



Seat No. : _____

XX-128

April-2013

Five Years M.Sc. (CA & IT) Integrated (K.S.)

T.Y. M.Sc.

305 : Network and Internet Technologies

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 **four**) **20**
- (1) Write in brief about Java Virtual Machine.
 - (2) What is String Buffer ? Explain it with example.
 - (3) Differentiate for loop and for-each loop.
 - (4) Explain the life cycle of a Thread.
 - (5) What is the difference between static (class) method and instance method ?
2. Answer the following : (any **four**) **20**
- (1) Explain the difference between Method Overloading and Overriding.
 - (2) List out any Four methods of String Class this proper example.
 - (3) What is the use of abstract class ?
 - (4) Explain different phases of life cycle of Applet.
 - (5) List out any four components of Swing with its signature.
3. (a) Write a code for the following : (any **three**) **18**
- (1) Write a small program that accepts an argument from the user and checks it for the palindrome.

- (2) Write an exception handling program for ClassNotFoundException – thrown if a program cannot find a class it depends at run time.
- (3) Write a program for producer consumer problem (with synchronization).
- (4) Write a Java application to display all records in given database. Field Names are as follows :

| Field Name | Field Type |
|------------|------------|
| EmpId | Integer |
| Empname | Varchar |
| Emp_desig | Varchar |
| Emp_J_Date | Varchar |
| Emp_Salary | Numeric |

- (b) What is the use of Garage Collection in Java ? **2**

4. (a) Write the differences of the following : (any **three**) **12**
 - (1) throw and throws
 - (2) Iterator and Enumerator
 - (3) Comparable and Comparator
 - (4) Array List and Vactor

- (b) Give the standard steps for connecting and querying database with java applications. Also discuss the important methods of statement class. **8**

5. Answer the following : (any **four**) **20**
 - (1) Explain Thread Synchronization in Java.
 - (2) Explain the Wrapper Classes in Java.
 - (3) List out any Four method of math class with example.
 - (4) Which way to use multiple inheritances in Java with proper example.
 - (5) How to create user defined exception in Java ?