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Question Paper Code	12922
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**B.E. / B.Tech. - DEGREE EXAMINATIONS, APRIL / MAY 2024**

Third Semester

**Computer Science and Engineering**

(Common to Information Technology, Computer Science and Engineering (AIML), Computer Science and Engineering (IoT), Computer and Communication Engineering)

**20CSPC301 - OBJECT ORIENTED PROGRAMMING**

Regulations - 2020

Duration: 3 Hours

Max. Marks: 100

**PART - A (10 × 2 = 20 Marks)**

Answer ALL Questions

	Marks	K- Level	CO
1. What are the different types of polymorphism?	2	K1	CO1
2. List the various operators in Java.	2	K1	CO1
3. Distinguish between class and interface.	2	K2	CO2
4. What do you mean by method overriding?	2	K1	CO2
5. What is the difference between an Interface and an Abstract class?	2	K1	CO3
6. What is a String and how do you create a String object?	2	K1	CO3
7. How to create a Buffered Reader object?	2	K1	CO4
8. Show the purpose of the finally clause of a try-catch-finally statement.	2	K2	CO4
9. What are the states in the life cycle of a thread?	2	K1	CO5
10. Define Generic class.	2	K1	CO5

**PART - B (5 × 13 = 65 Marks)**

Answer ALL Questions

11. a) Write a program to perform the following functions using classes, objects, constructors:- (i). Get as input the marks of 5 students in 5 subjects. (ii). Calculate the total and average. (iii). Print the formatted result on the screen.	13	K2	CO1
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**OR**

b) Explain decision control statements with suitable example programs.	13	K2	CO1
12. a) Define inheritance and explain the types of inheritance with suitable examples.	13	K2	CO2

**OR**

b) How can packages be created in Java? Explain it with suitable examples.	13	K2	CO2
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13. a) Explain about Interfaces in Java with examples. 13 K2 CO3
- OR**
- b) Explain ArrayLists in detail with examples. 13 K2 CO3
14. a) Write a program with a try and catch keyword for user defined exception with explanation. 13 K2 CO4
- OR**
- b) Differentiate byte stream and character stream with necessary examples. 13 K2 CO4
15. a) Explain Thread Priority in detail with suitable examples. 13 K2 CO5
- OR**
- b) What is Deamon thread and explain the method to create it with an example. 13 K2 CO5

**PART - C (1 × 15 = 15 Marks)**

16. a) Discuss in detail about Java Streams with suitable examples. 15 K2 CO6
- OR**
- b) Explain Lamda expressions with suitable examples. 15 K2 CO6