

(3 Hours)

(Total Marks: 80)

- N.B.:**
1. Question No.1 is compulsory.
 2. Answer any three out of the remaining questions.
 3. Assume suitable data if necessary.
 4. Figures to the right indicate full marks.

- Q1.** a) Explain HTTP and HTTPS protocol (10)
- b) You have been tasked to develop software for Hotel management. How will you divide functionality between the front end, back end, and database (10)
- Q2.** a) Explain different types of components in React JS with an example. (10)
- b) Write a program in ReactJS to print "Hello World" on the browser. (10)
- Q3.** a) Explain the Event loop in Javascript (10)
- b) With an example demonstrate the use of promise. (10)
- Q4.** a) Write a Node JS program for following: (10)
- i. Create a new file and add data into it.
 - ii. Append more data in the same file at the end of existing data.
 - iii. Read the file data without getting the buffer data.
 - iv. Rename the file.
 - v. Delete the file.
- b) Explain event handling in Nodejs (10)
- Q5.** a) Explain routing in Express JS along with an example. (10)
- b) Give a difference between XML and JSON (10)
- Q6.** Short note on: (Any 4) (20)
- a) REPL
 - b) React Props
 - c) JSX
 - d) Cookies
 - e) Session
