MALLA REDDY UNIVERSITY
(Telangana State Private Universities Act No. 13 of 2020 &
G.O.Ms. No. 14, Higher Education (UE) Department)

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School of Engineering
Question Bank
I Year B.Tech – II Semester 2024-25
Design Thinking for Application Development(MR24-1CS0108)

Q.No.	Question	Course Outcome	Question Level	Marks	Section	Unit
1.	What is Design Thinking? Why is it important in Software Development?	CO1	Easy	8	Section-I	1
2.	Write about tools and Principles of Design thinking?	CO1	Medium	8	Section-I	1
3.	List the reasons when Design Thinking does not work? Explain.	CO1	Easy	8	Section-I	1
4.	How will you justify that the Design Thinking Process is Non-Linear?	CO1	Medium	8	Section-I	1
5.	Discuss the Evolution of Design Thinking.	CO1	Easy	8	Section-I	1
6.	Explain Design Thinking Process in detail.	CO1	Easy	8	Section-I	1
7.	Describe Icebreaker Activities and give examples.	CO1	Complex	8	Section-I	1
8.	What is the purpose of using Icebreakers and Explain using examples.	CO1	Medium	8	Section-I	1
9.	Differentiate Group and Team? What are the series of activities in a Group Work?	CO1	Complex	8	Section-I	1
10.	How does the group work enhance the quality of outcomes in any business application?	CO1	Complex	8	Section-I	1
11.	Explain research methods for understanding users.	CO2	Medium	8	Section-II	2

No.	Question	CO	Difficulty	Marks	Section	
12.	*What are the tools for the empathy? Explain in detail.*	CO2	Medium	8	Section-II	2
13.	Explain about Journey maps.	CO2	Medium	8	Section-II	2
14.	Write about Problem Definition?	CO2	Medium	8	Section-II	2
15.	Explain. (i)User interviews.	CO2	Easy	4	Section-II	2
	(ii)Defining Problems.			4		
16.	Explain the procedure to Identifying a problem	CO2	Complex	8	Section-II	2
17.	Discuss about framing problems	CO2	Medium	8	Section-II	2
18.	How to create empathy maps and POV statements?	CO2	Medium	8	Section-II	2
19.	Describe the steps of Effective User Interviews.	CO2	Easy	8	Section-II	2
20.	Explain the procedure of Structuring User Interview Questions.	CO2	Medium	8	Section-II	2
21.	Explain in brief about ideation techniques used in design thinking.	CO3	Medium	8	Section-III	3
22.	What are different cognitive biases in design thinking and Explain in brief about how to overcome cognitive bias.	CO3	Complex	8	Section-III	3
23.	Explain in brief about techniques to foster creativity throughout the process.	CO3	Complex	8	Section-III	3
24.	Explain in detail about Brainstroming and role of Brainstroming in design thinking.	CO3	Medium	8	Section-III	3
25.	Explain in brief about fundamentals of prototyping and its importance in software development.	CO3	Medium	8	Section-III	3
26.	Explain in detail about SCAMPER method and Mindmapping in Design thinking.	CO3	Easy	8	Section-III	3
27.	Explain in detail about low fidelity prototypes in design thinking process.	CO3	Medium	8	Section-III	3
28.	Explain in detail about group brainstroming.	CO3	Medium	8	Section-III	3
29.	Explain the key benefits of prototyping in application Development and Write in brief about best practices and tools for prototyping.	CO3	Medium	8	Section-III	3

30.	Explain step by step process for creating low fidelity prototypes.	CO3	Medium	8	Section-III	3
31.	Describe the steps involved in user testing. Why is defining objectives crucial before conducting a test?	CO4	Easy	8	Section-IV	4
32.	Explain A/B testing in the context of design thinking. How can it help in making data-driven design decisions?	CO4	Easy	8	Section-IV	4
33.	Describe the Think-Aloud Protocol method. What are its advantages and limitations in user testing?	CO4	Medium	8	Section-IV	4
34.	How does contextual inquiry differ from remote testing? Explain with examples of situations where each method is preferable.	CO4	Medium	8	Section-IV	4
35.	Explain the key steps in iterative testing and feedback. How does repeating the process enhance the final product?	CO4	Medium	8	Section-IV	4
36.	Describe how usability testing and surveys contribute to the feedback process in design thinking.	CO4	Medium	8	Section-IV	4
37.	Explain the key principles of Agile methodologies. How do these principles contribute to the success of software development projects?	CO4	Complex	8	Section-IV	4
38.	How does integrating Agile and Design Thinking improve the product development process? Provide examples to support your answer.	CO4	Complex	8	Section-IV	4
39.	What is the significance of stakeholder confidence in iterative testing? How does continuous refinement improve trust in the design process?	CO4	Medium	8	Section-IV	4
40.	Discuss how cross-functional teams play a role in both Agile and Design Thinking. Why is collaboration important in these methodologies?	CO4	Complex	8	Section-IV	4
41.	What is advanced prototyping? Explain key elements and advantages of advanced prototyping.	CO5	Easy	8	Section-V	5
42.	What is interactive prototype? Explain in detail.	CO5	Medium	8	Section-V	5

43.	Write about user flow diagrams. Explain the benefits of combining Interactive Prototypes and Userflow Diagrams?	CO5	Medium	8	Section-V	5
44.	What is System Thinking and Explain in brief about the key principles of system thinking?	CO5	Medium	8	Section-V	5
45.	Explain the term "Understanding the bigger picture" in the context of system thinking.	CO5	Complex	8	Section-V	5
46.	Why we need digital tools in Design Thinking and Explain its applications?	CO5	Complex	8	Section-V	5
47.	Explain –Sketch	CO5	Complex	3	Section-V	5
	-Figma			3		
	-InVision			2		
48.	Describe about the key features of Collaboration and Explain how this feature can be used with digital tools?	CO5	Medium	8	Section-V	5
49.	Explain in brief about the tools used in Project management?	CO5	Medium	8	Section-V	5
50.	Explain Project managment tool MIRO with a neat diagram?	CO5	Medium	8	Section-V	5