Question based on Lec 5 – API & Express

Single Answer

1. What does REST stand for?
   a) Representational State Transfer
   b) Remote Execution Service Technology
   c) Resource Extraction and Synchronization Technique
   d) Reliable Event Streaming Technology

2. Which HTTP method is used to create a new resource in REST?
   a) GET
   b) POST
   c) PUT
   d) DELETE

3. What does the HTTP status code 201 indicate?
   a) Bad Request
   b) OK
   c) Created
   d) Not Found

4. What is the main purpose of middleware in Express.js?
   a) To handle database queries
   b) To modify requests and responses or terminate the request-response cycle
   c) To define routes for APIs
   d) To generate HTML templates

5. In Express.js, which method is used to define a route for handling GET requests?
   a) app.post()
   b) app.get()
   c) app.put()
   d) app.delete()

6. Which of the following is NOT an HTTP method used in RESTful APIs?
   a) GET
   b) POST
   c) FETCH
   d) DELETE

7. What does the HTTP status code 404 signify?
   a) Resource not found
   b) Server error occurred
   c) Request was successful but returned no content
   d) Unauthorized access

8. Which of the following is an example of a meaningful URI for REST APIs?
   a) /getProduct?id=123

b) <mark>/products/123</mark>

c) /fetchProductData

d) /retrieveProductInfo/123

9. In Express.js, what does req.params contain?

a) Query string parameters from the URL (e.g., ?key=value).

b) <mark>Route parameters defined in the URL (e.g., /users/:id).</mark>

c) Form data sent in POST requests.

d) Headers from the HTTP request.

10. Which of these is an example of built-in middleware in Express.js?

a) body-parser

b) <mark>express.static()</mark>

c) jsonwebtoken

d) cors

Multiple Answer

11. Which HTTP methods are commonly used in RESTful APIs? (Select three correct answers.)

a) <mark>GET</mark>

b) HEAD

c) <mark>POST</mark>

d) <mark>DELETE</mark>

12. What are benefits of using RESTful APIs? (Select three correct answers.)

a) <mark>Stateless communication</mark>

b) <mark>Standardized HTTP methods</mark>

c) Requires SOAP protocol for communication

d) <mark>Platform independence</mark>

13. Which features describe Express.js? (Select two correct answers.)

a) <mark>Minimalist web framework for Node.js</mark>

b) Built-in support for SQL databases

c) <mark>Provides routing and middleware capabilities</mark>

d) Handles computationally intensive tasks

14. Which HTTP status codes indicate client-side errors? (Select two correct answers.)

a) <mark>401 Unauthorized</mark>

b) 500 Internal Server Error

c) <mark>404 Not Found</mark>

d) 200 OK

15. Which tools or libraries can be used with Express.js to work with databases? (Select two correct answers.)

a) <mark>Mongoose</mark>

b) <mark>Sequelize</mark>

c) body-parser

d) jsonwebtoken

Fill in the Blanks

16. _REST_ is an architectural style for building web services that use standard HTTP methods like GET, POST, PUT, and DELETE.

17. The _presentation_ layer in three-tier architecture is responsible for interacting with users through interfaces.

18. In REST APIs, ___URI___ are used to uniquely identify resources on the server.

19. Express.js uses _express.static()_ to serve static files like images, CSS, and JavaScript files.

20. A _RESTful API_ API follows REST principles and uses stateless communication between client and server.