

## Slip 21

### 10 Marks:

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

abstract class Staff {
    protected String name;
    protected String address;

    public Staff(String name, String address) {
        this.name = name;
        this.address = address;
    }

    public abstract void display();
}

class FullTimeStaff extends Staff {
    private String department;
    private double salary;

    public FullTimeStaff(String name, String address, String department,
double salary) {
        super(name, address);
        this.department = department;
        this.salary = salary;
    }

    @Override
    public void display() {
        System.out.println("Full Time Staff:");
        System.out.println("Name: " + name);
        System.out.println("Address: " + address);
        System.out.println("Department: " + department);
        System.out.println("Salary: " + salary);
    }
}

public class Main {
    public static void main(String[] args) {
        FullTimeStaff staff = new FullTimeStaff("Alice", "123 Elm St",
"Finance", 60000);
        staff.display();
    }
}
```

### 20 Marks:

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

```

abstract class Staff {
    protected String name;
    protected String address;

    public Staff(String name, String address) {
        this.name = name;
        this.address = address;
    }

    public abstract void display();
}

class FullTimeStaff extends Staff {
    private String department;
    private double salary;

    public FullTimeStaff(String name, String address, String department,
double salary) {
        super(name, address);
        this.department = department;
        this.salary = salary;
    }

    @Override
    public void display() {
        System.out.println("Full Time Staff:");
        System.out.println("Name: " + name);
        System.out.println("Address: " + address);
        System.out.println("Department: " + department);
        System.out.println("Salary: " + salary);
    }
}

class PartTimeStaff extends Staff {
    private int hoursWorked;
    private double ratePerHour;

    public PartTimeStaff(String name, String address, int hoursWorked, double
ratePerHour) {
        super(name, address);
        this.hoursWorked = hoursWorked;
        this.ratePerHour = ratePerHour;
    }

    @Override
    public void display() {
        System.out.println("Part Time Staff:");
        System.out.println("Name: " + name);
        System.out.println("Address: " + address);
        System.out.println("Hours Worked: " + hoursWorked);
        System.out.println("Rate per Hour: " + ratePerHour);
    }
}

public class Main {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
    }
}

```

```

        System.out.println("Select 1 for Full Time Staff or 2 for Part Time
Staff:");
        int choice = sc.nextInt();
        sc.nextLine(); // Consume newline

        if (choice == 1) {
            System.out.print("Enter Name: ");
            String name = sc.nextLine();
            System.out.print("Enter Address: ");
            String address = sc.nextLine();
            System.out.print("Enter Department: ");
            String department = sc.nextLine();
            System.out.print("Enter Salary: ");
            double salary = sc.nextDouble();

            FullTimeStaff staff = new FullTimeStaff(name, address,
department, salary);
            staff.display();
        } else if (choice == 2) {
            System.out.print("Enter Name: ");
            String name = sc.nextLine();
            System.out.print("Enter Address: ");
            String address = sc.nextLine();
            System.out.print("Enter Hours Worked: ");
            int hoursWorked = sc.nextInt();
            System.out.print("Enter Rate per Hour: ");
            double ratePerHour = sc.nextDouble();

            PartTimeStaff staff = new PartTimeStaff(name, address,
hoursWorked, ratePerHour);
            staff.display();
        } else {
            System.out.println("Invalid choice.");
        }
    }
}

```