**Viva Questions:**

1. **What is Docker, and why is it used?**  
   Docker is a platform to build, ship, and run applications in lightweight containers for consistency across environments.
2. **How is Docker different from a Virtual Machine (VM)?**  
   Docker shares the host OS kernel, while VMs run full guest OS → Docker is lighter and faster.
3. **What are the advantages of using Docker in software development?**  
   Portability, consistency, faster deployment, resource efficiency, and easy scaling.
4. **What is a Docker container?**  
   A running instance of a Docker image that includes application code and dependencies.
5. **What is a Docker image? How is it different from a container?**  
   An image is a read-only blueprint; a container is a running instance of that image.
6. **What is Docker Hub?**  
   A cloud-based registry for storing and sharing Docker images.
7. **How do you check the Docker version installed on your system?**  
   docker --version or docker version
8. **What command is used to run a container?**  
   docker run
9. **What does the docker ps command do?**  
   Lists running containers.
10. **How do you stop a running container?**  
    docker stop <container\_id>
11. **How do you remove a container or image?**

* Container: docker rm <container\_id>
* Image: docker rmi <image\_id>

1. **Difference between docker run and docker start?**

* docker run: Creates and starts a new container.
* docker start: Starts an existing stopped container.

1. **How do you build a Docker image?**  
   docker build -t <image\_name> .
2. **What is a Dockerfile?**  
   A text file with instructions to build a Docker image.
3. **What is the difference between docker pull and docker build?**

* docker pull: Downloads an image from a registry.
* docker build: Creates an image from a Dockerfile.

1. **How do you see the list of images in your system?**  
   docker images
2. **Can a container run without an image? Why/why not?**  
   No, because containers are created from images.