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

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

- B. To handle HTTP requests and generate responses.
- C. To design the layout and presentation of web pages.
- D. To establish database connections.

Answer: B. To handle HTTP requests and generate responses.

Explanation: Servlets are Java classes that are used to handle HTTP requests and generate HTTP responses.

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

- A. Model
- B. View
- C. Controller
 - D. Servlet

Answer: C. Controller

Explanation: In the MVC pattern, the Controller is responsible for processing user input and updating the Model.

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.

Answer: C. To generate dynamic web pages.

Explanation: JSP is used to generate dynamic web pages by embedding Java code within HTML templates.

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

- A. JavaFX
- B. JSP
- C. Servlet



Answer: D. HttpSession

Explanation: The HttpSession API allows you to manage and work with sessions in a web application.

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.

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

Explanation: Cookies are often used to store user-specific information and maintain state across multiple requests.

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



D. View

Answer: C. Model

Explanation: In a Java web application, the Model component is responsible for interacting with the database using JPA.

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.

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

Explanation: The web.xml file is used to configure servlet mappings and other web application settings in Java web applications.

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

A. GET

B. PUT



D. DELETE

Answer: C. POST

Explanation: The POST method is typically used for submitting form data to the server.

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.

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

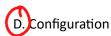
Explanation: The @Entity annotation is used in JPA to specify that a Java class is a persistent entity and is mapped to a database table.

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

A. Initialization

B. Request Handling

C. Destruction



Answer: D. Configuration

Explanation: The Servlet life cycle includes Initialization, Request Handling, and Destruction phases. Configuration is typically handled in the web.xml file.

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.

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

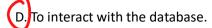
Explanation: The deployment descriptor, typically found in the web.xml file, is used to configure the deployment settings of a web application.

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.



Answer: D. To interact with the database.

Explanation: A JPA EntityManager is used to interact with the database, including creating, updating, and deleting entities.

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



Answer: D. In the View directory

Explanation: Static resources like HTML, CSS, and JavaScript files are typically placed in the View directory for efficient serving to clients.

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



B. POST

C. PUT

D. DELETE

Answer: A. GET

Explanation: The GET method is considered idempotent, as it should not have any side effects on the server. It's used for retrieving data.

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.

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

Explanation: The @SessionScoped annotation is used in Java EE to specify that a Java class is a session-scoped bean.

Question 16: What does JPA stand for?

A. Java Persistence Application

B. Java Programming API



D. Java Performance Analyzer

Answer: C. Java Persistence API

Explanation: JPA stands for Java Persistence API, which is a Java specification for accessing, persisting, and managing data between Java objects and a relational database.

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.

Answer: B. To handle user input and update the Model.

Explanation: The primary role of a Controller in the MVC pattern is to handle user input and update the Model.

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

Answer: B. 201 Created

Explanation: The 201 Created status code is typically returned when a resource is successfully created in response to a POST request.

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.

Answer: B. To manage database connections.

Explanation: The JPA EntityManagerFactory is used to manage database connections and provide EntityManager instances.

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

A. GET



C. POST

D. DELETE

Answer: B. PUT

Explanation: The PUT method is used to update an existing resource at the specified URI.

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.

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

Explanation: The JSP Standard Tag Library (JSTL) provides a set of custom tags that can be used in JSP pages to perform common tasks.

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

A. request.invalidateSession();

B. session.destroy();



D. session.end();

Answer: C. session.invalidate();

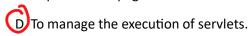
Explanation: The session.invalidate() method is used to invalidate a session in a Servlet, removing all session attributes and ending the session.

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.

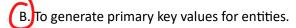


Answer: D. To manage the execution of servlets.

Explanation: A servlet container is responsible for managing the execution of servlets in a Java web application, including their lifecycle and handling of requests.

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

A. To generate a unique session ID.



C. To execute SQL queries.

D. To handle session management.

Answer: B. To generate primary key values for entities.

Explanation: The @GeneratedValue annotation is used in JPA to generate primary key values for entities automatically.

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.

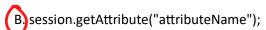
D. To process HTTP requests.

Answer: C. To render the user interface.

Explanation: The View in the MVC pattern is responsible for rendering the user interface and presenting data to the user.

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

A. request.getSessionAttribute("attributeName");



C. session.getSessionAttribute("attributeName");

D. request.getAttribute("attributeName");

Answer: B. session.getAttribute("attributeName");

Explanation: The session.getAttribute("attributeName") method is used to retrieve a session attribute in a Servlet.

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.

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

Explanation: The deployment descriptor is used to configure the deployment settings of a Java web application, including servlet mappings, security constraints, and resource references.

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. ession.setAttribute("attributeName", attributeValue);
- D. request.addAttribute("attributeName", attributeValue);

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

Explanation: The session.setAttribute("attributeName", attributeValue) method is used to set a session attribute in a Servlet.

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.

Answer: D. To manage the execution of web applications.

Explanation: A web container is responsible for managing the execution of web applications, including the lifecycle of servlets and JSP pages.

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

- A. GET
- B. POST
- C. PUT



Answer: D. DELETE

Explanation: The DELETE method is typically used for requesting the removal of a resource on the server.