Lab	Type	Practical
I.		**Revision of JavaScript and ES6**
LAB-1	A	1. WAP to demonstrate the use of various inbuilt string functions like charAt(), charCodeAt(), startsWith(), endsWith(), includes(), indexOf(), lastIndexOf(), match(), repeat(), replace("", ""), search(), split(), substr(start, length), substring(start, end), toString(), trim().
	A	2. WAP to explore more inbuilt string functions like slice(), toLowerCase(), toUpperCase(), valueOf(), fromCharCode().
	A	3. WAP to create an array of countries, read values of an array from user and print it.
	B	4. WAP to read a numeric array from user and find maximum number from it.
	C	5. WAP to read an array from user and sort them in ascending order (without using inbuilt function).
LAB-2	A	6. WAP in JavaScript to print following patterns: (a) ***** ***** ***** ***** ***** (b) ***** * * * * * * * * ***** (c) * ** *** **** ***** (d) ***** **** *** ** *
	A	7. WAP to check whether the given number is prime or not.
	B	8. WAP to check whether the given number is palindrome or not.
	C	9. WAP to print prime numbers between the two given numbers.
LAB-3	A	10. WAP to print sum of first 'n' Natural number (sum =1 + 2 + 3+ … +n).
	A	11. WAP to check whether the given number is Armstrong or not.
	B	12. WAP to print the factors of given number.
	C	13. WAP to print the GCD of two number.
	C	14. WAP to print LCM of two numbers.

LAB-4	A A A A A B C	15. WAP to change background color on click of button. 16. WAP to recognize which mouse event is fired. 17. WAP to recognize which keyboard event is fired. 18. WAP for following effect: If the mouse is over heading, change font color to “red” and if the mouse goes out of the heading change it to “black”. 19. Write a javascript that handles following mouse events. Add necessary elements javaScript gives the key code for the key pressed. If the key pressed is "a","e","I","o","u" the script should announce that vowel is pressed. If the keypressed is alphabet (apart from aeiou) then alphabet is pressed. If the keypressed is in between 0-9 then number is pressed and in any other case display a message special symbol is pressed. 20. WAP to design a form using HTML and JavaScript that asks the user to enter his date of birth and on clicking the Calculate Button it calls the function that calculates how many days are left in your birthday.
LAB-5	A A A A	21. WAP to demonstrate callbacks in javascript. 22. WAP to demonstrate the concept of class in javascript. 23. Demonstrate the difference between let and var. 24. WAP to demonstrate the use of const keyword.
LAB-6	A A A A B B C	25. WAP to demonstrate the concept of Arrow functions. 26. WAP to demonstrate Arrow functions when we have only one argument. 27. WAP to demonstrate Arrow functions when we do not have argument. 28. WAP to demonstrate Multiple arrow function. 29. WAP to check whether the given number is prime or not using arrow function. 30. WAP to check whether the given number is palindrome or not using arrow function. 31. WAP to print prime numbers between the two given numbers using arrow function.
LAB-7	A A A A A B C	32. WAP to demonstrate use of various array methods like *push, pop,shift,unshift*. 33. WAP to demonstrate use of various array methods like *sort,reverse*. 34. WAP to demonstrate use of various array methods like *join,split*. 35. WAP to demonstrate use of various array methods like *include,find*. 36. WAP to demonstrate *every* function of ES6. 37. WAP to append object in array using Javascript. 38. WAP to perform insert, update and delete operation on a static array using Javascript.

