

# 26 Lecture - CS506

## Important Subjective

Certainly, here are 10 short-answer questions related to Java Servlets along with their answers:

**\*\*Question 1:\*\*** What is a Java Servlet?

**\*\*Answer:\*\*** A Java Servlet is a server-side Java program that extends the functionality of a web server, allowing dynamic content generation and handling of client requests.

**\*\*Question 2:\*\*** How does a servlet differ from a regular Java class?

**\*\*Answer:\*\*** A servlet implements the `Servlet` interface or extends the `HttpServlet` class and is designed to handle web requests and responses, while a regular Java class typically serves other purposes within a Java application.

**\*\*Question 3:\*\*** What is the role of the `init()` method in a servlet?

**\*\*Answer:\*\*** The `init()` method initializes the servlet by creating an instance of it. It's called when the servlet is first loaded into memory.

**\*\*Question 4:\*\*** Explain the purpose of the `doGet()` method in servlets.

**\*\*Answer:\*\*** The `doGet()` method handles HTTP GET requests from clients. It's overridden in the servlet to provide custom logic for processing GET requests.

**\*\*Question 5:\*\*** How can you pass parameters from a client to a servlet?

**\*\*Answer:\*\*** Parameters can be passed to a servlet through the URL query string or by including them in the request body for methods like POST.

**\*\*Question 6:\*\*** What is the difference between the `sendRedirect()` and `forward()` methods in servlets?

**\*\*Answer:\*\*** `sendRedirect()` sends an HTTP redirect response to the client, redirecting to a different URL, while `forward()` internally forwards the request to another resource within the server.

**\*\*Question 7:\*\*** What's the purpose of the `destroy()` method in a servlet?

**\*\*Answer:\*\*** The `destroy()` method is called when a servlet is being removed from service. It's used to release resources and perform cleanup operations.

**\*\*Question 8:\*\*** How can you configure a servlet's URL mapping?

**\*\*Answer:\*\*** URL mapping can be configured in the `web.xml` deployment descriptor or using annotations like `@WebServlet` in the servlet class.

**\*\*Question 9:\*\*** Explain the `HttpServletRequest` and `HttpServletResponse` objects in servlets.

**\*\*Answer:\*\*** `HttpServletRequest` represents the client's request to the server, providing information like parameters and headers. `HttpServletResponse` represents the response to be sent back to the client.

**\*\*Question 10:\*\*** What is a session in servlets, and how is it managed?

**\*\*Answer:\*\*** A session is a way to maintain stateful information between multiple requests from the same client. It's managed using the `HttpSession` object and can store attributes accessible across requests.