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Internal Assessment Test 2 – Set 1 – Nov 2025

Max Marks: 50

Sub Name & Code: TYLFSD/25TYLFSDCS

Date: .09.25

Branch & Sections: AIML, AIDS 5<sup>th</sup> A, B & C

Duration: 90 mins

**Answer All Questions. This paper contains 30 MCQ's, 10 Fill in the Blanks & 1**

**Programming Question**

Q. #.	Question	Options	Ma rks	CO	P O	B L
1	In React, what is used to pass data to a component from outside?	A) setState B) props C) state D) getInitialState	1	1	1	1
2	What is the purpose of the setState method in React?	A) To update the component's state B) To force re-rendering of a component C) To set initial state D) To access the DOM	1	1	1	1
3	What is Redux in React?	A) A state management library B) A form validation library C) A router library D) A build tool	1	1	1	2
4	In React, what is the purpose of the useState hook?	A) To define the initial state of a component B) To update the component's state C) To handle side effects D) To manage routing	1	1	1	2
5	Which company developed ReactJS?	A) Facebook B) Google C) Microsoft D) Apple	1	1	1	1
6	Which command is used to Run react app.	A. npm run B. npm start C. start app D. run react app	1	1	1	1
7	What is the purpose of React Router?	A) To manage state in a React application B) To handle routing and navigation in a React application C) To define routes for server-side rendering D) To optimize database queries	1	1	1	2
8	What is the significance of the key prop in React lists?	A) It is used to define the list's length B) It helps React identify which items have changed, are added, or are	1	1	1	1

		removed C) It determines the sorting order of list items D) It sets the initial state of list items				
9	What is React Router used for?	A) Managing state in a React application B) Handling navigation and routing in a React Application C) Defining routes for server-side rendering D) Optimizing database queries	1	1	1	2
10	What does the term “lifting state up” refer to in React?	A) Moving the state from a child component to a parent component B) Changing the state using the setState method C) Passing state as props to child components D) Removing the state from a component	1	1	1	2
11	What is Node.js?	A A front-end JavaScript framework B A server-side JavaScript runtime C A database management system D A CSS preprocessor	1	1	2	2
12	What is True About Node.js?	A It is single-threaded and asynchronous B It supports only synchronous I/O operations C It is primarily used for client-side scripting D It does not support event-driven programming	1	1	2	3
13	What is the Primary Use of Node.js?	A Building user interface B Writing server-side logic and APIs C Managing databases D Styling web pages	1	1	2	3
14	Node.js Uses Which Engine to Execute JavaScript Code?	A Spider Monkey B V8 C Chakra D Rhino	1	1	2	1
15	Which Module is Used to Create a Web Server in Node.js?	A fs B HTTP C path D URL	1	1	2	1
16	What is Express.js?	A A database management system B A front-end JavaScript library C A framework for building web applications with Node.js D A package manager for Node.js	1	1	1	1

17	Which of the Following is True About Express.js?	A It is built on top of the Django framework B It is used only for client-side scripting C It simplifies the process of building web servers and APIs in Node.js D It does not support routing	1	1	1	3
18	What is NPM in the Context of Node.js?	A Node Project Manager B Node Package Manager C Node Programming Module D Node Process Manager	1	1	1	2
19	Which Command is Used to Install Dependencies Listed In package.json?	A npm update B npm add C npm install D npm require	1	1	1	2
20	How can Errors be Handled in Node.js?	A Using try...catch blocks B Using if...else statements C By ignoring them D Errors cannot be handled in Node.js	1	1	1	2
21	What is Express.js.	a) A database management system for Node.js. b) A front-end framework for building user interfaces. c) A web application framework for Node.js. d) A testing framework for JavaScript.	1	1	1	2
22	How do you install Express.js in your project?	a) npm install express b) yarn add express.js c) npm get express d) install express	1	1	1	1
23	Which method is used to create an Express application instance?	a) express.createApp() b) new express() c) express() d) app.init()	1	1	1	3
24	What is the purpose of app.use() in Express.js?	a) To define a route handler. b) To register middleware that will be applied to incoming requests. c) To send a response to the client. d) To start the server.	1	1	1	1
25	Which of the following is a core concept in Express.js for handling requests and responses ?	a) Templates b) Middleware c) Databases d) Front-end components	1	1	1	2
26	How do you define a GET route in	a) app.post('/path', callback) b) app.get('/path', callback)	1	1	2	2

