Java MVC part 1

Question 1: What is primary purpose of a Servlet in a web application ?

A. To manage client-side scripting languages like JavaScript.

B. To handle HTTP request and generate responses.

C. To design the layout and presentation of web pages.

D. To establish database connections.

Question 2: Which component of MVC pattern is responsible for processing user input and updating the model ?

A. Model

B. View

C. Controller

D. Servlet

Question 3: What is the main purpose of a JSP (JavaServer Pages) in a web application ?

A. To define the database schema

B. To handle client-side scripting

C. To generate dynamic web pages

D. To manage server configurations

Question 4: Which Java API allows you to work with sessions in a web application ?

A. JavaFX

B. JSP

C. Servlet

D. HttpSession

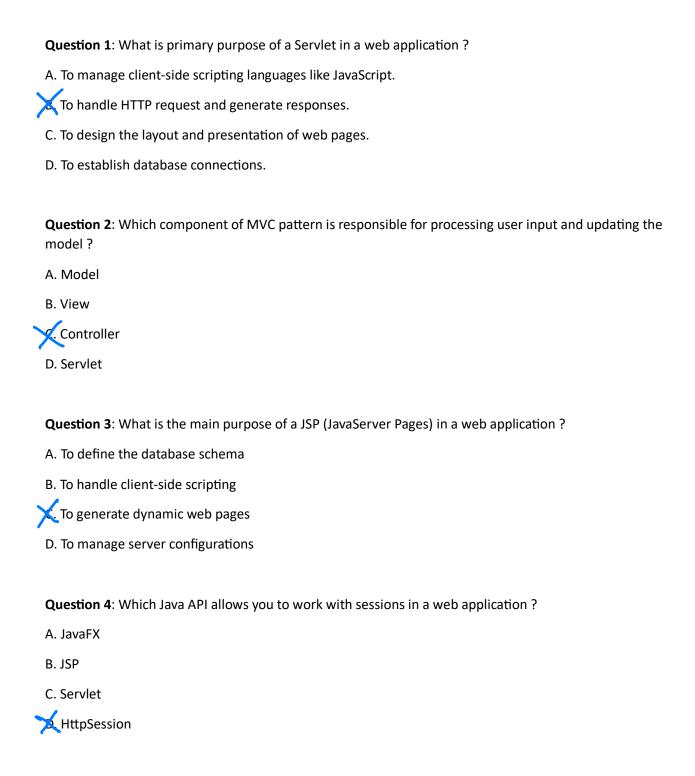**Question 5:** What is the primary purpose of using cookies in a web application?

A. To store large files and images on the client-side.

B. To maintain user-specific information across multiple requests.

C. To secure database connections.

D. To validate HTML forms.

Question 6: In a Java web application, which component is responsible for interacting with the database using JPA (Java Persistence API)?

A. Controller

B. Servlet

C. Model

D. View

Question 7: What is the main purpose of the web.xml file in a Java web application?

A. To define the layout and styling of web pages.

B. To configure servlet mappings and other web application settings.

C. To store user-specific information.

D. To handle HTTP requests.

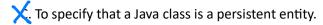**Question 8:** Which HTTP method is typically used for submitting form data to the server?

A. GET

B. PUT

C. POST

D. DELETE

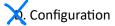**Question 9:** What is the purpose of the @Entity annotation in JPA?

A. To indicate a Java class is a servlet.

B. To define a JSP page.

C. To specify that a Java class is a persistent entity.

D. To handle HTTP requests.

Question 10: Which of the following is NOT a part of the Servlet life cycle?

A. Initialization

B. Request Handling

C. Destroy

D. Configuration

Question 11: What is the purpose of a deployment descriptor in a Java web application?

A. To store user-specific data.

B. To specify how JSP pages should be rendered.

C. To configure the deployment settings of a web application.

D. To validate HTML forms.

Question 12: What is the main function of a JPA EntityManager?

A. To process HTTP requests.

B. To render JSP pages.

C. To manage database connections.

D. To interact with the database.

Question 13: In a Java web application, where should you place static resources like HTML, CSS, and JavaScript files for efficient serving?

A. In the Controller package

B. In the Model package

C. In the WEB-INF directory

D. In the View directory

Question 14: Which HTTP method is idempotent, meaning it should not have any side effects on the server?

A. GET

B. POST

C. PUT

D. DELETE

Question 15: What is the purpose of the @SessionScoped annotation in a Java web application?

A. To define a JSP page.

B. To indicate a Java class is a Servlet.

C. To specify that a Java class is a session-scoped bean.

D. To handle HTTP requests.

Question 16: What does JPA stand for?

