

Total number of printed pages – 6

MCA  
PCS 5010

Fifth Semester Examination – 2006

ENTERPRISE WEB-BASED COMPUTING  
WITH JAVA

Full Marks – 70

Time : 3 Hours

*Answer Question No. 1 which is compulsory and  
any five from the rest.*

*The figures in the right hand margin indicate  
full marks for the questions.*

1. Answer the following questions : 2×10
- (a) Which two methods of the applet class returns the height and width of the image ?
  - (b) Which method is used to retrieve an initialization parameter from **Servlet Context** ?

P.T.O.

(c) Which of the following methods will be invoked on a session attributes that implements **Http Session Binding Listener** when the session is invalidated ?

- (i) **session Destroyed**
- (ii) **value Unbound**
- (iii) **attribute Removed**
- (iv) **session Invalidated.**

(d) Which of the following tags can you use to print the value of an expression to the output ? (Select two)

- (i) `<%@ %>`
- (ii) `<%! %>`
- (iii) `<% %>`
- (iv) `<%= %>`
- (v) `<%-- -- %>`

(e) What will be the output of the following code

```
<html><body>
<% x=3; %>
<% int x=5; %>
<% int x=7; %>
  x = <%=x %>, <%=this.x %>
</body></html>
```

(i) x = 3, 5

(ii) x = 3, 7

(iii) x = 5, 3

(iv) x = 5, 7

(v) Compilation Error.

(f) Which of the following implicit objects does not represent a scope container ?

(i) application

(ii) session

(iii) request

(iv) page

(v) page Context.

(g) Which of the following is not a page directive attribute ?

(i) error Page

(ii) is Thread Unsafe

(iii) buffer

(iv) auto Flush.

(h) Errors generated during JDBC operations are thrown as \_\_\_\_\_

(i) What is the basic difference between Entity Beans and Session Beans.

(j) What is the full form of JMS.

2. (a) What are the different Form Elements in an HTML form ? Discuss any two of them in brief. 6

(b) What is SAX? What are the different methods need for setting the properties and features in the XML reader Interface ? 4

3. (a) List any two Request Methods and two Response Methods of HttpServlet class and discuss their Functionality. 5

(b) What do you mean by session management ? How Cookie class helps in managing the same ? 5

4. (a) Discuss different types of scripting elements in JSP with suitable example. 4

(b) Discuss any 3 attributes of *jsp:plugin* elements. 6

5. (a) What is the use of Constrained Properties in Java Beans ? What are Accessor Methods ? 4

(b) Discuss the three standard actions for using JavaBeans in a JSP Page. 6

6. Discuss the MVC architecture. Compare the same with JSP model 1. 10

7. What is the use of RMI in Java Architecture? With suitable diagram discuss the different layers of RMI. 10

8. Write short notes on any two of the following :

5x2

(i) JMS

(ii) Servlet Lifecycle.

(iii) Struts

(iv) Perl.

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