	Express.js?	c) app.route('/path').get(callback) d) app.send('/path', callback)				
27	How can you send a JSON response in Express.js?	a) res.sendJson(data) b) res.json(data) c) res.send(JSON.stringify(data)) d) res.jsonString(data)	1	1	2	2
28	Which object in an Express route handler contains request parameters (e.g., from :id in a URL)?	a) req.body b) req.query c) req.params d) req.headers	1	1	2	3
29	What is the default port number for an Express.js server if not specified?	a) 80      b) 8080 c) 3000      d) 5000	1	1	2	2
30	How do you start an Express.js server to listen for incoming requests?	a) app.start(port) b) app.listen(port, callback) c) server.run(port) d) express.start(port)	1	1	2	3
31	MongoDB is _____ type of database	*(Fill in the Blank)	1	3	2	2
32	_____ is the default port used by MongoDB?	*(Fill in the Blank)	1	2	2	2
33	JSON stand for _____	*(Fill in the Blank)	1	3	1	1
34	_____ command is used to start the MongoDB server?	*(Fill in the Blank)	1	2	2	2
35	_____ is the correct command to connect to the MongoDB shell?	*(Fill in the Blank)	1	3	3	2
36	_____ is the default database in MongoDB?	*(Fill in the Blank)	1	2	1	1
37	_____ MongoDB commands is used to show all databases?	*(Fill in the Blank)	1	2	2	2
38	_____ is the correct syntax to create a collection in MongoDB?	*(Fill in the Blank)	1	1	1	3
39	MongoDB store data as _____	*(Fill in the Blank)	1	1	1	1
40	_____ is used in MongoDB to query documents in a collection?	*(Fill in the Blank)	1	1	1	1
41	Write frontend & Backend code to develop an authentication mechanism with email_id and password using ajax (Axios). <b>(CO: 1, PO: 2, BL: 3) (10 Marks)</b>					

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**Answer All Questions. This paper contains 30 MCQ's, 10 Fill in the Blanks & 1**

**Programming Question**

Q. #.	Question	Options	Ans	Ma rks	CO	P O	B L
1	In React, what is used to pass data to a component from outside?	A) setState    B) props C) state    D) getInitialState	B	1	1	1	1
2	What is the purpose of the setState method in React?	A) To update the component's state B) To force re-rendering of a component C) To set initial state D) To access the DOM	A	1	1	1	1
3	What is Redux in React?	A) A state management library B) A form validation library C) A router library D) A build tool	A	1	1	1	2
4	In React, what is the purpose of the useState hook?	A) To define the initial state of a component B) To update the component's state C) To handle side effects D) To manage routing	B	1	1	1	2
5	Which company developed ReactJS?	A) Facebook    B) Google C) Microsoft    D) Apple	A	1	1	1	1
6	Which command is used to Run React App.	A. npm run B. npm start C. start app D. run react app	B	1	1	1	1
7	What is the purpose of React Router?	A) To manage state in a React application B) To handle routing and navigation in a React	B	1	1	1	2

		application C) To define routes for server-side rendering D) To optimize database queries				
8	What is the significance of the key prop in React lists?	A) It is used to define the list's length B) It helps React identify which items have changed, are added, or are removed C) It determines the sorting order of list items D) It sets the initial state of list items	B	1	1	1
9	What is React Router used for?	A) Managing state in a React application B) Handling navigation and routing in a React Application C) Defining routes for server-side rendering D) Optimizing database queries	B	1	1	2
10	What does the term “lifting state up” refer to in React?	A) Moving the state from a child component to a parent component B) Changing the state using the setState method C) Passing state as props to child components D) Removing the state from a component	A	1	1	2
11	What is Node.js?	A A front-end JavaScript framework B A server-side JavaScript runtime C A database management system D A CSS preprocessor	B	1	1	2
12	What is True About Node.js?	A It is single-threaded and asynchronous B It supports only synchronous I/O operations C It is primarily used for client-side scripting D It does not support	A	1	1	3

		event-driven programming					
13	What is the Primary Use of Node.js?	A Building user interface B Writing server-side logic and APIs C Managing databases D Styling web pages	B	1	1	2	3
14	Node.js Uses Which Engine to Execute JavaScript Code?	A Spider Monkey B V8 C Chakra D Rhino	B	1	1	2	1
15	Which Module is Used to Create a Web Server in Node.js?	A fs B HTTP C path D URL	B	1	1	2	1
16	What is Express.js?	A A database management system B A front-end JavaScript library C A framework for building web applications with Node.js D A package manager for Node.js	C	1	1	1	1
17	Which of the Following is True About Express.js?	A It is built on top of the Django framework B It is used only for client-side scripting C It simplifies the process of building web servers and APIs in Node.js D It does not support routing	C	1	1	1	3
18	What is NPM in the Context of Node.js?	A Node Project Manager B Node Package Manager C Node Programming Module D Node Process Manager	B	1	1	1	2
19	Which Command is Used to Install Dependencies Listed In package.json?	A npm update B npm add C npm install D npm require	C	1	1	1	2
20	How can Errors be Handled in Node.js?	A Using try...catch blocks B Using if...else statements C By ignoring them D Errors cannot be handled in Node.js	A	1	1	1	1
21	What is Express.js.	a) A database management system for Node.js.	C	1	1	1	1

