



## DEPARTMENT OF MCA

<b>Class</b>	: I MCA - II SEM	<b>AY ::</b> 2023-24
<b>Course Title</b>	: Software Engineering (21MC204)	
<b>Faculty</b>	: Mrs.M.Sunitha	<b>Branch:</b> MCA

## MODEL QUESTION BANK

### MODULE-1: THE SOFTWARE PROCESS

S.NO	QUESTION	CO	BL	MARKS
1.	Define Software and Explain Software Engineering process in detailed	1	1	12
2.	What is the nature of software? Discuss about the unique nature of WebApps	1	1,2	12
3.	Define Software Process? Explain about Software Engineering Practice?	1	1	12
4.	What is Myth? Discuss about various types of software related Myths	1	1,2	12
5.	Define Process Model? Explain about various types of process models in detailed	1	1,2	12
6.	Discuss in detail about Process Assessment and Improvement	1	2	12
7	Explain about Prescriptive Process Models and Specialized Process Models	1	2	12
8.	Define The Unified Process, Personal and Team Process Models	1	2	12
9.	Explain Process Technology and distinguish between Product and Process	1	2	12
10.	Discuss about Agile Development in detailed	1	2	12
11.	What is Agility? Explain Agile Process	1	1,2	12

### MODULE-2: MODELING CONCEPTS

S.NO	QUESTION	CO	BL	MARKS
1	Discuss about Requirements Engineering in detailed	2	1	12
2	How to define Requirements and understanding the requirements	2	1	12
3	Explain Requirements Engineering process for Eliciting the Requirements	2	1,2	12
4	Define Use Case and Discuss about how Use Cases are developed	2	1,2	12
5	Explain in detail about building the requirements model	2	2	12
6	Discuss about how Negotiating and Validating Requirements	2	2,1	12
7	Define Requirements Model and Explain in detail about Requirements Modeling	2	1,2	12
8	Define the Requirements Analysis process and its need	2	1	12
9	Discuss about UML Models in detailed with examples	2	2	12
10	What is Data Model? Explain Data Modeling Concepts	2	1	12
11	Discuss about Class- Based Modeling process	2	2	12



### MODULE-3: DESIGN CONCEPTS

S.NO	QUESTION	CO	BL	MARKS
1	What is Software Design? Explain the Design Concepts in detailed	3	1,2	12
2	How the Software is designed by using the Software Engineering process	3	1	12
3	Explain about the design process of a software	3	2	12
4	How to develop the Software design model	3	1	12
5	Define Software Architecture? Discuss about Architectural Design in detailed	3	1,2	12
6	Discuss about various Architecture Styles in detailed	3	2	12
7	Explain about Architectural Mapping Using Data Flow	3	2	12
8	What is Component design? Explain about Component-level Design in detailed	3	1,2	12
9	Explain about how designing Class-Based Components	3	2	12
10	Discuss about Component Level Design for WebApps	3	2	12
11	Explain about how Traditional Components are designed	3	2	12
12	Discuss about Component-Based Development	3	2	12

### MODULE-4: USER INTERFACE DESIGN, CODING AND TESTING

S.NO	QUESTION	CO	BL	MARKS
1	Define User Interface, Explain about various types of User Interface Design	4	1,2	12
2	Discuss about the Golden Rules for User Interface Design	4	2	12
3	Explain about User Interface Analysis and Design process	4	2	12
4	Discuss about Interface Analysis and Interface Design Steps	4	2	12
5	Discuss about fundamentals of component-based GUI	4	2	12
6	Explain about a) Coding b) Code review	4	2	6+6
7	Explain about c) Software Documentation d) Testing	4	2	6+6
8	Define Testing? Explain the importance of Testing Process	4	1,2	12
9	Explain the importance of white-box testing with example	4	2	12
10	Explain the importance of black-box testing with example	4	2	12
11	Distinguish between White-Box Testing and Black-Box Testing	4	2	12



## MODULE-5: SOFTWARE QUALITY & PRODUCT METRICS

S.NO	QUESTION	CO	BL	MARKS
1	Define Software Product and Explain about Product Metrics in detailed	5	1,2	12
2	Discuss about Software Quality and Explain Software Quality Management System.	5	2	12
3	Explain SEI CMM?	5	2	12
4	Discuss about the Metrics for Requirements Model	5	2	12
5	Discuss about the Metrics for Design Model	5	2	12
6	Discuss about the Metrics for source code	5	2	12
7	Explain in detail about metrics for Testing	5	2	12
8	Discuss about metrics for maintenance	5	2	12
9	Discuss about metrics for Process and Products	5	2	12
10	What is Software Quality? Explain about metrics for software quality	5	1,2	12

Name & Signature of the NECN Faculty	Name & Signature of the NECG Faculty	Name & Signature of the NECN HOD	Name & Signature of the NECG HOD

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