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.

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 0.   (b) Suspend ().

(c) Wait 0.   (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.

$(12 \times \frac{1}{4} = 3$ 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 ?

$\times 1 = 9$ weightage)

III. 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 ?

$(5 \times 2 = 10$ 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 ¡mplementation 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 X 4 = 8 weightage)