

**PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)**

**BCA DEGREE EXAMINATION MAY 2026
(Second 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 × 1 = 10)

Module No.	Question No.	Question	K Level	CO
1	1	Which of the following is NOT one of the three OOP principles in Java? (i) Encapsulation (ii) Inheritance (iii) Compilation (iv) Polymorphism	K1	CO1
	2	Show the result of the following Java expression? byte a = 10; byte b = 20; int c = a + b; (i) Compilation error due to type mismatch (ii) 30 stored in byte variable (iii) 30 stored in int variable (iv) Runtime error	K2	CO1
2	3	Identify the keyword that is used to prevent a class from being inherited in Java? (i) static (ii) final (iii) abstract (iv) private	K1	CO2
	4	Indicate the true statements about interfaces in Java? (i) An interface can extend a class. (ii) An interface can contain only implemented methods. (iii) A class can implement multiple interfaces. (iv) Interface methods are private by default.	K2	CO2
3	5	Label the block name which is always executed in exception handling, whether an exception occurs or not? (i) try (ii) catch (iii) throw (iv) finally	K1	CO3
	6	Select the method name is used to suspend a thread for a period of time? (i) sleep (ii) suspend (iii) stop (iv) resume	K2	CO3
4	7	Choose the class name that is used to establish a connection with a database in JDBC. (i) Statement (ii) ResultSet (iii) DriverManager (iv) ConnectionPool	K1	CO4
	8	Indicate the best one to describe the role of a Servlet in a web application. (i) It designs the web page layout (ii) It handles client requests and generates dynamic responses (iii) It stores data permanently in a database (iv) It replaces the web server	K2	CO4

Cont...

5	9	How to handle a button click event using ActionListener in Java? (i) actionPerformed() (ii) mouseClicked() (iii) itemStateChanged() (iv) keyPressed()	K1	CO5
	10	Write the correct one which describes the interaction between components. (i) The listener directly creates the event object. (ii) The event source registers itself to listen for events. (iii) The event source generates an event and delegates handling to the registered listener. (iv) The event object handles the event without listener involvement.	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.	Classify Java data types with examples.	K2	CO1
		(OR)		
	11.b.	Explain the use of 'this' keyword and finalize() method.		
2	12.a.	Identify the use of 'super' keyword in Inheritance.	K3	CO2
		(OR)		
	12.b.	Construct a program to create a package and importing it.		
3	13.a.	Develop a Java program to implement Arithmetic Exception.	K3	CO3
		(OR)		
	13.b.	Utilize appropriate methods to demonstrate thread execution in Java.		
4	14.a.	Examine the JDBC components with neat sketch.	K4	CO4
		(OR)		
	14.b.	Distinguish between Servlets and JSP in web applications.		
5	15.a.	Simplify the delegation event model by handling mouse events.	K4	CO5
		(OR)		
	15.b.	Compare JList and JTable in GUI applications.		

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	Demonstrate constructors in java with example.	K2	CO1
2	17	Apply method overriding in Java by writing a simple program to calculate volume of the box.	K3	CO2
3	18	Examine a thread execution in java by setting setPriority() method.	K4	CO3
4	19	Analyze the JDBC architecture by writing a Java program to establish a database connection.	K4	CO4
5	20	Categorize the swing components with suitable example program.	K4	CO5

Z-Z-Z

END