

Seat No. : _____

AA-101

April-2019

BCA, Sem.-IV

CC-210 : Core Java

Time : 2:30 Hours]

[Max. Marks : 70

1. (A) Write the following :

- (i) Explain the principles of Object-Oriented Programming Languages. 7
- (ii) Write a short note on :
 - (A) Types of Operators 4
 - (B) Method Overloading 3

OR

- (i) Which Java features replace C++ in most of the application development ? 7
- (ii) Write a short note on :
 - (A) Importance of JVM. 4
 - (B) Constructor and its types. 3
- (B) Do as Directed. (any **four** out of **six**) 4
 - (i) Which of the following is **not** an object-oriented language ?
 - (A) Simula (B) Java
 - (C) C (D) C++
 - (ii) Which **command** is used to interpret a Java program file ?
 - (A) java (B) javac
 - (C) javap (D) javadoc
 - (iii) Which property from the following is correct for constructors ?
 - (A) can not be inherited
 - (B) an <init> method implicitly created
 - (C) Default is inbuilt
 - (D) All of the above
 - (iv) Which of these statement is valid ?
 - (A) short s1 = 143; (B) int j1 = '3';
 - (C) double dl = 6.3; (D) float fl = 4.3;

- (v) To perform bitwise ORing, _____ operator is used in Java.
- (A) & (B) !
(C) ~ (D) |
- (vi) Which of the following is true for class product ?
- (A) new product()
(B) new product(product s)
(C) new product(int pno, String pname)
(D) All of the above

2. (A) Write the following :

- (i) "Multiple values can be passed to and returned from method using array." Explain with suitable examples. 7
- (ii) Write a short note on:
- (A) Interface extending 4
(B) Method Overriding 3

OR

- (i) What is inheritance ? What are its types ? 7
- (ii) Write a short note on:
- (A) Difference between Abstract class and Interface 4
(B) Command-line arguments 3

(B) Do as Directed. (any four out of six) 4

- (i) Which statement from the following is correct ?
- (A) int m[][] = new int [5] [5];
(B) int [] m [] = new int [5] [5];
(C) int [] [] = new int [5, 5];
(D) None of the above
- (ii) _____ variables and methods are allowed in static method.
- (A) only static (B) only non-static
(C) static and non-static both (D) static, non-static, final, abstract
- (iii) Which of the following keyword allows deriving members from another class ?
- (A) extends (B) implements
(C) derives (D) inherits

- (iv) Child class method hides execution of parent class method is an example of _____
- (A) overloading (B) loadingover
(C) overbiding (D) overriding
- (v) _____ does not permit parent class members to be used further into child classes.
- (A) super (B) this
(C) final (D) Final
- (vi) _____ inheritance for classes is not available in Java.
- (A) simple (B) multiple
(C) unique (D) hybrid

3. (A) Write the following:

- (i) Draw Access Protection chart. Explain its use inside and outside package with example. 7
- (ii) What is multi-catch in exception handling ? Explain with example. 7

OR

- (i) What is wrapper class ? Explain any two with suitable examples. 7
- (ii) Explain user defined exception with example. 7

(B) Do as Directed. (any **three** out of **five**) 3

- (i) _____ must be included at the top of every java source file.
- (A) import (B) impact
(C) inherit (D) package
- (ii) What is the result of compiling the following code: package pkg1 .pkg2;
- (A) compile time error (B) runtime error
(C) compile but no execution (D) compile and execution
- (iii) _____ is the immediate parent class of all exceptions in Java.
- (A) Exception (B) Throwable
(C) Throw (D) Catch
- (iv) _____ is always specified after method that does not catch the exception it throws.
- (A) throw (B) throws
(C) finally (D) new
- (v) Which of the following statement will not generate exception ?
- (A) $z = x/0;$ (B) `int a[] = new int[5];a[5]=5;`
(C) `a= 10; try{ a = 20;}` (D) None of the above

4. (A) Write the following :
- (i) Which are the two ways of creating threads ? Explain with examples. 7
 - (ii) List methods of Graphics class in applet and explain any two with an example. 7

OR

- (i) How Java provides multithreading concept to reduce overall execution time ? 7
 - (ii) Draw Applet Life cycle and explain with suitable example. 7
- (B) Do as Directed. (any **three** out of **five**) 3
- (i) Which package contains all methods and variables of multithreading ?
 - (A) java.thread
 - (B) java.lang
 - (C) java.Object
 - (D) Java-package
 - (ii) Once a thread is created, it enters into __ state.
 - (A) Ready
 - (B) Running
 - (C) New
 - (D) Run
 - (iii) _____ has same values for starting and ending co-ordinates.
 - (A) Polygon
 - (B) Polyline
 - (C) Polyrectangle
 - (D) Ploycircle
 - (iv) _____ is the method of an applet.
 - (A) init()
 - (B) display()
 - (C) execute()
 - (D) None of the above
 - (v) _____ class has methods to draw graphical symbols on the applet.
 - (A) Drawing
 - (B) Graph
 - (C) Graphics
 - (D) Image