

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 until 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 x $\frac{1}{4}$ = 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 ?

x 1 = 9 weightage)

III. Short Essay or **Paragraph** 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 x 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 X 4 = 8 weightage)