Department of ELECTRONICS & COMMUNICATION ENGINEERING

B. Tech Mid Question Bank (R20 Regulation)

Academic Year: 2024 - 2025
Semester: VII

Subject Name: SOFTWARE ENGINEERING [22CS405PC]

Faculty Name: Bhagyashree B. M

PART-A

Q.No	Questions	Marks	BL	CO	Unit No
1	What is Software?	2M	L2	C01	I
2	Explain various characteristics of software	2M	L2	C01	I
3	What are the merits of the waterfall model?	2M	L2	C01	I
4	What is meant by Software Engineering?	2M	L3	C01	I
5	What are the various categories of Software?	2M	L3	C01	I
6	What are the Challenges in Software?	2M	L2	C01	I
7	State Characteristics of SRS document	2M	L2	C02	II
8	Discuss about class-based modelling	2M	L2	C02	II
9	Discuss analysis patterns of requirement engineering?	2M	L2	C02	II
10	Identify goals of elicitation phase?	2M	L2	C02	II
11	Explain the process of validating requirements?	2M	L3	C02	II
12	Explain 'Association' relationship of class diagrams with an example?	2M	L3	C02	II
13	List out software quality attributes	2M	L2	C03	III
14	List out the components of a Software Design Model?	2M	L2	C03	III
15	Define Abstraction ant types of abstraction?	2M	L2	C03	III
16	Define Refactoring and Aspect.	2M	L2	C03	III
17	What are the object oriented design concepts.	2M	L2	C03	III
18	What are the advantages of Modularization	2M	L3	C03	III
19	State Golden rules of user interface design	2M	L3	C04	IV
20	Why interface analysis is critical in UI development	2M	L2	C04	IV
21	What are the steps for user interface analysis and design	2M	L2	C04	IV
22	Draw the architecture for user interface design process	2M	L2	C04	IV
23	What is interface analysis	2M	L3	C04	IV
24	What are the steps required for interface design steps	2M	L3	C04	IV
25	Who does the software testing and need of it	2M	L2	C05	V
26	Differentiate between Validation and Verification of a Software Product?	2M	L2	C05	V

27	Discuss testing strategy for small and large software testing	2M	L1	C05	V
28	Define Software Testing? List out the advantages of Software Testing?	2M	L2 L1	C05	V
29	Explain how Unit testing of a Software System is performed?	2M	L2	C05	V
30	List out the outcome of unit testing	2M	L2	C05	V

PART-B

Q.No	Questions	Marks	BL	CO	Unit No
1	Discuss about changing nature of software?	3	L2	C01	I
2	Explain about the various myths about the software	3	L2	C01	I
3	Explain in detail about incremental process models?	3	L2	C01	I
4	Discuss about personal and team process Models?	3	L3	C01	I
5	Software engineering is a layered approach – Explain with a neat diagram.	3	L3	C01	I
6	Define CMMI. Explain in detail with neat diagrams representing different levels	3	L2	C01	I
7	Briefly explain about advantages of prototype model with a neat diagram	6	L2	C01	I
8	Interpret about personal and team process models in software development	6	L2	C01	I
9	Elaborate about the unified process model with a neat diagram	6	L2	C01	I
10	Write in detail about Requirements Management?	3	L2	C02	II
11	Write about object Models for Software Development.	3	L2	C02	II
12	Explain in detail about design concept?	3	L2	C02	II
13	Write about design process and design quality?	3	L2	C02	II
14	Explain in detail the Requirement Elicitation & Analysis	3	L2	C02	II
15	Explain about software design quality attributes?	3	L3	C02	II
16	Illustrate about software requirements document with an example	6	L3	C02	II
17	Discuss about functional and non-functional requirements with an example	6	L2	C02	II
18	Write short note on requirements validation process	6	L2	C02	II
19	Explain in detail about design concept?	3	L2	C03	III
20	List any four technical criteria for good design	3	L3	C03	III
21	Explain about Software Architecture?	3	L3	C03	III
22	Explain about conceptual Model of UML?	3	L2	C03	III
23	Explain about Sequence Diagrams?	3	L2	C03	III

24	Define Design Process. Explain about Collaboration diagrams?	3	L2	C03	III
25	Analyse about unit testing and integration testing.	3	L1 L2	C04	IV
26	Briefly explain about debugging process with a neat diagram	3	L2	C04	IV
27	Describe about black-box testing with an example.	3	L2	C04	IV
28	Differentiate between reactive vs proactive risk strategies	3	L1	CO4	IV
29	Distinguish between black box and white box testing by taking an example software application of your choice	3	L2	CO4	IV
30	How could you achieve 100% testing coverage? Explain	3	L2	CO4	IV
31	Distinguish between black box and white box testing by taking an example software application of your choice	6	L1	CO4	IV
32	How could you achieve 100% testing coverage? Explain	6	L3	CO4	IV
33	What do you understand by software testing and how can you decide that the testing can be stopped.	6	L2	C04	IV
34	Discuss about the important activities involved in management of software quality assurance.	3	L2	CO5	V
35	Briefly explain about goals attributes and metrics of software quality assurance.	3	L2	CO5	V
36	Describe about the measures of reliability and safety in software quality assurance.	3	L1	CO5	V
37	Analyze about the iso 9000 quality standards	3	L2	CO5	V
38	Write short note on RMMM plan	3	L2	CO5	V
39	What are the various categories of risks? Give an overview about Risk Management.	3	L2	CO5	V
40	Write short note on RMMM plan	6	L2	CO5	V
41	What are the various categories of risks? Give an overview about Risk Management. [	6	L2	CO5	V
42	What is the need of Risk Management and explain various activities connected to Risk Management?	6	L3	CO5	V