



Name :

Roll No. :

Invigilator's Signature :

CS/B.TECH(CSE)/SEM-8/CS-802E/2012

2012

ADVANCED JAVA PROGRAMMING

Time Allotted : 3 Hours

Full Marks : 70

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

GROUP – A

(Multiple Choice Type Questions)

1. Choose the correct alternatives for the following :

10 × 1 = 10

- i) Tree based Parser is
 - a) SAX
 - b) DOM
 - c) DTD
 - d) none of these.
- ii) Which HTTP methods are used to show the client what the server is receiving ?
 - a) GET
 - b) PUT
 - c) TRACE
 - d) RETURN.
- iii) Which method of HttpServletResponse is used to redirect an HTTP request to another URL ?
 - a) sendURL ()
 - b) redirectURL ()
 - c) redirectHttp ()
 - d) sendRedirect ()



- iv) Which HTTP methods are not considered idempotent ?
- a) GET b) POST
c) HEAD d) PUT.
- v) Which of the following methods are not declared in `HttpServletRequest` as opposed to in `ServletRequest` ?
- a) `getMethod ()` b) `getHeader ()`
c) `getCookie ()` d) `getInputStream ()`.
- vi) Session Beans represent
- a) process b) Data
c) Stack d) none of these.
- vii) When using a `RequestDispatcher`, the use of which methods can often lead to an `IllegalStateException` ?
- a) `read` b) `flush`
c) `write` d) `getOutputStream`.
- viii) Which are valid JSP implicit variables ?
- a) `stream` b) `context`
c) `exception` d) `listener`.
- ix) Given a JSP page with line
`$(101% 10)`
- a) 1 b) 10
c) 1001 d) 101% 10
- x) Which of the following tools is used to generate the stubs and skeletons for a remote service ?
- a) `javac` b) `rmic`
c) `java` d) `rmiregistry`.



GROUP – B

(Short Answer Type Questions)

Answer any *three* of the following. $3 \times 5 = 15$

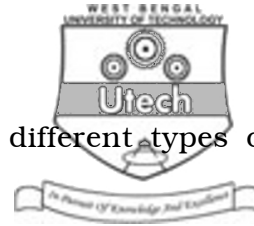
2. Discuss about the different Tier architectures.
3. What are the different approaches of Session Tracking ?
4. Why do we need dynamic webpage and active webpage ?
What are the disadvantages of static webpage ? $3 + 2$
5. What do you mean by DTD and XSD ? Give suitable examples.
6. Explain LDAP tree structure with suitable example.

GROUP – C

(Long Answer Type Questions)

Answer any *three* of the following. $3 \times 15 = 45$

7.
 - a) What is Applet ? Describe the life-cycle of an applet.
 - b) What is the difference between HTTP servlet and Generic servlet ?
 - c) What are cookies ? Briefly explain at least two ways by which we can create a cookie.
 - d) "HTTP protocol is a stateless protocol". Explain briefly. $2 + 3 + 4 + 3 + 3$
8.
 - a) What are the uses of Serialization ?
 - b) What makes J2EE suitable for distributed client tier applications ?
 - c) Describe JSP life cycle.
 - d) What are scriptlets and declaration in a JSP page.
Explain with examples. $3 + 5 + 3 + 4$



9. a) What is EJB ? Briefly discuss the different types of EJB.
b) Compare EJB and JavaBean.
c) What are the EJB containers ?
d) What are the differences between Type-1 and Type-4 JDBC drivers ? $4 + 4 + 4 + 3$
10. a) Why are XML documents useful with Java ?
b) Name the packages which define all the interfaces of the SAX parser.
c) What is the advantage of XML ?
d) Write a Java program which will display the elements of the following XML file :

```
<Employees_details>
<Employee>
<Emp_Id>E001</Emp_Id>
<Emp_Name>B.GATES</Emp_Name>
</Employee>
<Employee>
<Emp_Id>E002</Emp_ID>
<Emp_Name>P.C.SIRCAR</Emp_Name>
</Employee>
</Employees_details>
```

 $3 + 3 + 3 + 6$
11. Write short notes on any *three* of the following : 3×5
- a) JINI
 - b) JAXP & JAXB
 - c) JNDI
 - d) LDAP tree structure
 - e) Benefits of using JDO.

