Student Result

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Exam: MERN STACK

Score: 29.0/47.0

Percentage: 61.70%

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?	**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**

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**

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**

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

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**

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?	*Not Answered*	To access environment variables
31	What type of database is MongoDB?	*Not Answered*	NoSQL (Document-oriented)

32	In MongoDB, what is a single record called?	*Not Answered*	**Document**
33	What is the purpose of a 'Schema' in Mongoose?	*Not Answered*	**To define the structure of documents in a collection**
34	Which operator is used to update a specific field in a MongoDB document?	*Not Answered*	**$set**
35	What is the role of $match in a MongoDB Aggregation Pipeline?	*Not Answered*	**To filter documents based on a condition**
36	What is the default port for a MongoDB server?	*Not Answered*	**27017**

37	Why is the populate() method used in Mongoose?	*Not Answered*	**To replace IDs with actual documents from other collections**
38	A 'Collection' in MongoDB is equivalent to what in SQL?	*Not Answered*	**Table**
39	What is the primary benefit of Database Indexing?	*Not Answered*	**To improve query performance speed**
40	Is the _id field in a MongoDB document immutable by default?	*Not Answered*	**Yes**
41	What is the output of typeof null in JavaScript?	*Not Answered*	**"object"**

42	What is a "Closure" in JavaScript?	*Not Answered*	**A function bundled with its lexical environment**
43	What does the Array .map() method return?	*Not Answered*	**A new array with transformed elements**
44	What is 'Hoisting' in JavaScript?	*Not Answered*	**Moving declarations to the top of their scope**
45	What does Promise.all() reject?	*Not Answered*	**As soon as any one promise rejects**
46	Which symbol represents the ES6 Spread operator?	*Not Answered*	**...**
47	Which symbol represents the ES6 Spread operator?	*Not Answered*	**...**