30.4.19

Roll No. | | | | | | | | |

B.E./ B.Tech. (Full Time) ARREAR DEGREE EXAMINATIONS, APR / MAY 2019

(Information Technology)
Semester : V
IT8504 – Integrated Programming
(Regulations: 2012)

Time: 3 Hours | Answer ALL Questions | Max. Marks: 100

PART- A (10 x 2 = 20 Marks)

1. What is the role of XML in web development?
2. What is Distributed Object Model?
3. How do you transform the contents of an xml file in an html page? Give an example.
4. List the function tag which is used to split the string in an XML file with an example.
5. What is JMS?
6. Differentiate COM and DCOM.
7. What do you mean by Wireless Messaging?
8. Define the objectives of CLDC.
9. List out the components of JINI technology.
10. What are Attributes in JINI?



Part – B (5x16=80 Marks)

11. a) i) Explain about the importance of developing Distributed system/ applications using Java. Also, discuss about the various components of the distributed applications. (8)

ii) What are Middleware Technologies? Explain the different types of Middleware components and its usage in detail. (8)

12. a) i) Explain the different properties and methods involved in parsing XML DOM. Illustrate XML DOM Parsing with a suitable example. (10)

ii) Write short notes on XML Annotations. (6)

(OR)

b) i) Create an XML file named Tour.xml consisting of the following details such as Tour ID, Name, Places covered, Number of days, Journey Date etc with multiple occurrences for each tag. Validate the above xml file with a schema containing indicators and different data types. (10)

ii) Write a PHP code which is used to read the xml data (Tour.xml) from the file and display its contents. (6)

13. a) i) Implement a Client Server communication (Chat application) using Transmission Control Protocol (Sockets). (10)

ii) Explain how Remote Procedure Call is implemented using CORBA with a suitable example. (6)

(OR)

b) i) Using multithreading, write a Java program to create two threads with appropriate names and try to synchronize them properly to increment a counter variable (only one thread should update the counter at a time). Terminate the threads when the counter reaches 20. (10)

ii) Write short notes on Reusable Programming techniques. (6)

14. a) i) Explain the setting up of Record Store in detail. Also discuss the steps involved in creating and manipulating the Record Store of MIDLet with an example. (10)

ii) What is MIDP? Discuss about the benefits of MIDP. (6)

(OR)

b) i) Create a Midlet based Graphical User Interface for a Music Retrieval screen which accepts Song ID, Song Name and User Priority from the user by making use of various components. Design two more buttons named Submit and Reset in the screen so that when the user clicks submit button, details entered by the user should be displayed at the bottom of the screen and the screen should get cleared while clicking the Reset button. (16)

15. a) Explain about the Unicast discovery and Broadcast discovery mechanism of lookup services in JINI architecture in detail. (16)

(OR)

b) i) Discuss about the granting of leases in JINI architecture in detail. (10)

ii) Write short notes on the proxy choices for service architecture in JINI. (6)