

Department of CSE (AI&ML)

B. Tech. Mid Question Bank (R22 Regulation)

Academic Year: 2024-2025 Sem: III

Subject Name: Software Engineering[22AM302PC]

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PART-A

MID-I Questions					
Q.No	Questions	Marks	BL	CO	Unit No
1	Define Software Engineering.	2M	L1	CO1	I
2	What changing nature of software?	2M	L1	CO1	I
3	Define CMMI.	2M	L1	CO1	I
4	List out phases in Agile methodology.	2M	L1	CO1	I
5	Define The evolving role of software.	2M	L1	CO1	I
6	What is Software Myths?	2M	L1	CO1	I
7	Differentiate between user requirement and system requirement.	2M	L4	CO2	II
8	List the various types of feasibility studies.	2M	L1	CO2	II
9	Write short note on requirements management.	2M	L1	CO2	II
10	What is user Interface Design?	2M	L1	CO2	II
11	Define interface specification.	2M	L1	CO2	II
12	Define software requirement document.	2M	L1	CO2	II
13	What are the goals of the design process?	2M	L1	CO3	III
14	What is meant by software review?	2M	L1	CO3	III
15	What is the purpose of a sequence diagram?	2M	L1	CO3	III
MID-II Questions					
16	Define building blocks of UML?	2M	L1	CO3	III
17	What is software architecture.	2M	L1	CO3	III
18	What are the 3 main elements of a class diagram?	2M	L1	CO3	III
19	Give the different categories of risks.	2M	L1	CO4	IV
20	Define black-box testing.	2M	L1	CO4	IV
21	How to calculate Software measurement?	2M	L2	CO4	IV
22	What Metrics for Process and Products?	2M	L1	CO4	IV
23	Define white-box testing.	2M	L1	CO4	IV
24	What is RMMM?	2M	L1	CO4	IV
25	Define risk refinement.	2M	L1	CO5	V
26	Define Risk management.	2M	L1	CO5	V
27	Difference between Verification and Validation Process.	2M	L4	CO5	V
28	What statistical software quality assurance?	2M	L1	CO5	V
29	What are the applications of Markov random fields?	2M	L1	CO5	V
30	What is MDP in machine learning?	2M	L1	CO5	V

PART-B

MID-I Questions					
Q.No	Questions	Marks	BL	CO	Unit No
1	Explain Software? types of softwares? Software Engineering?	4	L2	CO1	I
2	Explain different software myths with respect to management, customer and practitioner with neat case studies.	4	L2	CO1	I
3	Illustrate about generic process framework activities for software engineering.	4	L2	CO1	I
4	Describe about software engineering layers with a neat diagram.	4	L2	CO1	I
5	Differentiate between waterfall and Spiral Model.	4	L4	CO1	I
6	Explain spiral model with its merits and demerits.	4	L2	CO1	I
7	Summarize the Design Principles of software engineering.	8	L2	CO1	I
8	Explain the phased development life cycle.	8	L2	CO1	I
9	What is software process? What is need of software process improvement? Discuss capability maturity models.	8	L2	CO1	I
10	Describe non-functional requirements of software.	4	L2	CO2	II
11	Write short note on requirements specification.	4	L1	CO2	II
12	Sketch and explain Evolutionary model.	4	L3	CO2	II
13	Differentiate between functional and non-functional requirements.	4	L4	CO2	II
14	Explain about requirements elicitation and analysis.	4	L2	CO2	II
15	Explain about system requirements and user requirements.	4	L2	CO2	II
16	Write short note on requirements validation process.	8	L2	CO2	II
17	Explain briefly about Requirement Engineering Process with neat diagram.	8	L2	CO2	II
18	What is requirement engineering? State its process and illuminate the requirements of elicitation problem.	8	L2	CO2	II
19	Briefly Explain Software design process.	4	L2	CO3	III
20	Draw the sequence diagram for Passport Automation System	4	L2	CO3	III
21	Illustrate design quality in the context of design engineering.	4	L2	CO3	III
MID-II Questions					
22	Define UML? Explain conceptual model of UML.	4	L2	CO3	III
23	Define the term software requirement. Explain different types of software requirements.	4	L2	CO3	III
24	What is the use of an Activity diagram and draw an activity diagram for withdrawing money from a Bank ATM.	4	L2	CO3	III
25	List and explain the various software quality factors.	4	L2	CO4	IV
26	Interpret the art of debugging in software testing methodology.	4	L2	CO4	IV
27	What is the need of user interface? Explain user interface design steps.	4	L2	CO4	IV
28	What is Meant by Software Quality? Give an overview	4	L2	CO4	IV

	of various software Quality factors?				
29	What is SQA? Discuss in detail SQA Activities.	4	L2	CO4	IV
30	Discuss about the Metrics for software quality.	4	L2	CO4	IV
31	Define software testing. Explain different software testing strategies.	8	L2	CO4	IV
32	Explain in detailed about Black-Box and White-Box testing.	8	L2	CO4	IV
33	Contrast the validation testing with system testing.	8	L2	CO4	IV
34	Define Risk?How to manage Risk in Real time Software Applications?	4	L2	CO5	V
35	Analyze on the concept of risk projection.	4	L2	CO5	V
36	What is the need of software reviews? Explain.	4	L2	CO5	V
37	Illustrate reactive vs. proactive risk strategies in risk management.	4	L2	CO5	V
38	Deliberate the procedure of formal technical reviews in testing the software.	4	L2	CO5	V
39	Differences Between White box testing and Balck box testing?	4	L4	CO5	V
40	How far the risk refinement is useful in risk management.	8	L2	CO5	V
41	Describe the software quality assurance.	8	L2	CO5	V
42	Identify the importance of the ISO 9000 quality standards in improving software quality.	8	L2	CO5	V