

## 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
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

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

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

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

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

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

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

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



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"

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