LAB-8	A A A A B C	39. WAP to demonstrate *some* function of ES6. 40. WAP to create a numerical array containing number elements. You have to return a number greater than 50 using filter method. 41. WAP to create student name array and print each elements using ES6 for each method. 42. WAP to create numerical array and remove duplicate elements from the array using reduce method. 43. WAP to create a new array containing number of elements like color name in small letter (e.g. ['red', 'green', 'blue']) and convert each array element to Capitalized letter using map method. 44. WAP to perform CRUD operation on a static array using Javascript.
LAB-9	A A A A A B	45. WAP to demonstrate the use of object destructuring. 46. WAP to demonstrate the use of array destructuring. 47. WAP to demonstrate export module. 48. WAP to demonstrate import module. 49. WAP to demonstrate the spread operator. 50. WAP to combine two array using spread operator.(use numerical array)
II.	**Node Package Manager**	
LAB-10	A A A A	51. Install NPM (Node Pacakage Manager) 52. Demonstrate the use of NPM. 53. Demonstrate Node REPL. 54. WAP to hello world using nodejs
LAB-11	A A B C	55. Demonstrate Installing Module,Unistalling Module and Updating Module in NPM 56. Demonstrate the Continuation-passing style(CPS) 57. WAP to perform that given no is odd or even using Anonymous Function. 58. WAP to perform that given no is odd or even using Standard Callback Pattern.
III.	**ReactJS**	
LAB-12	A A A A A	59. Setting up react environment. 60. Hello world webapp using ReactJS. 61. Demonstrate the use of JSX. 62. WAP to create a simple class component in ReactJS. 63. WAP to create a simple function component in ReactJS.

LAB-13	A A A B	64. Create a function component in separate file and link with App.js 65. Demonstrate the ReactJS props. 66. Demonstrate the Event Handling in ReactJS. 67. WAP in ReactJS to display the element if it has attribute called is Display to be true (using conditional rendering).
LAB-14	A B B B C	68. Demonstrate the use of map method in ReactJS to display array. 69. Display Faculties stored in array using ReactJS. 70. Display Students stored in array using ReactJS. 71. Display Products stored in array using ReactJS. 72. Display Faculties, Students, Products stored in array using ReactJS with navigation.
LAB-15	A A A A B	73. Implementing Routing in ReactJS. 74. Develop basic website using 5 different component (pages) and implement Routing in it. (i.e. About, Contact etc…). 75. Demonstrate useState hook in ReactJS. 76. Demonstrate useEffect hook in ReactJS. 77. Print “Hello world” after every 5 seconds also have a state named count which updates when we click on the button.
IV.	**API using ReactJS**	
LAB-16	A A B B	78. Create a MockAPI online with following fields (FacultyID,FacultyName,FacultyExp,FacultyImage). 79. Perform CRUD operation on MockAPI using ReactJS. 80. WAP to create a simple calculator using ReactJS. 81. WAP to perform CRUD operation on array using ReactJS.
LAB-17	A A	82. WAP to Perform a POST Request in React With Fetch API 83. WAP to Perform a DELETE Request in React With Fetch API
LAB-18	A B C	84. Demonstrate CRUD operation using REST API. 85. Perform CRUD operation on multiple API (minimum 3) with routing for each api. 86. Perform CRUD operation on multiple API (minimum 10) with routing for each api.
LAB-19	A	87. Create a mini project using mockAPI.
LAB-20	A	88. Create a mini project using mockAPI.
V.	**NodeJS**	

LAB-21	A A A A A	89. Demonstrate the use of Node Package Manage (NPM). 90. Demonstrate "path" core module in NodeJS. 91. Demonstrate "fs" core module in NodeJS. 92. Demonstrate "child_process" core modules in NodeJS. 93. Demonstrate the use of EventEmmiter in NodeJS.
LAB-22	A B C	94. Create a hello world webapp using "http" core module in NodeJS. 95. Create a webapp with 5 pages like about,contact etc.. Using "http" core module in NodeJS. 96. Create a complete static webapp with minimum 10 pages using “http” core module in NodeJS.
LAB-23	A B C	97. Create a hello world webapp using ExpressJS. 98. Create a webapp with 5 pages like about,contact etc.. Using ExpressJS. 99. Create a complete static webapp with minimum 10 pages using ExpressJS.
LAB-24	A A A A	100. Demonstrate the use of middleware in Express. 101. Demonstrate the use of static middleware in Express. 102. Install MongoDB and MongoDBCompass. 103. Setup documents in MongoDB.
LAB-25	A A A B C	104. Install Mongoose library using NPM. 105. Demonstrate the use mongosee functions. 106. Create a Database using MongoDBCompass for faculty,student and products. 107. Create different database in MongoDB (minimum 5). 108. Create different database in MongoDB (minimum 10).
LAB-26	A B C	109. Create a restful CRUD API using NodeJS, Express and MongoDB for faculty,student and products. 110. Create a restful CRUD API using NodeJS, Express and MongoDB for library website. 111. Create a restful CRUD API using NodeJS, Express and MongoDB for eCommerce.