

C 5157

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Name.....

Reg. No.....

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

(UG—CCSS)

Core Course

CA 4B 05—PROGRAMMING IN JAVA

Time : Three Hours

Maximum : 30 Weightage

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 classifications ?
- (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 _____ is a sequence of bytes traveling from a source to a destination over a communication path.
- (a) String. (b) Stream.
(c) Character. (d) Integer.

(12 × ¼ = 3 weightage)

II. Short Answer Type Questions. Answer all *nine* questions :

- 13 Explain in brief the concepts *garbage collection and dynamic binding*.
- 14 Describe *Method overriding*. Explain it with an example.
- 15 How is interface used to support *multiple inheritance* ? Explain with a program.
- 16 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 reloading and restarting an applet ?
- 21 Differentiate b/w *J2EE, J2ME and J2SE*.

(9 × 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 × 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 × 4 = 8 weightage)