BRAINWARE UNIVERSITY

Term End Examination 2023-2024
Programme – BCA-2020/BCA-2021
Course Name – Object Oriented Programming with JAVA
Course Code - BCAC303
(Semester III)

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) Select in which of the following mechanisms, types of all variables and expressions are fixed at compilation time.

a) Strong Typing   b) Weak Typing
c) Static Binding/ early binding   d) Dynamic Binding/ late binding

(ii) Select in which of the following mechanisms, types of all variables and expressions are not known until runtime

a) Strong Typing   b) Weak Typing
c) Static Binding/ early binding   d) Dynamic Binding/ late binding

(iii) Show which of the following is not a Java features?

a) Dynamic   b) Architecture Neutral
c) Use of pointers   d) Object-oriented

(iv) articulate Which of these is used as a default for a member of a class if no access specifier is used for it?

a) private   b) public
c) public, within its own package   d) protected

(v) In object-oriented programming, new classes can be defined by extending existing classes. this is an example of:

a) Encapsulation   b) Interface
c) Composition   d) Inheritance

(vi) Select which of these is an incorrect Statement?

a) It is necessary to use new operator to initialize an array   b) Array can be initialized using comma separated expressions surrounded by curly braces

c) Array can be initialized when they are declared   d) None of the mentioned

(vii) Show what is the process of defining more than one method in a class differentiated by parameters?

a) Function overriding
b) Function overloading
c) Function doubling
d) None of the mentioned

(viii) Show which of these keywords can be used to prevent Method overriding?

a) static
b) constant
c) protected
d) final

(ix) Show which of these is an incorrect array declaration?

a) int arr[] = new int[5]
b) int [] arr = new int[5]
c) int arr[] = new int[5]
d) int arr[] = int [5] new

(x) Write which of these is the method which is executed first before execution of any other thing takes place in a program?

a) main method
b) finalize method
c) static method
d) private method

(xi) choose which of this method is used to find out that a thread is still running or not?

a) run()
b) Alive()
c) isAlive()
d) checkRun()

(xii) choose which of these method is used to explicitly set the priority of a thread?

a) set()
b) make()
c) setPriority()
d) makePriority()

(xiii) choose what does not prevent JVM from terminating?

a) Process
b) Daemon Thread
c) User Thread
d) JVM Thread

(xiv) Which events is generated when the window is closed?

a) TextEvent
b) MouseEvent
c) FocusEvent
d) WindowEvent

(xv) Which of these interfaces handles the event when a component is added to a container?

a) ComponentListener
b) ContainerListener
c) FocusListener
d) InputListener

Group-B
(Short Answer Type Questions)

3 x 5=15

2. Write a method to calculate the factorial of a number and another to check if a number is prime. (3)

3. What is the purpose of the super keyword in Java? (3)
4. What do you understand by method hiding in Java? (3)
5. Difference between method overloading and overriding (3)
6. Difference between String, StringBuffer and StringBuilder. (3)

OR

Explain the use of repaint() method with an example. (3)

Group-C
(Long Answer Type Questions)

5 x 6=30

7. What is the difference between procedural language and object oriented language? (5)
8. Write down the various use of Super keyword in Java. (5)
9. "Parent class object reference can be initialized by its Child class object"-Justify your answer. (5)
10. Write a program to demonstrate ActionListener. (5)
11. Describe JDK, JRE, and JVM? (5)
12. Write a short note on different layouts available in AWT. (5)

OR

What is the use of repaint() method? Show an example.   (5)

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