BRAINWARE UNIVERSITY

Term End Examination 2023
Programme – B.Tech.(CSE)-2018/B.Tech.(CSE)-2019/B.Tech.(CSE)-2020
Course Name – Object Oriented Programming
Course Code - PCC-CS502
(Semester V)

Full Marks : 60   **Time : 2:30 Hours**

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

Group-A
(Multiple Choice Type Question)   1 x 15=15

1. *Choose the correct alternative from the following :*

(i) Choose the feature by which one object can interact with another object
   a) Data transfer
   c) Message passing
   b) Data binding
   d) Message reading

(ii) Infer all the variables of class should be ideally declared as
   a) private
   c) public
   b) protected
   d) default

(iii) State what happens if constructor of class A is made private?
   a) Any class can instantiate objects of class A
   b) Objects of class A can be instantiated only within the class where it is declared
   c) Inherited class can instantiate objects of class A
   d) Classes within the same package as class A can instantiate objects of class A

(iv) Identify which of these cannot be declared static?
   a) Class
   c) Object
   b) Variable
   d) Method

(v) Determine which of the following statement is incorrect?
   a) String is a class
   c) Strings in java are mutable
   b) Every string is an object of class String
   d) Java defines a peer class of String called StringBuffer, which allows string to be altered

(vi) Identify which of these keywords is used to prevent content of a variable from being modified?
   a) final
   c) last
   b) constant
   d) static

(vii) State what is true of nested class?
   a) inner class and outer class both can not access their properties
   b) inner class and outer class both can access their properties

c) outer class can access inner class properties

d) inner class can access outer class properties

(viii) Identify the correct ordering for the import, class and package declarations when found in a single file?

a) package, import, class

b) class, import, package

c) import, package, class

d) package, class, import

(ix) _____ is not a iterative statement.

a) for(;;)

b) while()

c) do-while

d) if-else

(x) JIT stands for

a) Java In Time

b) Java In Technique

c) Just In Time

d) Just In Technique

(xi) The statement is true for Java?

a) Platform independent

b) Platform dependent

c) Code dependent

d) Sequence dependent

(xii) The Scanner class is found in the

a) java.io

b) java.applet

c) java.util

d) java.net

(xiii) The operator is used to allocate the memory for an object in JAVA

a) malloc

b) alloc

c) new

d) free

(xiv) There are two types of polymorphism in Java one of them is

a) Compile time polymorphism

b) Execution time polymorphism

c) Multiple polymorphism

d) Multilevel polymorphism

(xv) Determine _____ is true for args in the following line of code? public static void main(String args[])

a) args is a String

b) args is an array of String

c) args is a Character

d) args in an array of Character

Group-B
(Short Answer Type Questions)

3 x 5=15

2. Explain Encapsulation with example. (3)
3. Write a program to implement multilevel inheritance in java. (3)
4. What is Inheritance? Explain with example. (3)

OR

Explain Multilevel Inheritance with example. (3)

5. Explain finalize() method . (3)

OR

Write a program to implement Constructor overloading. (3)

6. Why Java is Multithreaded programming Language. explain. (3)

OR

Explain Applet life cycle. (3)

Group-C
(Long Answer Type Questions)

5 x 6=30

7. Analyze that how is an abstract class different from an interface with example? (5)
8. Explain the class hierarchy in java related to exception handling. Briefly explain each class. (5)
9. Explain the necessity of exception handling? Explain exception handling taking divide-by-zero as an example. (5)
10. Explain the different types of Inheritance with an example? (5)

11. Describe the types of variables with example in object oriented programming.   (5)

<div align="center">**OR**</div>

Describe the conventional styles for class names, method names, constants and   (5)
variables with example?

12. Explain the following: creating an applet, passing parameters to applets, adding graphics (5)
and colors to applet.

<div align="center">**OR**</div>

Explain various methods of Applet class with necessary examples.   (5)

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