

SECTIONAL GROUP:

DISCUSSION GROUP:

MATRICULATION NO:

(Write your matriculation number legibly using a **PEN**.)TOTAL
MARKS

1.

E

2.

A

3.

D

4.

E

5.

[3 marks]

Syntax error on switch variable (should be an integer or a character)

Syntax error on duplicate values (e.g., 50-59=60-69=-9) for cases.

Syntax error on printf (should be double quote rather than single quote)

6.

[2 marks]

26

7.

[3 marks]

(a) `day <= 6 && time <=8`(b) `day <= 5 && time > 8`
`// time > 8 can be omitted if (a) is correct.`(c) `day == 7 && time <=8`
`// day == 7 can be omitted if (a) is correct.`

8.

[3 marks]

(a) `{49, 1, 2, 3, 50}` `// Answer at list[0]`
`// At least one element >= 50`(b) `{1, 49, 2, 3, 50}` `// Answer at list[1] or after`
`// At least one element >= 50`(c) `{1, 2, 3, 4, 5}` `// No element >= 50`

9.

[2 marks]

ii and iv

10. [5 marks]

```
int isAntisymmetric(int arr[][10], int n) {
    int i,j;
    for (i = 0; i < n; i++){
        for (j = 0; j < n; j++){
            if (j >= i && arr[i][j]+arr[j][i] != 0)
                return 0;
        }
    }
    return 1;
}
```

11. (a) [4 marks]

```
declare and initialize variables count and add

loop for i = 0 to 5
    loop for j = 0 to 6
        if (chosen[i] == drawn[j])
            if (j == 6) set add to true
            else increase count

if count == 6 print "Prize 1!"
else if count == 5 and add is true, print "Prize 2!"
else if count == 5, print "Prize 3!"
else print "No prize."
```

(b) [4 marks]

```
int count = 0, add = 0;

for (i = 0; i < 6; i++){
    for (j = 0; j < 7; j++)
        if (chosen[i] == drawn[j])
            if (j == 6) add = 1;
            else count++;
}

if (count == 6) printf("Prize 1!");
else if (count == 5 && add) printf("Prize 2!");
else if (count == 5) printf("Prize 3!");
else printf("No prize.");
```