# FOURTH SEMESTER B.C.A. DEGREE EXAMINATION, MAY 2014

## (UG—CCSS)

### Core Course

### CA 4B 05—PROGRAMMING IN JAVA

Time : Three Hours                                                                      Maximum : 30 Weightage

I. Answer *all* twelve questions :

1 —————— is created during compilation of Java program.

   (a) Intermediate code.           (b) Byte Code.

   (c) Dynamic code.                (d) None of the above.

2 In a class, global variables are declared using the keyword —————.

3 —————— defines only abstract methods and final fields.

   (a) Interface.                   (b) Class.

   (c) Constructor.                 (d) None of the above.

4 In Java, exceptions are the sub-classes of the built-in class —————.

5 —————— is the process by which objects of one class acquire the properties of objects of another class.

   (a) Abstraction.                 (b) Inheritance.

   (c) Encapsulation.               (d) Polymorphism.

6 The function called by itself is called —————.

   (a) Static function.             (b) Public function.

   (c) Recursive function.          (d) Function overloading.

7 When the —————— statement is encountered inside a loop, the loop is immediately exited and the program continues with the statement immediately following the loop.

   (a) Continue.                    (b) Break.

   (c) Switch.                      (d) Return.

8 —————— occurs when two threads have a circular dependency on a pair of synchronized objects.

   (a) Synchronization.             (b) Deadlock.

   (c) Wait for.                    (d) None of the above.

**Turn over**

9 A ——— is a display monitor's smallest unit of resolution.

10 The ——— method is used to block the execution of the thread unfil further order.

(a) Sleep ().                          (b) Suspend ().

(c) Wait ().                           (d) Stop ().

11 The ——— method of an applet is called only once in a applet's life-cycle.

12 The ——— attribute of the applet code identifies the name of the Java byte code.

(a) Code.                             (b) Param.

(c) Value.                            (d) None of the above.

(12 × ¼ = 3 weightage)

II. Short answer type questions. Answer *all* nine questions :

13 What are the different types of Java programs ?

14 Write a short note on *identifiers* in Java.

15 What do you mean by *instantiating* an object ? How it is done in Java ?

16 What are the uses of the keyword *super* in Java, with example ?

17 What is *finally* block ? When and how it is used ?

18 What is the difference Java Beans and Servlets ?

19 What is scope of *variable* ?

20 Differentiate local and remote applets.

21 What is the usage of *this* keyword in Java ?

(9 × 1 = 9 weightage)

Short Essay or Pagagraph questions. Answer any *five* questions :

22 Compare and contrast the concepts *call-by-value* and *call-by-reference* with examples.

23 Discuss detail *packages*. Write a program to show an implementation of package.

24 When do we declare a field or a method or a class as *final* ?

25 How are *static members* different from normal members ? What are the restrictions for static methods ?

26 What is an event ? Write short notes on event handling mechanism.

27 Why do we use *wait()*, *notify()* and *notifyall()* methods in Java ?

28 What is a stream ? How is the concept of streams used in Java ?

(5 × 2 = 10 weightage)

IV. Essay Questions. Answer any *two* questions :

29 What is multithreading ? How do you handle it in Java ? Explain the different ways of creating thread with example.

30 Define Interface. Compare and contrast class and interface. Explain in detail the implementation of interface. Write a program to create two interfaces namely *date* and *time*. Then create class *client*, which implement two interfaces.

31 List out the *String operations* with example.

(2 × 4 = 8 weightage)