A. Java Persistence Application

B. Java Programming API

C. Java Persistence API

D. Java Performance Analyzer

Question 17: What is the primary role of a Controller in the MVC pattern?

A. To define the database schema.

B. To handle user input and update the Model.

C. To render HTML templates.
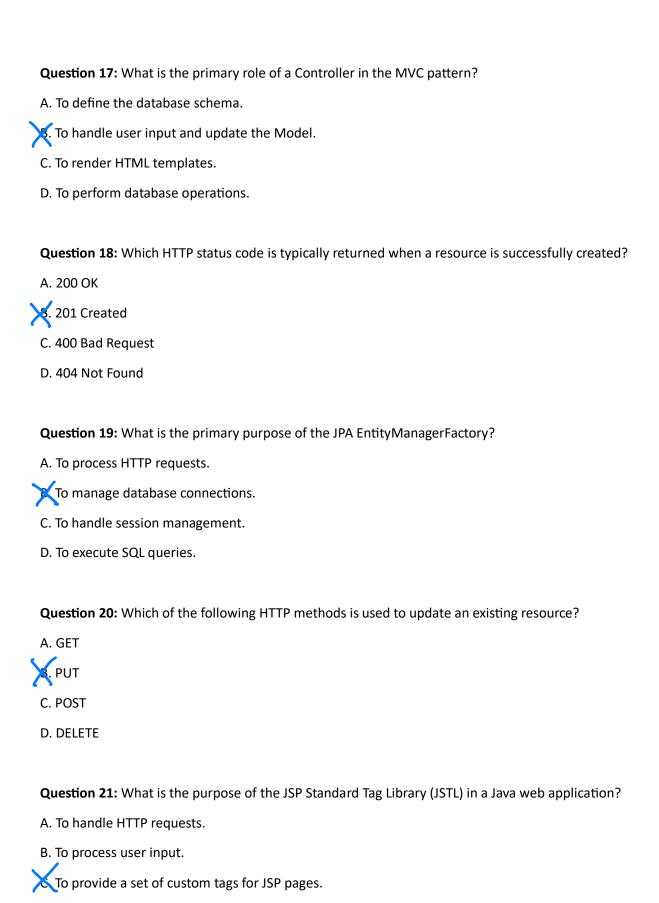
D. To perform database operations.

Question 18: Which HTTP status code is typically returned when a resource is successfully created?

A. 200 OK

B. 201 Created

C. 400 Bad Request

D. 404 Not Found

Question 19: What is the primary purpose of the JPA EntityManagerFactory?

A. To process HTTP requests.

B. To manage database connections.

C. To handle session management.

D. To execute SQL queries.

Question 20: Which of the following HTTP methods is used to update an existing resource?

A. GET

B. PUT

C. POST

D. DELETE

Question 21: What is the purpose of the JSP Standard Tag Library (JSTL) in a Java web application?

A. To handle HTTP requests.

B. To process user input.

C. To provide a set of custom tags for JSP pages.

D. To manage session data.

Question 22: Which of the following is a valid method to invalidate a session in a Servlet?

A. request.invalidateSession();

B. session.destroy();

C. session.invalidate();

D. session.end();

Question 23: What is the primary function of a servlet container in a Java web application?

A. To manage database connections.

B. To handle session management.

C. To process JSP pages.

D. To manage the execution of servlets.

Question 24: In JPA, what is the purpose of the @GeneratedValue annotation?

A. To generate a unique session ID.

B. To generate primary key values for entities.

C. To execute SQL queries.

D. To handle session management.

Question 25: What is the role of a View in the MVC pattern?

A. To handle user input and update the Model.

B. To manage database connections.

C. To render the user interface.

D. To process HTTP requests.

Question 26: Which of the following is a valid method to get a session attribute in a Servlet?

A. request.getSessionAttribute("attributeName");

B. session.getAttribute("attributeName");

C. session.getSessionAttribute("attributeName");

D. request.getAttribute("attributeName");

Question 27: What is the purpose of a deployment descriptor in a Java web application?

A. To define the layout and styling of web pages.

B. To manage server configurations.

C. To handle HTTP requests.

D. To configure the deployment settings of a web application.

Question 28: Which of the following is a valid method to set a session attribute in a Servlet?

A. session.set("attributeName", attributeValue);

B. session.add("attributeName", attributeValue);

C. session.setAttribute("attributeName", attributeValue);

D. request.addAttribute("attributeName", attributeValue);

Question 29: What is the primary purpose of a web container in a Java web application?

A. To execute JSP pages.

B. To manage database connections.

C. To process HTTP requests.

D. To manage the execution of web applications.

Question 30: Which HTTP method is typically used for deleting a resource on the server?

A. GET

B. POST

C. PUT

D. DELETE