GANDHI INSTITUTE OF ENGINEERING AND TECHNOLOGY, ODISHA, GUNUPUR
(GIET UNIVERSITY)

B. Tech (Third Semester - Regular) Examinations, November – 2024
23BCSES23001 - Object Oriented Programming using JAVA
(Branch : BT/CHE/CIVIL/ECE/EEE/ EE/ME)

Time: 3 hrs   Maximum: 60 Marks

Answer ALL questions
(The figures in the right hand margin indicate marks)

PART – A   (2 x 5 = 10 Marks)

Q.1. Answer *ALL* questions

		CO #	Blooms Level
a.	What do you mean by bytecode.	CO1	K2
b.	What do you mean by constructor? Write down different types of constructor.	CO2	K2
c.	What do you mean by a package in JAVA?	CO3	K1
d.	Differentiate between join() and sleep() in Multithreading?	CO4	K1
e.	Write any 2 roles of "final" keyword in java.	CO5	K2

PART – B   (10 x 5 = 50 Marks)

Answer *ALL* the questions

		Marks	CO #	Blooms Level
2. a.	Write down the difference between Procedure Oriented Programming and Object Oriented Programming.	5	CO1	K1
b.	Write a JAVA program to enter a number and check whether it is a palindrome or not.	5	CO1	K3
	(OR)			
c.	What do you mean by array? Describe different types of array with example.	5	CO1	K1
d.	Write a JAVA program to enter 10 numbers into an array and find the largest and smallest number.	5	CO1	K3
3.a.	What do you mean by exception? Describe different ways of handling exception.	5	CO2	K3
b.	Explain the life cycle of thread using a neat labelled diagram.	5	CO2	K1
	(OR)			
c.	Write down the differences between abstract class and interface.	5	CO2	K3
d.	Write a JAVA program to create a user defined exception that will check whether a person is eligible for voting or not. (A person is eligible to vote if his age is greater than or equal to 18)	5	CO2	K2
4.a.	Explain with the help of an example program, how inter-thread communication is performed in JAVA using wait( ) and notify( ) method.	5	CO3	K3
b.	Write a JAVA Program to explain the multilevel inheritance with labelled diagram.	5	CO3	K1
	(OR)			
c.	What do you mean by package? Describe different ways of using a package in a program.	5	CO3	K3
d.	Write down the uses of "this" and "super" keyword in java.	5	CO3	K2
5.a.	What do you mean by thread? Describe different ways of creating threads in java.	5	CO4	K3

b.	Write a JAVA program to enter a string and count the number of vowels and consonants in it.	5	CO4	K2

<div align="center">(OR)</div>

c.	Describe any 5 methods of String/StringBuffer class.	5	CO4	K3
d.	Write a JAVA program to create a thread to display first 10 natural numbers.	5	CO4	K2
6.a.	Write an AWT program to count total number of words and characters entered in a textarea.	5	CO5	K3
b.	Describe all life cycle methods of applet.	5	CO5	K2

<div align="center">(OR)</div>

c.	Write a program to draw a smiley using the applet.	5	CO5	K3
d.	Describe all methods of MouseListener and MouseMotionListener interface.	5	CO5	K3

<div align="center">--- End of Paper ---</div>