Slip No. 18 (Total Marks: 30)

1. Create an Employee class and track object count – 10 Marks

```
java
Copy code
import java.util.Scanner;

class Employee {
    int id;
    String name, deptname;
    float salary;
    static int count = 0;

    public Employee(int id, String name, String deptname, float salary) {
        this.id = id;
        this.name = name;
        this.deptname = deptname;
        this.salary = salary;
        count++;
    }

    public void display() {
        System.out.println("ID: " + id + ", Name: " + name + ", Dept: " +
deptname + ", Salary: " + salary);
    }

    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        int n = sc.nextInt();
        Employee[] employees = new Employee[n];

        for (int i = 0; i < n; i++) {
            int id = sc.nextInt();
            sc.nextLine();
            String name = sc.nextLine();
            String deptname = sc.nextLine();
            float salary = sc.nextFloat();
            employees[i] = new Employee(id, name, deptname, salary);
            employees[i].display();
        }

        System.out.println("Total objects created: " + Employee.count);
    }
}
```

2. Create a `Patient` class with custom exception handling for Covid cases – 20 Marks

```
java
Copy code
import java.io.*;

class CovidException extends Exception {
    public CovidException() {
        super("Patient is Covid Positive and needs to be hospitalized");
```

```
    }
}

class Patient {
    String name;
    int age;
    double oxyLevel, hrctReport;

    public Patient(String name, int age, double oxyLevel, double hrctReport)
{
        this.name = name;
        this.age = age;
        this.oxyLevel = oxyLevel;
        this.hrctReport = hrctReport;
    }

    public static void main(String[] args) throws IOException {
        BufferedReader br = new BufferedReader(new
InputStreamReader(System.in));

        String name = br.readLine();
        int age = Integer.parseInt(br.readLine());
        double oxyLevel = Double.parseDouble(br.readLine());
        double hrctReport = Double.parseDouble(br.readLine());

        Patient patient = new Patient(name, age, oxyLevel, hrctReport);

        try {
            if (patient.oxyLevel < 95 && patient.hrctReport > 10) {
                throw new CovidException();
            } else {
                System.out.println("Patient Info:");
                System.out.println("Name: " + patient.name);
                System.out.println("Age: " + patient.age);
                System.out.println("Oxygen Level: " + patient.oxyLevel);
                System.out.println("HRCT Report: " + patient.hrctReport);
            }
        } catch (CovidException e) {
            System.out.println(e.getMessage());
        }
    }
}
```