


RAN-2411000503044001

S.Y.M.Sc. Computer Application (Sem.-III) Examination October - 2025
904-01 Application Development using UI

Time: 3 Hours]
[Total Marks: 70
સૂચના : / Instructions

- (1) ઉપરોક્ત દર્શાવેલ વિગતો ઉત્તરવહી પર અવશ્ય લખવી.
 Fill up strictly the above details on your answer book

Seat No.:

----------------------	----------------------	----------------------	----------------------	----------------------	----------------------

Student's Signature

Q.I.
Answer the following Multiple Choice Questions
10

- What function will permit for rendering the React content in an HTML page?
 A. React.render() B. ReactDOM.start()
 C. React.mount() D. ReactDOM.render()
- What is React or ReactJS?
 A. Component-based Javascript library
 B. Javascript framework
 C. Javascript file
 D. None of the above
- The Keys given to a list of elements in React should be _____.
 A. Not necessarily unique
 B. Unique among the siblings only
 C. Unique in the DOM
 D. None of the above
- The number of elements that can be returned by a valid React component is _____.
 A. 5 B. 1
 C. 3 D. 2
- The states and actions are held together in Redux using _____.
 A. View B. Subscribe
 C. Reducer D. None of these
- The following can be used to retrieve updated state in Redux and render it again:
 A. Store B. Reducer
 C. Action D. View
- A _____ is the client application request to retrieve data from database or legacy API's.
 A. GraphQL schema B. GraphQL resolvers
 C. Both A and B D. GraphQL query

8. Mutations are operations sent to the server to _____ data.
 - A. create
 - B. delete
 - C. update
 - D. create, update or delete
9. What is the primary purpose of Jest in JavaScript applications?
 - A. UI testing
 - B. Database integration
 - C. Unit and integration testing
 - D. API testing
10. Which command is used to install Jest in a React project?
 - A. npm install jest
 - B. npm install react-testing-library
 - C. npm install-g jest
 - D. npm install --save jest

Q.2. Answer the following questions. (Any Nine) 18

1. What are synthetic events in React?
2. Why keys are used in Lists?
3. Explain one way data binding in React?
4. What is this.set State function in React?
5. Explain the use Effect hook in react.
6. What is GraphQL, and how does it differ from REST?
7. List Datatypes of GraphQL?
8. What is Apollo client in GraphQL?
9. What are the Cons of REST API which makes the pros of GraphQL?
10. How do you create test components for unit testing in React?
11. What is the process to push a React application to Git?
12. How do you deploy a React application on Nginx?

Q.3. Answer in detail. (Any Two) 14

1. How React components can be styled?
2. What are the components in React Router?
3. Differentiate between React routing and conventional routing?

Q.4. Answer in detail. (Any Two) 14

1. How pagination works in GraphQL?
2. How a query is created in GraphQL?
3. What is axios and how to use it in React?

Q.5. Do as directed. (Any Two) 14

1. How can you create testable React components for unit testing in Jest?
2. Explain NGINX Server Architecture.
3. What are the Advantages of “Dockerize a React App”?
4. What are the main advantages of using GraphQL?
