DB-117

December-2013

5 Years M.Sc. (CA & IT)

Integrated (K.S.) 5th Sem. T.Y. M.Sc.

Object Oriented Programming with Java

Time : 3 Hours]   **[Max. Marks : 100**

Instructions :   (1) Attempt **all** questions.

               (2) Make suitable assumptions wherever necessary.

               (3) Figures to the right indicate full marks.

1.   Answer the following : (any **five**)   **20**

    (1) Which features of Java have made it a language better than others ?

    (2) Discuss the significance of Wrapper Classes. List the names of all Wrapper Classes in Java.

    (3) Difference between String and String buffer class.

    (4) Explain the importance of garbage collection. How it is handling in Java ?

    (5) Explain difference between Method overloading and overriding with example.

    (6) Difference between Static and Instance variables and methods.

2.   Answer the following : (any **four**)   **20**

    (1) What is Package ? How it is useful in Java with example ?

    (2) Explain life cycle of Thread. Specify some importance methods of Thread class.

    (3) What are annotations ? How are they useful ?

    (4) What is Interface ? Explain how multiple inheritance done in Java.

    (5) What is Stream ? Explain in brief the types of Stream.

3.   Answer the following : (any **five**)   **20**

    (1) Explain about super, this, synchronized, and classpath.

    (2) Explain the concept of anonymous class and adapter class.

    (3) Difference between Java Applet and Java Application.

    (4) What is deadlock ? How it is solved in multithread application ?

    (5) Write in brief about Java Virtual Machine.

    (6) Explain abstract, public, final class modifiers.

4. Answer the following : (any **five**) **20**

    (1) Explain Thread Synchronization in Java.

    (2) Explain different phases of Life cycle of an Applet with example.

    (3) Explain about enumeration interface in detail.

    (4) What is Exception ? Write in brief about Exception Handling.

    (5) What is a Layout Manager ? Explain different layouts available in Java.

    (6) Explain event delegation model and importance of Listeners.

5. Write code for the following : **20**

    (1) There is a class called employee. It has members empid, name, salary. Write an application for writing the employee records in a .txt file. Then the application will read the records from file and display it. Use Object Output and Object Input Stream class.

    (2) Write a program to create an applet which shows current date and time continuously using thread.

    (3) Write an application that executes two threads. One thread displays "Hello" every 100 milliseconds, and the other displays "Goodbye" every 300 milliseconds.

    (4) Design a registration form for new user. On clicking submit button entered data should be display in dialog box.

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