PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)
BCA DEGREE EXAMINATION DECEMBER 2022
(Fourth Semester)

Branch – COMPUTER APPLICATIONS

JAVA PROGRAMMING

Time: Three Hours   Maximum: 75 Marks

SECTION-A (10 Marks)
Answer ALL questions
ALL questions carry EQUAL marks   (10 x 1 = 10)

1   What is the return value of constructor?
     (i) 1   (ii) null   (iii) instance   (iv) Void

2   What is the output of the following Java Code?
         int a=9;
         float b = a/2;
         System.out.println(b);
     (i) 4.0   (ii) 4.5   (iii) 5.0   (iv) None

3   Which exception is thrown when divide by zero statement executes?
     (i) NumberFormatException   (ii) NullPointerException
     (iii) ArithmeticException   (iv) None of these

4   Runtime polymorphism is also known as _____
     (i) Static binding   (ii) Early binding
     (iii) Dynamic method dispatch   (iv) Method overloading

5   Which of the following method is used to find the length of a String?
     (i) Strlen()   (ii) length()   (iii) capacity()   (iv) toLength()

6   Thread Priority in Java is?
     (i) Integer   (ii) Long   (iii) Float   d. double

7   Which of these functions is called to display the output of an applet?
     (i) display()   (ii) paint()   (iii) displayApplet() d. PrintApplet()

8   Which of these methods are used to read in from file?
     (i) get()   (ii) read()   (iii) scan()   d. readFileInput()

9   Which of these packages contains all the classes and methods required for event handling in Java?
     (i) applet   (ii) java.awt   (iii) java.event   (iv) java.awt.event

10   Which package is used for importing swing components?
     (i) javax.swing   (ii) java.swing
     (iii) java.awt   (iv) All of the mentioned

SECTION - B (25 Marks)
Answer ALL questions
ALL questions carry **EQUAL** Marks   (5 x 5 = 25)

11   a.   How garbage collection works in Java?

OR

b.   Distinguish between Auto boxing and un boxing

12   a.   What is meant by polymorphism? . Analyze the concept of constructor overloading.

OR

b.   How do multiple catch statements can be used for single try statement?

13   a.   Describe the life cycle of a Thread with neat diagram.

OR

b.   Explain about Thread Priority.

14   a.   Summarize the methods of Applet class.

OR

b.   What is the use of param tag? explain

15   a.   Bring out the adapter classes in Java. List out the advantages of it.

OR

b.   Narrate the methods of WindowListener.

SECTION -C (40 Marks)
Answer ALL questions
ALL questions carry **EQUAL** Marks   (5 x 8 = 40)

16   a.   i) Summarize the rules for defining constructor. (4 marks)
          ii) Describe about explicit narrowing.   (4 marks)

OR

b.   How to invoke parameterized constructor from another constructor in the same class? Explain.

17   a.   Discuss on the types of inheritance.

OR

b.   Elucidate the concept of package.

18   a.   Examine the use of Runnable interface.

OR

b.   Write a Java code to count the occurrence of the given character in a string.

19   a.   What are the constructors and methods available in File Reader class? Describe.

OR

b.   Distinguish between byte stream and character stream classes.

20   a.   Why swing components are called lightweight components? List down the JComponents.

OR

b.   How to add new row to a JTable? Explain.

Z-Z-Z   END