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.

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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.

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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 × 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

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GROUP – C

(Long Answer Type Questions)

Answer any *three* of the following. 3 × 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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