**1. What is Flask?**

Flask is a **lightweight web framework** in Python used to build web applications and APIs.  
It’s easy to use and doesn’t need many setup files — great for small and medium projects.

**2. What is REST?**

REST (Representational State Transfer) is a **way to design web APIs**.  
It uses standard HTTP methods like **GET, POST, PUT, DELETE** to perform operations on resources (data).

**3. Difference between GET and POST**

| **Method** | **Purpose** | **Data Sending** | **Example** |
| --- | --- | --- | --- |
| **GET** | Used to **read/fetch** data | Sent in URL | /users?id=1 |
| **POST** | Used to **send/create** data | Sent in body | Sending form or JSON data |

**4. How does a Flask route work?**

A **route** connects a URL to a function.  
When you visit that URL, Flask runs the linked function.

Example:

@app.route('/hello')

def hello():

return "Hello, World!"

If you open /hello in a browser, it shows “Hello, World!”.

**5. What is request.json?**

request.json is used to get **JSON data sent by the client** in a Flask API request.

Example:

data = request.json

name = data["name"]

**6. What are status codes like 200, 404?**

They tell if a request was successful or not.

| **Code** | **Meaning** |
| --- | --- |
| **200** | OK (Success) |
| **201** | Created |
| **400** | Bad Request |
| **401** | Unauthorized |
| **404** | Not Found |
| **500** | Server Error |

**7. How do you run a Flask app?**

1. Save your app in a file (e.g., app.py)
2. Run:
3. flask run

or

python app.py

1. Open the link shown in the terminal (usually http://127.0.0.1:5000)

**8. What is JSON?**

JSON (JavaScript Object Notation) is a **lightweight data format** used to send and receive data between client and server.

Example:

{

"name": "Revathi",

"age": 20

}

**9. How to test an API?**

You can test using:

* **Postman** – a tool to send API requests
* **curl** – command line tool
* **Python’s requests library**

Example:

import requests

response = requests.get("http://127.0.0.1:5000/hello")

print(response.json())

**10. Can we use a database instead of memory?**

Yes   
Flask can connect to databases like **SQLite, MySQL, or MongoDB** to store data permanently instead of using temporary in-memory storage.