

Code: 20IT3602

III B.Tech - II Semester – Regular Examinations – JUNE 2023**MODERN WEB APPLICATIONS
(INFORMATION TECHNOLOGY)**

Duration: 3 hours

Max. Marks: 70

Note: 1. This paper contains questions from 5 units of Syllabus. Each unit carries 14 marks and have an internal choice of Questions.

2. All parts of Question must be answered in one place.

BL – Blooms Level

CO – Course Outcome

			BL	CO	Max. Marks
UNIT-I					
1	a)	What is spread operator in ES6? Explain how to create array literals with spread operator with example.	L1	CO1	7 M
	b)	“React is primarily concerned with the view aspects of UI”. Interpret your answer with React application structure.	L2	CO1	7 M
OR					
2	a)	Explain the following concepts i) let and const in ES6 ii) DOM iii) JSON Data format	L2	CO1	7 M
	b)	Explain in what way React components are created using JSX. Explain with an example.	L2	CO2	7 M

UNIT-II					
3	a)	Explain form validation in ReactJS with a suitable example.	L2	CO2	7 M
	b)	Differentiate controlled and uncontrolled components in terms of updating the state in the React forms.	L2	CO2	7 M
OR					
4	a)	Develop a React application to format the data as JSON.	L3	CO2	7 M
	b)	What is Routing in React? Explain how to create and redirect to Router in React application.	L2	CO2	7 M
UNIT-III					
5	a)	Explain the following npm commands i) npm init ii) npm install iii) npm search	L2	CO3	7 M
	b)	Implement NodeJS application to call a series of update callbacks over x,y and z variables at various time intervals.	L3	CO3	7 M
OR					
6	a)	Differentiate Synchronous and Asynchronous File I/O operations in Node JS with example application.	L2	CO3	7 M
	b)	Develop a basic HTTP web server in NodeJS to show a static web page in browser.	L3	CO3	7 M

UNIT-IV

7	a)	What is a Route in ExpressJS and also explain how to configure Routes in ExpressJS with an example application.	L2	CO3	7 M
	b)	Implement the following operations using ExpressJS response object i) Sending HTTP status codes ii) Sending JSON data iii) Sending a file	L3	CO3	7 M

OR

8	a)	Implement an ExpressJS application to render user profile information using ejs template script.	L3	CO3	7 M
	b)	Develop an ExpressJS application to apply bodyParser middleware for handling POST body data.	L3	CO3	7 M

UNIT-V

9	a)	Explain how to insert documents into mongodb collection with an example application.	L2	CO4	7 M
	b)	Differentiate find() and findOne() methods of Collection object to retrieve the documents from MongoDB collection with an example.	L3	CO4	7 M

OR

10	a)	By make use of nodeJS mongodb module, explain how to connect with mongodb collection with an example.	L3	CO4	7 M
	b)	List and explain more commonly used query object operators that define the result set returned by MongoDB requests.	L2	CO4	7 M