# PSG COLLEGE OF ARTS & SCIENCE
## (AUTONOMOUS)
## BCom DEGREE EXAMINATION MAY 2025
### (Fourth Semester)
### Branch – COMMERCE WITH COMPUTER APPLICATIONS

## FUNDAMENTALS OF JAVA PROGRAMMING

Time: Three Hours                                    Maximum: 75 Marks

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

| Module No. | Question No. | Question | K Level | CO |
|---|---|---|---|---|
| 1 | 1 | What is the extension of java code files? <br> (a) .js    (b) .txt    (c) .class    (d) .java | K1 | CO1 |
|  | 2 | Show the numerical range of a char data type in Java? <br> (a) 0 to 256    (b) -128 to 127 <br> (c) 0 to 65535    (d) 0 to 32767 | K2 | CO1 |
| 2 | 3 | What is a class in Java? <br> (a) A blueprint for creating objects. <br> (b) A data type. <br> (c) A function. <br> (d) A variable. | K1 | CO2 |
|  | 4 | Outline it, how do you declare an array in Java? <br> (a) int array; <br> (b) int array[5]; <br> (c) int[] array = new int[5]; <br> (d) int array = [5]; | K2 | CO2 |
| 3 | 5 | Which keyword is used to implement an interface in Java? <br> (a) implements    (b) extends <br> (c) interface    (d) abstract | K1 | CO3 |
|  | 6 | Outline the keyword is used to define a package in Java? <br> (a) define    (b) package <br> (c) import    (d) group | K2 | CO3 |
| 4 | 7 | Which of the following classes is used to create a thread in Java? <br> (a) Thread    (b) Runnable <br> (c) Executor    (d) Task | K1 | CO4 |
|  | 8 | Show the character stream I/O, a single read/write operation performs _____. <br> (a) Two bytes read/write at a time. <br> (b) Eight bytes read/write at a time. <br> (c) One byte read/write at a time. <br> (d) Five bytes read/ write at a time. | K2 | CO4 |
| 5 | 9 | Which method is called automatically when an applet is first loaded? <br> (a) init()    (b) start() <br> (c) paint()    (d) run() | K1 | CO5 |
|  | 10 | Show the package provides the classes for working with graphics in Java? <br> (a) java.awt <br> (b) javax.swing <br> (c) java.util <br> (d) java.io | K2 | CO5 |

## SECTION - B (35 Marks)
### Answer ALL questions
### ALL questions carry EQUAL Marks                  (5 × 7 = 35)

| Module No. | Question No. | Question | K Level | CO |
|---|---|---|---|---|
| 1 | 11.a. | Explain the features of java. | K2 | CO1 |
| | | (OR) | | |
| | 11.b. | Show a java program to check whether a number is even or odd using if...else statement. | | |
| 2 | 12.a. | Narrate an object and how its build from a class? | K3 | CO2 |
| | | (OR) | | |
| | 12.b. | How to build with one-dimensional array? Give an example. | | |
| 3 | 13.a. | Identify the concept of inheritance with an example. | K3 | CO3 |
| | | (OR) | | |
| | 13.b. | Identify to create packages in java programs with syntax. | | |
| 4 | 14.a. | How do we set priorities for threads?-Analyze | K4 | CO4 |
| | | (OR) | | |
| | 14.b. | Define Stream. How Streams Work in Java?-Analyze. | | |
| 5 | 15.a. | List out any four applet tag with an example. | K4 | CO5 |
| | | (OR) | | |
| | 15.b. | Discover the syntax and example of drawLine(). | | |

## SECTION –C (30 Marks)
### Answer ANY THREE questions
### ALL questions carry EQUAL Marks                  (3 × 10 = 30)

| Module No. | Question No. | Question | K Level | CO |
|---|---|---|---|---|
| 1 | 16 | Classify the any five operators using in java with an example. | K4 | CO1 |
| 2 | 17 | Identify the concept of method overloading with an example. | K4 | CO2 |
| 3 | 18 | How to extend interface in java?-Explain with an example. | K5 | CO3 |
| 4 | 19 | Briefly explain the types of errors with an example. | K5 | CO4 |
| 5 | 20 | Outline the applet life cycle with suitable diagram. | K5 | CO5 |

Z-Z-Z                  END