



Name :

Roll No. :

Invigilator's Signature :

CS/B.Tech (CSE)/SEM-8/CS-802E/2010

2010

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 : $10 \times 1 = 10$
 - i) The use of a DTD in XML development is
 - a) required when validating XML documents
 - b) no longer necessary after the XML editor has been customized
 - c) used to direct conversion using an XSLT processor
 - d) a good guide to populating a templates to be filled in when generating an XML document automatically.
 - ii) Which of the following is not a transaction isolation level in EJB ?
 - a) Transaction _ read _ uncommitted
 - b) Transaction _ read _ committed
 - c) Transaction _ repeatable _ read
 - d) Transaction _ synchronous.



- iii) DOM stands for
 - a) Domain Object Model
 - b) Document Object Model
 - c) Document Oriented Methodology
 - d) Domain Oriented Markup.
- iv) What is the initial contact point for handling a web request in a Page-centric architecture ?
 - a) A JSP Page
 - b) A JavaBean
 - c) A Servlet
 - d) A session Manager.
- v) Entity beans that have container-managed relationships with other entity beans, must be accessed in the same scope as those related beans to provide a local client view.
 - a) local
 - b) global
 - c) logical
 - d) physical.
- vi) Scaling of an application to increase availability and throughput is called
 - a) Mapping
 - b) Transforming
 - c) Clustering
 - d) Optimizing.
- vii) Main purpose of XML is
 - a) to reuse data
 - b) to save and transport data
 - c) to make connection between data
 - d) none of these.



viii) Which of the following is true ?

- a) doGet () has higher data transfer capacity than doPost ()
 - b) doPost () and doGet () has same data transfer capacity
 - c) doPost () has unlimited data transfer capacity whereas doGet () has limited data transfer capacity
 - d) doGet() has unlimited data transfer capacity whereas doPost () has limited data transfer capacity.
- ix) Stub is a member to which of the following technologies ?
- a) JINI
 - b) JDO
 - c) JAXB
 - d) RMI.
- x) Which of the following JDBC driver types is called "native" ?
- a) Type 2
 - b) Type 1
 - c) Type 4
 - d) Type 1.

GROUP – B

(Short Answer Type Questions)

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

2. What is Servlet ? How is it different from CGI technology ?
2 + 3
3. Critically compare between JSP and Servlet. Discuss the main features of the life cycle of JSP.
2 + 3
4. What is the difference between Message Driven beans and Stateless Session beans ?
5. Explain layer architecture of RMI. Does RMI-IIOP support dynamic downloading of classes ? Justify your answer. 3 + 2
6. What is a directory service ? How to use LDAP to work with a directory service ?
2 + 3



GROUP – C

(Long Answer Type Questions)

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

7. a) Define HTTP Tunneling. 3
b) Explain how servlets differ from RMI. Explain the advantages and disadvantages of each technology. 7
c) Describe different types of servlet collaboration. 5
 8. a) Explain the 3 main components of MVC architecture, i.e., Model, view and controller. 6
b) Explain the difference between DOM and SAX. 4
c) What is the difference between Java Bean and Enterprise Java Bean ? 5
 9. a) What makes J2EE suitable for distributed multitiered Applications ? 5
b) Explain JTA and JTS in brief. 5
c) What are implicit objects in JSP ? What is the difference between forward and send Redirect ? 5
 10. a) What is JDO ? How is it different from Value Object ? 5
b) What is the difference between Bean Factory and Application context ? 5
c) How does EJB invocation happen ? 5
 11. Write short notes on any *three* of the following : 3×5
 - a) JAXP and JAXB
 - b) JNDI
 - c) Significance of JINI in web Application
 - d) n-tier architecture
 - e) FAT controller.
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