Question - 1
REST Basics

SCORE: **5 points**

Easy

REST is an architecture to provide access to data over a network through an API. Which of the following are true?

◉ REST is strictly a client-server interaction type meaning that the client performs requests and the server sends responses to these requests.

◯ REST is a server-server interaction meaning that both sides can make requests and send responses to requests.

◉
In REST architecture, a properly designed access endpoint should not specify actions as a part of the resource URI. Instead, actions should be specified using appropriate protocol methods such as GET, POST, PUT, and DELETE over HTTP.

◯ REST responses are not capable of specifying any caching related information regarding the accessed resource. Caching must be resolved with other mechanisms.

Question - 2
REST API Response

SCORE: **5 points**

REST API   Medium

Consider the following RESTful API endpoint and response.

```
GET /api/books?sort=desc&limit=10&offset=20 HTTP/1.1
Accept: application/json
```

```
{
  "count": 100,
  "next": "/api/books?sort=desc&limit=10&offset=30",
  "previous": "/api/books?sort=desc&limit=10&offset=10",
  "results": [
    {
      "id": 1,
      "title": "To Kill a Mockingbird",
      "author": "Harper Lee",
      "publication_date": "1960-07-11",
      "genre": "Novel"
    },
    {
      "id": 2,
      "title": "1984",
      "author": "George Orwell",
      "publication_date": "1949-06-08",
      "genre": "Dystopian Fiction"
    },
    {
      "id": 3,
      "title": "Brave New World",
```

```
        "author": "Aldous Huxley",
        "publication_date": "1932-06-11",
        "genre": "Dystopian Fiction"
      }
    ]
  }
```

Which of the following statements is true about the endpoint and response?

○ The endpoint is using a custom HTTP method. The response is paginated and sorted by the publication_date field in ascending order.

○ The endpoint is using a standard HTTP method. The response is paginated and sorted by the title field in descending order.

● The endpoint is using a standard HTTP method. The response is paginated and sorted by the publication_date field in descending order.

○ The endpoint is using a custom HTTP method. The response is paginated and sorted by the title field in ascending order.

Question - 3
Architectural Constraints of REST

SCORE: **5 points**

`Medium` `REST API`

Select the Architectural Constraints of REST API:

● Uniform interface

● Stateless

● Cacheable

● Layered system

Question - 4
API Testing I

SCORE: **5 points**

`API` `Medium`

Identify the true statement(s) about API testing:

○ Tests hardware

● Verifies the functionality and reliability of APIs

● Tests software

● Verifies the security and performance of APIs

○ Does not verify the functionality and reliability of APIs

Question - 5
What's in an API?

SCORE: **5 points**

`API` `Hard`

Select the true statement(s) about APIs:

○ API stands for "Application Programming Interchange"

● An API is a set of established procedures for building software and applications

● API stands for "Application Programming Interface"

● An API provides the means to develop applications that interact with specific hardware using a given programming language

○ Linux Standard Base is an API

Question - 6
APIs in Express JS

SCORE: **5 points**

Javascript   Medium   ExpressJS   Node.js

What is the console output when the GET request is sent to *http://localhost:5000/* using a web browser?

```
const express = require("express");
const app = express();

app.use((req, res, next) => {
  setTimeout(() => {
    console.log(`${req.method} request received.`);
  }, 3000);
});

app.get("/", (req, res) => {
  setTimeout(() => {
    console.log("You sent a GET request");
  }, 1000);
});

app.post("/", (req, res) => {
  res.send("You sent a POST request.");
});

app.listen(5000, () => {
  console.log("Server started on port 5000.");
});
```

○ "Server started on port 5000."

● "GET request received."

○ "You sent a GET request." and "GET request received."

○ "GET request received." and "You sent a GET request."