

Student Result

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Exam: MERN STACK

Score: 47.0/47.0

Percentage: 100.00%

Question-wise Summary

| Sr.no | Question | Selected Answer | Correct Answer |
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| 1 | What is the primary purpose of the useState hook in React? | To manage local component state | To manage local component state |
| 2 | When does a useEffect hook with an empty dependency array [] run? | Only once after the initial mount | Only once after the initial mount |
| 3 | Why does React use a Virtual DOM? | To optimize UI updates by minimizing direct DOM manipulation | To optimize UI updates by minimizing direct DOM manipulation |

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| 4 | How are lifecycle events handled in functional components? | Using Hooks (e.g., useEffect) | Using Hooks (e.g., useEffect) |
| 5 | In Redux, what is the role of a "Reducer"? | To update state based on actions as a pure function | To update state based on actions as a pure function |
| 6 | What is the best way to pass data from a child component to a parent? | Using Callback functions as props | Using Callback functions as props |
| 7 | What is the importance of the key prop when rendering lists in React? | To help React identify which items have changed or moved | To help React identify which items have changed or moved |

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| 8 | When should you use React.memo? | To prevent unnecessary re-renders of a component | To prevent unnecessary re-renders of a component |
| 9 | What problem does the Context API primarily solve? | Prop Drilling across multiple levels | Prop Drilling across multiple levels |
| 10 | Where should static data be defined in a functional component to avoid re-creation on every render? | Outside the component function | Outside the component function |
| 11 | What does JSX stand for? | JavaScript XML | JavaScript XML |
| 12 | In a controlled component, where is the form data handled? | By the component's state | By the component's state |

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| 13 | What is the main benefit of using 'Interfaces' in TypeScript? | Defining the shape/structure of an object | Defining the shape/structure of an object |
| 14 | What is the purpose of the useParams hook in React Router? | To access dynamic parameters from the URL | To access dynamic parameters from the URL |
| 15 | What is a Higher-Order Component (HOC)? | A function that takes a component and returns a new component | A function that takes a component and returns a new component |
| 16 | Which JavaScript engine powers Node.js? | V8 Engine | V8 Engine |
| 17 | What is the primary role of 'Middleware' in Express.js? | To execute code during the Request/Response cycle | To execute code during the Request/Response cycle |

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| 18 | Which HTTP method is typically used to update an existing resource in a REST API? | PUT / PATCH | PUT / PATCH |
| 19 | Which Node.js module is used for handling file system operations? | fs | fs |
| 20 | How many parts does a JSON Web Token (JWT) consist of? | 3 | 3 |
| 21 | How do you define a dynamic path parameter in an Express route? | /user/:id | /user/:id |

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| 22 | How can you handle asynchronous operations in Node.js? | Using Callbacks, Promises, or Async/Await | Using Callbacks, Promises, or Async/Await |
| 23 | Which middleware is used to parse JSON bodies in Express 4.x+? | express.json() | express.json() |
| 24 | What is the main purpose of the Node.js Event Loop? | To handle non-blocking I/O operations | To handle non-blocking I/O operations |
| 25 | Why is module.exports used in Node.js? | To share functions or objects between files | To share functions or objects between files |
| 26 | Is Node.js fundamentally single-threaded? | Yes | Yes |

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| 27 | How many arguments does an Express global error-handling middleware take? | 4 (err, req, res, next) | 4 (err, req, res, next) |
| 28 | What does CORS stand for? | Cross-Origin Resource Sharing | Cross-Origin Resource Sharing |
| 29 | What happens when you run npm install --save-dev? | It installs a dependency for development only | It installs a dependency for development only |
| 30 | What is the use of process.env in a Node.js application? | To access environment variables | To access environment variables |
| 31 | What type of database is MongoDB? | NoSQL (Document-oriented) | NoSQL (Document-oriented) |

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| 32 | In MongoDB, what is a single record called? | Document | Document |
| 33 | What is the purpose of a 'Schema' in Mongoose? | To define the structure of documents in a collection | To define the structure of documents in a collection |
| 34 | Which operator is used to update a specific field in a MongoDB document? | \$set | \$set |
| 35 | What is the role of \$match in a MongoDB Aggregation Pipeline? | To filter documents based on a condition | To filter documents based on a condition |
| 36 | What is the default port for a MongoDB server? | 27017 | 27017 |

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| 37 | Why is the populate() method used in Mongoose? | To replace IDs with actual documents from other collections | To replace IDs with actual documents from other collections |
| 38 | A 'Collection' in MongoDB is equivalent to what in SQL? | Table | Table |
| 39 | What is the primary benefit of Database Indexing? | To improve query performance speed | To improve query performance speed |
| 40 | Is the _id field in a MongoDB document immutable by default? | Yes | Yes |
| 41 | What is the output of typeof null in JavaScript? | "object" | "object" |

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| 42 | What is a "Closure" in JavaScript? | A function bundled with its lexical environment | A function bundled with its lexical environment |
| 43 | What does the Array .map() method return? | A new array with transformed elements | A new array with transformed elements |
| 44 | What is 'Hoisting' in JavaScript? | Moving declarations to the top of their scope | Moving declarations to the top of their scope |
| 45 | What does Promise.all() reject? | As soon as any one promise rejects | As soon as any one promise rejects |
| 46 | Which symbol represents the ES6 Spread operator? | ... | ... |
| 47 | Which symbol represents the ES6 Spread operator? | ... | ... |