R22

ANURAG Engineering College
(An Autonomous Institution)
II B.Tech II Semester Supplementary Examinations, December – 2024
JAVA PROGRAMMING
(INFORMATION TECHNOLOGY)

Time: 3 Hours   **Max.Marks:60**

Section – A (Short Answer type questions)   (10 Marks)
Answer All Questions

		Course Outcome	B.T Level	Marks
1.	List the features of JAVA.	CO1	L1	1M
2.	Identify the difference between abstract class and interface.	CO1	L1	1M
3.	List different types of compile time exceptions.	CO2	L1	1M
4.	Which class is the super class for all exceptions and errors in JAVA?	CO2	L1	1M
5.	Write the use of CLASSPATH.	CO3	L1	1M
6.	Write about the use of default access specifier in JAVA.	CO3	L1	1M
7.	Difference between process and thread.	CO4	L1	1M
8.	Draw thread life cycle.	CO4	L1	1M
9.	Write the limitations of AWT.	CO5	L1	1M
10.	List different types of components in Swing.	CO5	L1	1M

Section B (Essay Questions)
Answer all questions, each question carries equal marks.   **(5 x 10M = 50M)**

			Course Outcome	B.T Level	Marks
11.	A)	i) Summarize the key concepts of OOP and explain.	CO1	L2	5M
		ii) Develop a program to enter the marks of a student in four subjects. Then calculates the total and aggregate, and display the grade obtained by the student. If the student scores an aggregate greater than 75%, then the grade is Distinction. If aggregate is 60>= and <75, then the grade is First Division. If aggregate is 50>= and <60, then the grade is Second Division. If aggregate is 40>= and < 50, then the grade is Third Division. Else the grade is Fail.	CO1	L3	5M

OR

	B)	i) "A super class reference variable can refer to a sub class object". Interpret this statement with an example program.	CO1	L2	5M
		ii) Identify the use of super keyword to call the parent class constructor (parameterized) with an example program.	CO1	L3	5M

12.	A)	i) Infer the use of throws clause with an example program.	CO2	L2	5M
		ii) Develop a JAVA program to merge the contents of two files into another file.	CO2	L3	5M

OR

	B)	i) Explain the procedure of creating user defined exceptions in JAVA.	CO2	L2	5M
		ii) Outline the advantage of File class. Explain with appropriate example.	CO2	L2	5M

13. A)	i) Illustrate the procedure of creating and importing packages in JAVA with example.		CO3	L2	5M
	ii) Suppose the input is '1 2 3 4 5 6 7 8 9 10'. Construct a JAVA program to print the sum of even numbers from the given input. Use appropriate methods of StringTokenizer class to divide the input into tokens.		CO3	L3	5M

OR

B)	i) Illustrate the use of LinkedList class with an example program.		CO3	L2	5M
	ii) Interpret the use of comparator interface with an example program.		CO3		5M

14. A)	i) Give Overview of JDBC architecture with neat diagram. Explain.		CO4	L2	5M
	ii) How thread communication can be achieved in JAVA. Explain.		CO4	L2	5M

OR

B)	i) Do threads have priorities? How can thread priorities affect the execution of a program? Explain.		CO4	L2	5M
	ii) Develop a JAVA code to accept employee number of an employee and retrieve details such as employee number, name, salary from database. Assume appropriate table.		CO4	L3	5M

15. A)	i) Explain MVC architecture.		CO5	L2	5M
	ii) Explain GridLayout manager with an example program.		CO5	L2	5M

OR

B)	i) List different types of event classes in JAVA and explain briefly.		CO5	L2	5M
	ii) Develop a JAVA program that handles any one mouse event using Adapter class.		CO5	L3	5M