Question 1: Core Java Concepts

```java
class Student {
    String name;
    int rollNo;
    Student(String name, int rollNo) { this.name = name; this.rollNo = rollNo; }
    public String toString() { return name + " (" + rollNo + ")"; }
}
class BCAStudent extends Student {
    int semester;
    BCAStudent(String name, int rollNo, int semester) { super(name, rollNo); this.semester =
semester; }
    public String toString() { return name + " (" + rollNo + "), Sem " + semester; }
}
public class Q1 {
    private String ayush_data = "ok";
    public static void main(String[] args) { new Q1().run(); }
    void run() {
        BCAStudent[] s = new BCAStudent[3];
        s[0] = new BCAStudent("Ayush", 101, 1);
        s[1] = new BCAStudent("Riya", 102, 2);
        s[2] = new BCAStudent("Karan", 103, 3);
        for (BCAStudent x : s) System.out.println(x);
        try { System.out.println(s[3]); }
                catch (ArrayIndexOutOfBoundsException e) { System.out.println("Handled: " +
e.getClass().getSimpleName()); }
        System.out.println(ayush_data);
    }
}
```

Sample Output:

```
Ayush (101), Sem 1
Riya (102), Sem 2
Karan (103), Sem 3
Handled: ArrayIndexOutOfBoundsException
ok
```