		b) A front-end framework for building user interfaces. c) A web application framework for Node.js. d) A testing framework for JavaScript.					
22	How do you install Express.js in your project?	a) npm install express b) yarn add express.js c) npm get express d) install express	A	1	1	1	1
23	Which method is used to create an Express application instance?	a) express.createApp() b) new express() c) express() d) app.init()	C	1	1	1	3
24	What is the purpose of app.use() in Express.js?	a) To define a route handler. b) To register middleware that will be applied to incoming requests. c) To send a response to the client. d) To start the server.	B	1	1	1	1
25	Which of the following is a core concept in Express.js for handling requests and responses?	a) Templates b) Middleware c) Databases d) Front-end components	B	1	1	1	2
26	How do you define a GET route in Express.js?	a) app.post('/path', callback) b) app.get('/path', callback) c) app.route('/path').get(callback) d) app.send('/path', callback)	B	1	1	2	2
27	How can you send a JSON response in Express.js?	a) res.sendJson(data) b) res.json(data) c) res.send(JSON.stringify(data)) d) res.jsonString(data)	B	1	1	2	1
28	Which object in an Express route handler contains request parameters (e.g., from :id in a URL)?	a) req.body b) req.query c) req.params d) req.headers	C	1	1	2	3

29	What is the default port number for an Express.js server if not specified?	a) 80 b) 8080 c) 3000 d) 5000	C	1	1	2	2
30	How do you start an Express.js server to listen for incoming requests?	a) app.start(port) b) app.listen(port, callback) c) server.run(port) d) express.start(port)	B	1	1	2	3
31	MongoDB is _____ type of database	*(Fill in the Blank)	Document-Oriented Database	1	3	2	2
32	_____ is the default port used by MongoDB?	*(Fill in the Blank)	27017	1	2	2	2
33	JSON stand for _____	*(Fill in the Blank)	JavaScript Object Notation	1	3	1	1
34	_____ command is used to start the MongoDB server?	*(Fill in the Blank)	mongod	1	2	2	2
35	_____ is the correct command to connect to the MongoDB shell?	*(Fill in the Blank)	mongo	1	3	3	2
36	_____ is the default database in MongoDB?	*(Fill in the Blank)	test	1	2	1	1
37	_____ MongoDB commands is used to show all databases?	*(Fill in the Blank)	show databases	1	2	2	2
38	_____ is the correct syntax to create a collection in MongoDB?	*(Fill in the Blank)	db.createCollection("collection_name")	1	1	1	1
39	MongoDB store data as _____	*(Fill in the Blank)	Documents	1	1	1	1
40	_____ is used in MongoDB to query documents in a collection?	*(Fill in the Blank)	\$	1	1	1	1
41	Write frontend & Backend code to develop an authentication mechanism with email_id and password using ajax (Axios). <b>(10 Marks)</b>						
	<b>App.js</b>						
	<pre>import './App.css'; import { useState } from 'react'; import axios from 'axios';</pre>						

function App() {  
 const [form, setForm] = useState({});  
 const handleForm = (e) => {  
 setForm({ ...form, [e.target.name]: e.target.value })  
 }  
 const handleSubmit = async (e) => {  
 e.preventDefault();  
 const response = await axios('http://127.0.0.1:8080/demo', {  
 method: 'POST',  
 data: JSON.stringify(form),  
 headers: {  
 'Content-Type': 'application/json'  
 }  
 })  
 const data = await response.data;  
 window.alert(data);  
 }  
 return (  
 <div>  
 <h2>Personal Details</h2>  
 <form onSubmit={handleSubmit} className='personal'>  
 <span>User Name :</span>  
 <input type='text' name='uname' onChange={handleForm} /><br />  
 <span>Password :</span>  
 <input type='password' name='pass' onChange={handleForm} /><br />  
 <input type='submit' />  
 </form>  
 </div>  
 )  
}  
export default App;

**Backend.js**

```
const express = require('express');
const cors = require('cors');
const bodyParser = require('body-parser');
const mongoose = require('mongoose');
mongoose.set('strictQuery', true);
```

```
main().catch(err => console.log(err));

async function main() {
  await
mongoose.connect('mongodb+srv://user:user123@cluster0.qu1lekm.mongodb.net/');
  console.log('db connected')
}
const userSchema = new mongoose.Schema({
  uname: String,
  pass: String
});

const User = mongoose.model('users', userSchema);

const server = express();

server.use(cors());
server.use(bodyParser.json());

// CRUD - Create
server.post('/demo', async (req, res) => {
  const username = req.body.uname, password = req.body.pass;
  const docs = await User.find({ "uname": String(username), "pass": String(password) });
  console.log(docs);
  if (docs.length !== 0) {
    res.json("Login Success");
  }
  else
    res.json("Invalid UserName or Password");
})

server.listen(8080, () => {
  console.log('server started')
})
```