		OR			
Q. 06	a	Discuss the six practices incorporated by IXP.	CO3	L2	06M
	b	Discuss the principles that guide the software process.	CO3	L2	07M
	c	Explain the Dynamic Systems Development Method with a neat diagram.	CO3	L2	07M
		Module-4			
Q. 07	a	With neat sketch illustrate software development activities recommended by ISO 12207	CO4	L2	05M

	b	Explain different phases of Project management life cycle and software development life cycle.	CO4	L2	07M
	c	Explain the Project control life Cycle of Management control.	CO4	L2	07M
		OR			
Q. 08	a	Explain classification of software projects with suitable diagram	CO4	L2	06M
	b	Illustrate some important differences between modern project management practices and traditional practices.	CO4	L2	07M
	c	List the activities involved in management and explain principal project management process.	CO4	L2	07M
		Module-5			
Q. 09	a	Explain five maturity levels of SEI CMM.	CO5	L2	06M
	b	Discuss V-Process model with suitable diagram.	CO5	L2	07M
	c	Explain the McCall model based on eleven attributes of the software.	CO5	L2	07M
		OR			
Q. 10	a	Discuss about ISO 9126.	CO5	L2	06M
	b	Discuss about 12 attributes of McCall's model.	CO5	L2	07M
	c	Explain Boehm's quality Model with suitable diagram.	CO5	L2	07M