

Slip No. 19 (Total Marks: 30)

1. Read a text file and display its contents in reverse order and in uppercase – 10 Marks

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

class TextFileReverse {
    public static void main(String[] args) throws IOException {
        FileReader file = new FileReader("sample.txt");
        Scanner sc = new Scanner(file);
        StringBuilder content = new StringBuilder();

        while (sc.hasNext()) {
            content.append(sc.nextLine().toUpperCase()).append("\n");
        }

        System.out.println("Original Content in Uppercase: ");
        System.out.println(content.toString());

        System.out.println("Content in Reverse Order: ");
        System.out.println(content.reverse().toString());
    }
}
```

2. Define an abstract class `staff` with a subclass `officeStaff` – 20 Marks

```
java
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import java.io.*;

abstract class Staff {
    protected String id, name;

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

    public abstract void display();
}

class OfficeStaff extends Staff {
    String department;

    public OfficeStaff(String id, String name, String department) {
        super(id, name);
        this.department = department;
    }

    @Override
    public void display() {
```

```

        System.out.println("ID: " + id + ", Name: " + name + ", Department: "
+ department);
    }
}

public class Main {
    public static void main(String[] args) throws IOException {
        BufferedReader br = new BufferedReader(new
InputStreamReader(System.in));
        System.out.println("Enter the number of OfficeStaff: ");
        int n = Integer.parseInt(br.readLine());

        OfficeStaff[] staffArray = new OfficeStaff[n];
        for (int i = 0; i < n; i++) {
            System.out.println("Enter ID, Name, and Department for Staff " +
(i + 1) + ": ");
            String id = br.readLine();
            String name = br.readLine();
            String department = br.readLine();
            staffArray[i] = new OfficeStaff(id, name, department);
        }

        System.out.println("Office Staff Details:");
        for (OfficeStaff staff : staffArray) {
            staff.display();
        }
    }
}

```