Reg. No. [ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ]

Question Paper Code	12035

B.E. / B.Tech. - DEGREE EXAMINATIONS, APRIL / MAY 2023
Fourth Semester
M.Tech. - Computer science and Engineering (5 Years Integrated)
20CJPC401 - CORE JAVA PROGRAMMING
(Regulations 2020)

Duration: 3 Hours

Max. Marks: 100

PART - A (10 × 2 = 20 Marks)
Answer ALL Questions

		Marks, K-Level, CO
1.	Define Conditional Operator. Write a suitable example.	2,K2,CO1
2.	Differentiate between Input stream class and Reader class.	2,K2,CO1
3.	Explain the Uses of "Super" keyword.	2,K2,CO2
4.	Define method overriding.	2,K1,CO3
5.	What happens when the statement: int value=10/0 is executed?	2,K2,CO4
6.	What are the states in the life cycle of a thread?	2,K2,CO4
7.	What is the need for generic programming?	2,K2,CO5
8.	Why does HashMap allow null whereas HashTable does not allow null?	2,K2,CO5
9.	Define Delegation Event model.	2,K1,CO6
10.	How can a frame be created in Java?	2,K2,CO6

PART - B (5 × 13 = 65 Marks)
Answer ALL Questions

11. a) What is inheritance? Why do we need to use inheritance? Explain the types of inheritance with an example program.   13,K2,CO2

OR

b) Can we use constructors with parameters? What kind of parameters can be given? Explain with an area of various geometric shapes examples.   13,K2,CO2

12. a) (i) Differentiate between class and object.   5,K2,CO1

(ii) Explain briefly about Method overloading with examples.   8,K2,CO1

OR

b) Discuss the various characteristics of object oriented programming concepts.   13,K2,CO1

K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create

12035

1

13. a) Explain in detail about Array List with an example. *13,K2,CO3*

OR

b) What is meant by interface? How can interfaces be extended? Explain. *13,K2,CO3*

14. a) Explain in detail about the life cycle of Thread. *13,K2,CO4*

OR

b) (i) Difference between Errors & Exception. *4,K2,CO4*

(ii) Explain about throwing exceptions. *9,K2,CO4*

15. a) (i) Write a java program for Implementing HashMap Class *6,K2,CO5*

(ii) Write a java program for Inserting Elements to HashSet using add()and addAll(). *7,K2,CO5*

OR

b) Explain about the Classes that Implements Queue collection. *13,K2,C*

PART - C (1 × 15 = 15 Marks)

16. a) Write a program to create a frame with the following menus such that the corresponding geometric shape is created when a menu is clicked (i) circle (ii) rectangle (iii) Line (iv) Diagonal. *15,K3,CO6*

OR

b) Explain in detail about Layout management with example program. *15,K2,CO6*

K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create

12035

2