22NMB208N

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BVoc DEGREE EXAMINATION DECEMBER 2025
(Second Semester)

Branch - **NETWORKING AND MOBILE APPLICATION**

OBJECT ORIENTED PROGRAMMING USING JAVA

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	____ is responsible for executing Java bytecode a) JDK b) JRE c) JVM d) Compiler	K1	CO1
	2	The use of this keyword in Java ____ a) Refers to current object b) Refers to parent class c) Refers to child class d) Refers to garbage collector	K2	CO1
2	3	_____ keyword is used to inherit a class in Java. a) extend b) extends c) implements d) inherit	K1	CO2
	4	By default, all members of an interface are _____ a) private and abstract b) public and abstract c) protected and final d) static and private	K2	CO2
3	5	_____ is the superclass of all exception classes in Java. a) Throwable b) Error c) Exception d) RuntimeException	K1	CO3
	6	_____ method is used to pause a thread for a specified time a) sleep() b) wait() c) suspend() d) yield()	K2	CO3
4	7	_____ class provides buffered character input in Java. a) BufferedWriter b) FileReader c) BufferedReader d) PrintWriter	K1	CO4
	8	_____ event model does Java use for handling GUI events. a) Inheritance Event Model b) Delegation Event Model c) Observer Event Model d) Callback Event Model	K2	CO4
5	9	Which HTML tag is used to embed an applet in a webpage> a) <java> b) <object> c) <applet> d) <embed>	K1	CO5
	10	____ method of InetAddress returns the host name associated with an IP address. a) getHostAddress() b) getHostName() c) getAddress() d) getIP()	K2	CO5

Cont...

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 basic concepts of Object-Oriented Programming (OOPs) with examples.	K2	CO1
		(OR)		
	11.b.	Explain the role of constructors in Java with an example.		
2	12.a.	What is method overriding? Write a program to demonstrate it.	K3	CO2
		(OR)		
	12.b.	Define an interface in Java. Write a simple program that implements an interface.		
3	13.a.	What is the role of the finally block in Java exception handling? Illustrate with a program.	K3	CO3
		(OR)		
	13.b.	Explain the thread life cycle in Java with a neat diagram.		
4	14.a.	Explain the concept of stream classes in Java. How do they help in input/output operations?	K2	CO4
		(OR)		
	14.b.	Describe event listener interfaces in Java. Give examples of at least two listener interfaces and their methods.		
5	15.a.	What is the applet lifecycle? Explain the methods init(), start(), stop(), and destroy().	K3	CO5
		(OR)		
	15.b.	Explain client-server communication in Java with a simple example.		

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	Explain the structure of a Java class in detail. Write a program that demonstrates declaring a class, creating objects, and invoking methods.	K3	CO1
2	17	Discuss the types of inheritance supported in Java with examples. Why is multiple inheritance not supported through classes?	K3	CO2
3	18	What is inter-thread communication? Write a program demonstrating wait(), notify(), and notifyAll()	K3	CO3
4	19	What are adapter classes in Java? Explain how they simplify event handling with example program.	K3	CO4
5	20	Discuss the role of the HTML `<applet>` tag and how applets interact with web pages.	K2	CO5

Z-Z-Z END