



School of Engineering Question Bank I Year B.Tech – II Semester 2024-25 UI Frameworks (MR24-1CS0105)

Q.No.	Question	Course Outcome	Question Level	Marks	Section	Unit
1.	What is React and why is it used? Explain the features of React.	C01	Easy	8	Section-I	1
2.	What is React component? Explain Class component and Functional component with examples.	C01	Medium	8	Section-I	1
3.	Write the steps involved in React installation.	C01	Easy	8	Section-I	1
4.	Explain how State is declared in React with an example.	C01	Medium	8	Section-I	1
5.	What are Props in React and how they differ from React States?	C01	Easy	8	Section-I	1
6.	Explain the types of forms in React. Write a code to create a basic form in React.	C01	Medium	8	Section-I	1
7.	Explain phases of React Component Lifecycle.	C01	Complex	8	Section-I	1
8.	Explain React Props with an example.	C01	Medium	8	Section-I	1
9.	What is React JSX? What are the advantages of React JSX? Write a program using React JSX.	C01	Easy	8	Section-I	1
10.	What is Virtual DOM? How virtual DOM is different from actual DOM?	C01	Easy	8	Section-I	1
11.	How to define an event in React? Write a program for creating an "onClick" event.	C02	Medium	8	Section-II	2
12.	Write a program to display the following ordered list in React: a. HTML b. Java c. JavaScript d. SQL e. Python	C02	Medium	8	Section-II	2
13.	Explain the purpose of Keys in React lists with an example.	C02	Complex	8	Section-II	2
14.	What is the difference between key and ref in React?	C02	Easy	8	Section-II	2

15.	What is React Router? Explain the purpose of React Router with an example.	C02	Complex	8	Section-II	2
16.	Write a program to create a table in React.	C02	Complex	8	Section-II	2
17.	What are React Hooks? Write a program using useState Hook in React.	C02	Medium	8	Section-II	2
18.	What is React Redux? Explain the components of Redux architecture.	C02	Complex	8	Section-II	2
19.	Explain the concept of Higher-Order Components (HOCs) in React.	C02	Medium	8	Section-II	2
20.	What is the importance of code splitting in React? Explain code splitting with an example.	C02	Complex	8	Section-II	2
21.	What is Angular? Explain the features of Angular.	C03	Easy	8	Section-III	3
22.	State the differences between Angular and React.	C03	Easy	8	Section-III	3
23.	Explain how to generate a component in Angular with an example.	C03	Medium	8	Section-III	3
24.	Write the classification of Angular directives. Explain ngIf directive with an example.	C03	Medium	8	Section-III	3
25.	Explain the following structural directives in Angular with an example. i. ngFor ii. ngSwitch	C03	Medium	8	Section-III	3
26.	Write down the steps for Routing in Angular and write a program to create a simple webpage using Angular Router.	C03	Complex	8	Section-III	3
27.	Write down the installation steps of Angular.	C03	Easy	8	Section-III	3
28.	Write a program in Angular using ngStyle directive.	C03	Medium	8	Section-III	3
29.	What are attribute directives in Angular? Write a program in Angular using ngClass directive.	C03	Medium	8	Section-III	3
30.	Write a program in Angular to display the message "Welcome to Angular" and style the text by applying any three different CSS styles.	C03	Medium	8	Section-III	3
31.	Write the differences between template driven forms and Reactive forms in Angular.	C04	Easy	8	Section-IV	4
32.	Write a program to create a Template driven form in Angular.	C04	Medium	8	Section-IV	4
33.	Write a program to create a Reactive form in Angular.	C04	Complex	2	Section-IV	4
34.	Define Angular Pipes. Explain built in Angular pipes with examples.	C04	Medium	4	Section-IV	4
35.	Write a program using the following pipes in Angular: a) Lowercase pipe	C04	Medium	4	Section-IV	4

	b) Uppercase pipe c) Date pipe d) Currency pipe					
36.	Write a program to create a custom pipe in Angular.	C04	Medium	8	Section-IV	4
37.	Explain Angular services and Dependency injections.	C04	Complex	8	Section-IV	4
38.	What are Angular HTTP services? Explain HTTP services.	C04	Medium	8	Section-IV	4
39.	Explain the core parts of Angular HTTP request services.	C04	Medium	8	Section-IV	4
40.	Write a program using the following pipes in Angular: a) Percent pipe b) Decimal pipe c) Slice pipe	C04	Medium	8	Section-IV	4
41.	What is Tkinter? Write the steps to create a simple window using Tkinter.	C05	Easy	8	Section-V	5
42.	Define Widget in Tkinter. Write a python program to create the following widgets: a. Label Widget b. Button Widget	C05	Medium	8	Section-V	5
43.	Explain the importance of Entry widget and CheckButton widget with an example.	C05	Medium	8	Section-V	5
44.	Define Geometry Manager classes and list the types of Geometry Manager classes. Explain any one type with an example.	C05	Complex	8	Section-V	5
45.	Explain grid() Geometry class with an example	C05	Complex	8	Section-V	5
46.	Explain how events are handled in Tkinter with an example program.	C05	Complex	8	Section-V	5
47.	Write a python program to create the following widgets in Tkinter: a. RadioButton Widget b. List Widget	C05	Medium	8	Section-V	5
48.	Write a program to create a scroll bar widget in Tkinter.	C05	Medium	8	Section-V	5
49.	Write a program to design a Text Widget and Message Widget using Tkinter.	C05	Medium	8	Section-V	5
50.	What is a GUI? List the Python libraries available for designing a GUI. Write a program to display "Hello world!!" message in Tkinter.	C05	Easy	8	Section-V	5