

# **LUMBINI PABSON SEE PRE-BOARD EXAM 2081**

**Subject: Computer Science**

**FM: 50 | Time: 2 hrs**

*Candidates are required to give their answer according to the given instructions.*

## **Group "A"**

**1. Answer the following questions in one sentence:**

- a. What is web browser?
- b. What is the business conducted through wireless handheld device?
- c. Which data type is used to video file in MS-Access?
- d. What is Filtering?
- e. Write difference between function procedure and sub procedure.
- f. Write any two header files of C language.

**2. Write appropriate technical term for the following: [2×1=2]**

- a. It is the act of copying someone else's work and publishing it as your own work.
- b. The process of converting original representation of the information, known as plaintext, into an alternative form known as ciphertext.

**3. Write the full form of the following:**

- a. ASCII
- b. MAC

## Group "B"

### 4. Answer the following questions:

- a. Define computer network. List the types of computer network.
- b. What is cyber ethics? List any two of them.
- c. What is computer security? Write any two measures of hardware security.
- d. What is m-computing? Write advantages of m-computing.
- e. What is VR? Write two application areas of VR.
- f. What is query? List its types.
- g. Define filtering. Write two examples of it.
- h. Define primary key. Write any two advantages of it.
- i. What is field and database.

### 5. Write down the output of the given program. Show with dry-run in table.

```
CLS
P=1: Q=1
CALL DISP(P,Q)
END
```

```
SUB DISP(M,N)
WHILE (N<=5)
PRINT M
M=M*10+N
N=N+1
WEND
END SUB
```

### 6. Re-write program after correcting the bugs:

```
REM To display some records from data file "info.dat"
CLS
OPEN "MARKS.DAT FOR INPUT AS #1
PRINT "Roll , "Name", "English"."Nepali", "Maths"
DO WHILE EOF()
INPUT #1,RN,N$,E,N,M
```

```
PRINT R,N$.E,Ne,M
END WHILE
CLOSE #1
END
```

**7. Study the following program and answer the given questions:**

```
DECLARE SUB TEST (A, B, C)
LET X=4
LET Y=7
LET Z=12
CALL TEST (X, Y, Z)
PRINT X, Y, Z
END
```

```
SUB TEST (A, B, C)
A=A+3
B=B+2
SUM=A+B+C
PRINT SUM
END SUB
```

**Questions:**

- List the arguments and parameters used in the above program.
- List local variables used in each module.

**Group "C"**

**8. Convert/calculate as per the instruction:**

- $(10101011)_2 = (?)_{16}$
- $(641)_{10} = (?)_2$
- $(1010)_2 \times (11)_2 - (101)_2$
- $(101101)_2 \div (110)_2$

**9. Answer the following questions:**

- a. Write a program in QBASIC that asks for the radius and height of a cylinder and calculates its surface area and volume. Create a user-defined function to calculate the surface area and a sub-program to calculate the volume. [Hint: Surface Area= $2 \times \pi \times r \times (r+h)$ , Volume= $\pi \times r^2 \times h$ ]
- b. A sequential data file called "Employee.txt" has stored data under the field headings Employee ID, Name, Gender, