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## Bharati Vidyapeeth's

## Institute of Computer Applications and Management (BVICAM)

## A-4, Paschim Vihar, New Delhi-63

## SECOND SEMESTER [MCA] MODEL QUESTION PAPER

Paper Code: MCA-114 Subject: Full Stack Development **Time: 3 Hours** Maximum Marks: 60 Note: Attempt FIVE questions in all. Question No. 1 is compulsory and attempt one question from each unit. 1. Answer all the following questions briefly: - $2 \times 10 = 20$ Can you assign an anonymous function to a variable and pass it as an argument to another function? CO<sub>2</sub> (b) Illustrate the difference React and Angular? Determine the purpose of using AJAX when java script is performing the same (c) CO<sub>2</sub> task. CO<sub>3</sub> (d) Discuss the features of Mongo-DB. Discuss the purpose of getting react famous when there are other languages CO<sub>1</sub> (e) already available CO<sub>3</sub> (f) Describe the Interpolation and property binding in angular. Compare ECMA 6 with ECMA 5. CO4 (g) (h) Can you explain the difference between a collection and a document in MongoDB? CO<sub>4</sub> (i) Differentiate between Flux and Redux CO<sub>3</sub> CO<sub>3</sub> (j) Write a command to create a database and collection in MongoDB. UNIT - I 2. 5 CO<sub>1</sub> (a) How do you handle server-side rendering in a React application? Differentiate between a functional component and a class component in React (b) CO<sub>1</sub> with example. CO<sub>1</sub> 3. (a) Differentiate between a) states and props 5 b) a static component and a dynamic component in React. 5 CO1 (b) Explain the concept of a Sagas in Redux. **UNIT-II** 4. (a) Explain about controlled and uncontrolled components? 5 CO2 5 CO2 (b) Illustrate the working of REST API Design with HTTP. CO<sub>2</sub> 5. (a) Develop a single page application using react router. 5 CO2 List down the components of redux. Explain the term "Single source of truth"? (b)

6. (a) Demonstrate the advantage of Model View Controller (MVC).

Discuss 2-way data binding? Explain with example 2-way data binding with ng-(b) 5 CO3 model 7. 5 CO3 (a) How do you handle events in Angular form 5 CO3 (b) Illustrate the purpose of using "ngfor", with example. **UNIT - IV** 8. (a) Discuss the types of No-SQL databases 5 CO4 5 CO4 (b) Explain the scenarios to manipulate mongoDB document from Node.js. 5 CO4 9. (a) Discuss BSON in mongo DB. Explain the purpose of using BSON over JSON (b) While creating schema in Mongo-DB what are the points need to be taken in 5 CO4 consideration.