

Lalitpur Computer Science Send Up - Exam 2080

Class: 10

F.M.: 50

Subject: Opt. Computer Science

Time: 2hrs

Group A

1. Answer the following questions in one sentence. [6×1=6]

- a) Name two bounded transmission media.
- b) Give an example of cyber bullying.
- c) What is IoT?
- d) What type table do you create in MS Access to modify table structure?
- e) What is file mode?
- f) Write any two numeric data type of C language.

2. Write the technical term for the following statements. [2×1=2]

- a) A program in client computer to access internet
- b) A program that disinfects other programs.

3. Write the full forms of the following. [2×1=2]

- a) UTP
- b) ISDN

Group B [24 Marks]

4. Answer the following questions. [9×2=18]

- a) What is ring topology? Mention its two advantages.
- b) What is cyber law? What is the cyber law of Nepal called?
- c) Mention any four software security measures.
- d) What is m-commerce? Write its two limitation.

- e) What is e-governance? List the types of e-governance.
- f) What is database? Write any two advantages of electronic data base.
- g) What is field type? List any four field type supported by MS-Access.
- h) Write two differences between filtering and querying.
- i) What is report? Why is it prepared? What are the different parts of a report?

5. Write the output of the given program showing the dry run table. [3]

```
DECLARE SUB TTT(N)
CLS
X=2
CALL TTT(X^2)
END
```

```
SUB TTT(N)
T=2
WHILE T<=4
PRINT T*N
T=T+2
WEND
END SUB
```

6. Debug the following program. [3]

```
REM to print 5 records from data file HOSPITAL.TXT
OPEN "HOSPITAL.TXT" FOR APPEND AS #5
FOR REP = 1 TO 5
INPUT #3, PN$,AD$,G$,A
DISPLAY PN$,AD$,A, G$
NEXT REP
FINISH #5
END
```

7. Read the following program and answer the given questions. [2]

```
DECLARE SUB AA (N$)
CLS
W$= "CYBERCRIME"
CALL AA(W$)
END

SUB AA (N$)
R= LEN(N$)\2
E$=RIGHT$(N$,R) + LEFT$(N$,R)
```

```
PRINT E$  
END SUB
```

Questions:

- a) List all string variables from the program.
- b) What type of operator is '+' in above program?

Group C [16 Marks]

8. Convert/Calculate as per the instruction. [4×1=4]

- a) $(111000001)_2 = (?)_{16}$
- b) $(521)_8 = (?)_{10}$
- c) $(111)_2 \times (11)_2$
- d) $(100110)_2 - (110)_2$

9.

a) Write a program in QBASIC to define a function procedure to display the cube root of an integer supplied by the user. Use sub procedure module to calculate and print the difference between cube root and square root the same integer. **[4]**

b) A sequential data file 'STUDENT.DAT' contains the information regarding name, class, section and gender of 50 students. Write a program to add five more records in the same file. **[4]**

10.

- a) Write a program using C language to print the first 25 odd numbers between 50 to 100. **[2]**
- b) Write a program using C language to input an integer then check whether the integer is negative or positive or zero. **[2]**