

**NATIONAL SCHOOL OF BUSINESS MANAGEMENT**

**SE204.3- Development of Enterprise Applications I**

**Model Paper**

**Instructions to Candidates**

1. Total number of pages - Four (04)
2. Answer 04 Questions. Select only one question from Part C.
3. If a page or a part of this question paper is not printed, please inform the Supervisor immediately.
4. Time allocated for the examination is three (03) hours.
5. Write your index number in all pages of answer script.
6. Stapler all answer sheets at the end of the examination.

**Part A**

**Question 1 (Total – 20 marks)**

Write answers in the answer book.

1. Which of the following method can be used to get multiple values of a parameter such as checkbox data?
   1. request.getParameter()
   2. request.getParameterValues()
   3. request.getParameterNames()
   4. None of the above.
2. How can we retrieve the valve of the “Accept” header from the request?
   1. String accept = request.getParameter(“Accept”);
   2. String accept = request.getHeader(“Accept”);
   3. String accept = request.getRequestHeader(“Accept”);
   4. String accept = getServletContext().getInitParameter(“Accept”);
3. 3. Which method is used to send the same request and response objects to another servlet in RequestDispacher?
   1. forward()
   2. sendRedirect()
   3. Both A & B
   4. None of the above
4. How would you set a header named “Refresh” in the HTTPResponse object?
   1. response.setHeader(Refresh, 30);
   2. response.setHeader("Refresh", 30);
   3. response.setStatus(30);
   4. response.setIntHeader("Refresh", 30);
5. Which of the following code delete a cookie in servlet?
   1. response.deleteCookie(cookie);
   2. cookie.setMaxAge(0);
   3. request.deleteCookie(cookie);
   4. None of the above
6. Which directive specifies a HTTP response that will be of type “image/svg”?
   1. <%@ page type=“image/svg” %>
   2. <%@ page mimeType=“image/svg” %>
   3. <%@ page language=“image/svg” %>
   4. <%@ page contentType=“image/svg” %>
7. Which is **not** an example for an implicit object in JSP?
   1. pageContext
   2. cookie
   3. page
   4. out
8. Which is an example of the syntax used to import a class in JSP?
   1. <% page import= “java.util.Date” %>
   2. <%@ page import= “java.util.Date” @%>
   3. <%@ page import= “java.util.Date” %>
   4. <% import java.util.Date; %>
9. Which statement is **true** about <jsp:usebean> action?
   1. The id attribute is optional.
   2. The scope attribute is required.
   3. The scope attribute is optional and default value is request.
   4. The scope attribute is optional.

10. Which of the following code is used to get an attribute in a HTTP Session object in servlets?

1. session.getAttribute(String name)
2. session.alterAttribute(String name)
3. session.updateAttribute(String name)
4. session.setAttribute(String name)

**Part B**

**Question 2 (Total – 20 marks)**

1. Briefly describe the servlet life cycle using a suitable diagram. (5 marks)
2. Briefly describe the MVC architecture. (05 marks)
3. Briefly explain the following request/response headers. (10 marks)
   1. Refresh
   2. Expires
   3. Location
   4. Referer

**Question 3 (Total – 30 marks)**

1. Write a program to create a cookie with your favorite color which lives only 1 minute. (5 marks)
2. Write a program to create a session cookie to store your name. (5 marks)
3. Write a servlet that generates an Excel spreadsheet with 10 rows and 5 columns. Display a random number in each cell. (5 marks)
4. Explain the usage of the following JSP Actions with an example. (10 marks)
   1. <jsp:include>
   2. <jsp:forward>
   3. <jsp:param>
   4. <jsp:useBean>
5. What is the difference between **include directive** and **include action**? (5 marks)

**Part C**

**Please answer only one question from below questions.**

**Question 4 (Total – 30 marks)**

1. Write program to create a user registration for a library which,
   1. collects First Name, Last Name, Email, Contact Number, Username, Password data.
   2. inserts the registration form data to **user** table of **library** database.
   3. RegistrationSuccess.jsp should display that the registration is successful & RegistrationError.jsp should display an error message.

**Question 5 (Total – 30 marks)**

1. Write program to create a user login which,
   1. uses sessions
   2. Validate the username and password.
   3. if they match redirects to success.jsp & display a welcome message.
   4. if not redirects to the login.jsp