

(3 Hours)

(Total Marks: 80)

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

- Q1.** a) Explain REST API in detail. (10)
b) Compare XML and JSON. (10)
- Q2.** a) Explain React component life cycle. (10)
b) What are Buffers and Streams in NodeJs? Explain with an example. (10)
- Q3.** a) Explain asynchronous programming in detail. (10)
b) What is DNS? Explain working of DNS. (10)
- Q4.** a) What is NodeJS? Explain features of NodeJS. State different types of NodeJS Modules. (10)
b) Explain Arrow function in ES6 with an example. (10)
- Q5.** a) What are Refs? When to use Refs and when not to use Refs? (10)
b) Explain routing in ExpressJS along with an example. (10)
- Q6.** Short note on: (Any 4) (20)
- REPL
 - DOM
 - JSX
 - URL
 - NPM
