Third Semester MCA Degree Examination, June/July 2015
Programming with Java

Time: 3 hrs.   Max. Marks:100

Note: *Answer any FIVE full questions.*

1 a. List and explain the characteristics features of Java language. With a block diagram, state the process of general structure of simple Java program. **(10 Marks)**
   b. Explain the following with an example.
       i) Bitwise operators.   ii) Type conversions.   iii) For-each. **(10 Marks)**

2 a. Demonstrate with a program
       i)   Overloaded constructions.
       ii) Dynamic method dispatch. **(10 Marks)**
   b. Explain the following with examples.
       i) Static   ii) finalize( ) method   iii) object as parameters. **(10 Marks)**

3 a. What are abstract class and Interfaces? Give the difference between abstract class and Interface with proper examples. **(10 Marks)**
   b. What is an exception handling? Explain the try, catch throw, throws and finally block with suitable examples? **(10 Marks)**

4 a. What is the life cycle of a tread? Discuss the different approaches for creating threads with suitable examples. **(10 Marks)**
   b. What is Serialization? Given the benefits and Demonstrate with a program the serializing and Deserializing an object. **(10 Marks)**

5 a. Explain the following.
       i) Enumeration.   ii) Generics. **(10 Marks)**
   b. Define string and string buffer class. Explain any five methods of string and string buffer class with examples. **(10 Marks)**

6 a. Give an Java.lang hierarchy. Explain in detail about wrapper classes with examples. **(10 Marks)**
   b. Explain the following.
       i) The Arraylist class.   ii) The Treeset class. **(10 Marks)**

7 a. Explain the various Networking classes and Interfaces using Java.net package. **(10 Marks)**
   b. What is a event Delegation model and what are the event classes and event Interfaces? Give an example using keyboard event. **(10 Marks)**

8 a. What is Applet? Give the life cycle of an Applet. Write an applet program to find factorial of a given number. **(10 Marks)**
   b. What are swings? List the phases of swings. Demonstrate a simple swing application program. **(10 Marks)**

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