



**Model Paper - 2 B. C. A. (Regular)**

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**Subject:** Fundamentals of Full Stack Web Development      **Marks:** 25  
**Semester:** 6<sup>th</sup> Semester      **Academic Year:** 2025-26      **Seat No:**

**Q-1(A) Multiple Choice Questions.(Any 4) [4 marks]**



**Q-1 (B) Answer in Short(Any 4) [4 marks]**

1. Which hook is used for side effects in React?
  2. Which HTTP method is used to update an existing resource?
  3. What type of data does `res.json()` send?
  4. What is a "Dumb Component"?
  5. What is the purpose of a custom validator?

**Q-2 (A)** Discuss how routes are connected to controller logic in Express.js. Include an example with separate files. **[5 marks]**

OR

- (A) Describe in detail how Firestore integrates with Angular or React applications for real-time data.

**Q-2 (B)** Explain in detail how to structure backend code using models, services, and controllers, with examples [4 marks]

**Q-3 (A) Answer the Following (Any 2) [8 marks]**

1. Write short notes on Firestore collections and subcollections.
  2. What is a Route Guard? Explain CanActivate and CanDeactivate with examples.
  3. Write a note on route parameters and query parameters in Express.js with suitable examples.