

Model Question Paper-1/2 with effect from 2021(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			*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.

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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

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

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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