

**C 5157**

(Pages : 3)

Name .....

Reg. No.....

**FOURTH SEMESTER B.C.A DEGREE (SUPPLEMENTARY/IMPROVEMENT)  
EXAMINATION, MAY 2016**

(UG—CCSS)

Core Course

CA 4B 05—PROGRAMMING IN JAVA

Maximum : 30 Weightage

Time : Three Hours

I. Answer all *twelve* questions :

1 Which Property does not hold good for Java ?

- (a) Object-Oriented.
- (b) Secure.
- (c) Dynamic:
- (d) Complex.

2 A compiler converts the Java program into an intermediate language representation called

- (a) Bytecode.
- (b) Byte.
- (c) Byteclass.
- (d) Bytejava.

3 In Java, exceptions are the sub-classes of the built-in class

4 Operator is used to create an object.

- (a) Class.
- (b) New.
- (c) Print.
- (d) Main.

5 Java platform consists of JVM and a package of readymade software components. This package is known as

- (a) Java API.
- (b) JVM API.
- (c) JM API.
- (d) API.

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

7 Which of the following is not a Looping statement

- (a) For.
- (b) Switch.
- (c) While.
- (d) Do-while.

**Turn over**

8 Which

property of Java allows the creation of hierarchical classification

- (a) Interface.
- (b) Inheritance.
- (c) Robust.
- (d) Distributed.

9 OOPS allows us to decompose a problem into a number of entities called

10 The class at the top of the exception classes hierarchy is called

- (a) Common.
- (b) Throwable.
- (c) NULL.
- (d) Catch.

11 The

class creates and maintains a buffer for an input stream.

- (a) Common Buffered input Stream.
- (b) Buffered Stream.
- (c) Input Stream.
- (d) Buffered input Stream.

12 A

path. is a sequence of bytes traveling from a source to a destination over a communication

- (a) String.
- (b) Stream.
- (c) Character.
- (d) Integer.

## II. Short Answer Type

Questions. Answer all these questions :

(12 x 3 weightage)

13 Explain in brief the concepts

14 Describe *Method overriding*. *garbage collection and dynamic binding*. Explain it with an example.

15 How is interface used to support

*multiple inheritance* ? Explain with a program. What is meant by 'Late binding' ?

17 How is a *superclass* constructor or method invoked ?

18 What is *synchronization* ? When it is used ?

19 How *applets* differ from application programs ?

20 What is the difference between

21 Differentiate b/w *J2EE*, *J2ME* and *J2SE*. reloading and restarting an applet ?

(9 x 1 = 9 weightage)

III. Short Essay or Paragraph Questions. Answer any *five* questions :

22 Explain '*Dynamic method dispatch*' with *one* example program.

23 List out the similarities between *interfaces* and *classes*.

24 How do we set priorities for threads ?

25 List out the common types of exceptions in **java**.

26 Explain briefly the concept of *method overriding* with example.

27 Describe the following terms with examples :

(a) Interface.

(b) Constructors and methods.

(c) The modifier final.

(d) The modifier abstract.

(e) Private.

(f) Protected.

28. What is a *stream* ? How are the concepts of streams used in **java** ?

(5 x 2 = 10 weightage)

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

29 Describe the **AWT** class hierarchy. Also describe the methods in component, container, and frame and panel class.

30 What is *multithreading* ? How do you handle it in Java ? Explain the different ways of creating thread .Write a Java program that creates three **threads**. First thread displays "*Good Morning*" every one second, the second thread displays "*Hello*" every two seconds and the third thread displays "*Welcome*" every three seconds.

31 Explain in detail about *Java Buzzwords* (or) *Java features* (or) *Characteristics*.

(2 x 4 = 8 weightage)