

M.E. Second Semester (Information Technology) (Full Time) (C.G.S.)

13427 : Integrative Programming : 2 NMEF 1

P. Pages : 2

Time : Three Hours



AU - 3308

Max. Marks : 80

- Notes :
1. Answer **three** questions from Section A and **three** questions from Section B.
 2. Due credit will be given to neatness and adequate dimensions.
 3. Assume suitable data wherever necessary.
 4. Illustrate your answer necessary with the help of neat sketches.
 5. Use of pen Blue/Black ink/refill only for writing the answer book.

SECTION - A

1. a) Differentiate between:- 7
- i) Character I/O and Byte I/O.
 - ii) Transient object and Persistent object.
 - iii) Design Pattern and Design framework.

- b) Describe the socialization interface and give the steps to make an object serializable. 7

OR

2. a) Differentiate between: 4
- i) Abstract class and Interface.
 - ii) Constructor and finalizer.

- b) Define-cloning object and persistent object. 3

- c) Explain the role of finalizer. Explain in detail how to define a finalize method and what type of access specifiers can be used with finalizers. 7

3. a) What is thread? Explain how to create a thread using thread class and Runnable interface. 6

- b) Explain what is synchronization. What is the need of it? 7

OR

4. a) Explain what suitable examples, under what situations it is better. 6

- i) To use a thread or a process.
- ii) To synchronize threads or not to synchronize.

- b) Explain how SVM can be used to schedule task. 7

5. a) Explain various transaction isolation levels in the connection class. 6

- b) Give a sequence of steps for connecting a Java application to a database Through JDBC and retrieve the data, update the data and delete the data from the database. 7

OR

6. a) What is the purpose of `farName()` method? To which class does this method belong? Give an example showing use of `farName()` method. 7
- b) Explain. 6
- i) Connection pool.
 - ii) Two- phase commit.
 - iii) Type 2 JDBC Driver for RDBMS systems.

SECTION – B

7. a) Parsing XML document, Explain significance of this step and briefly explain the importance features of DOM parser. 7
- b) What is JNDI? Why it is used? Explain the facilities provided by JNDI. 6

OR

8. a) Differentiate between. 6
- i) XHTML and XML.
 - ii) Well- formed document and valid document.
 - iii) Document and DTD.
- b) If you want an element of complex Type to contain one or more other element. Explain how can define sequence of those elements. 7
9. a) Describe security manager object used in RMI for protecting against unauthorized access. 7
- b) Explain details Java authentication and authorization service (JAAS). 6

OR

10. a) Describe the steps for Networking two or more hosts using sockets in Java. Explain the interaction between a client and server. 7
- b) Differentiate. 6
- i) TCP socket and Datagram socket.
 - ii) RMI and CORBA.
11. a) Explain with a neat diagram how a web app process HTTP requests. 7
- b) Explain main classes of JSP API. 7

OR

12. a) Describe the steps for session trading by using cookie object. 7
- b) Explain the life cycle of a servlet. Explain purpose of various method. 7
