



Name :
Roll No. :
Invigilator's Signature :

CS/B.TECH (CSE)/SEM-8/CS-802E/2011

2011

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) Which HTTP methods are NOT considered idempotent ?
 - a) GET
 - b) POST
 - c) HEAD
 - d) PUT.
- ii) Which HTTP methods are used to show the client what the server is receiving ?
 - a) GET
 - b) RETURN
 - c) TRACE
 - d) OPTIONS.
- iii) When using a RequestDispatcher, the use of which methods can often lead to an IllegalStateException ?
 - a) read
 - b) flush
 - c) write
 - d) getOutputStream.



- iv) Which type of objects can store attribute ?
- a) HttpServletRequest b) ServletConfig
c) ServletResponse d) RequestDispatcher.
- v) Which deployment descriptor elements may appear before the < web-app > element ?
- a) < listener >
b) < context-param >
c) < servlet >
d) No XML element may appear before the < web-app > element.
- vi) Which type of objects are available to the jspInit () method ?
- a) ServletConfig b) JspServletConfig
c) JspServletContext d) HttpServletRequest.
- vii) Which JSP lifecycle step is out of order ?
- a) Translate the JSP into a servlet
b) Compile servlet source code
c) Call jsp Service ()
d) Instantiate the servlet class.
- viii) Which are valid JSP implicit variables ?
- a) stream b) context
c) listener d) exception.
- ix) Given a JSP page with the line :
- `$ {101 % 10}`
- The output is
- a) 1 b) 10
c) 1001 d) 101 % 10



- x) Where should web.xml be stored in a WAR file ?
- a) In / WEB-INF/classes b) In / WEB-INF/lib
c) In / WEB-INF d) In / META-INF.

GROUP – B

(Short Answer Type Questions)

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

2. Explain JINI Technology ? What is JNDI ? What is the significance of it ? $2 + (2 + 1)$
3. Explain the use of following JSP tags action elements :
i) useBean ii) getProperty iii) setProperty. $1 + 2 + 2$
4. What is the significance of Entity Bean ? Explain CMP and BMP Entity Bean. $[2 + 3]$
5. Briefly explain MVC Architecture. What is the advantage of 3 tier architecture over 2 tier architecture ? $3 + 2$
6. What are Servlets ? Briefly explain the various sessions Management Technique available in Servlets. $1 + 4$

GROUP – C

(Long Answer Type Questions)

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

7. a) What is the difference between Servlets and CGI ?
b) What is Servlets API ? Describe the Life cycle of Servlets.
c) What is Servlets container ? What role does it play ?
Briefly define different containers available in Servlets.
 $3 + 2 + 5 + 5$



8. a) What is JDBC ? Discuss different types of JDBC Driver available in java.
- b) Give a brief description of the following :
- i) Statement ii) PreparedStatement iii) Callable Statement
- c) Write a Java Program, which will display all the records from a database (use JDBC-ODBC bridge driver, Table Name = "EMP" with fields like [empid Number, Ename text (10), Salary number]. Assume access database is running in your machine & DSN is TEST)
- 2 + 4 + 3 + 6
9. a) What is Enterprise Java Bean ? How does it differ form normal Java Bean ?
- b) What are the types of Bean available in EJB ? Explain in short.
- c) Explain the feature of entity bean ? What are the ways to persist entity bean ?
- 1 + 2 + 5 + 4 + 3
10. a) What are the differences between JSP and JDBC ?
- b) Describe the Life cycle of JSP
- c) Explain in brief the various tags available in JSP
- d) Describe static, active and dynamic web pages.
- 3 + 4 + 5 + 3
11. a) What is XML ? How does it differ from HTML ?
- b) Briefly define the architecture of XML with a neat sketch diagram.
- c) What is the advantage of XML ? Describe the XML schema in brief.
- 2 + 2 + 5 + 3 + 3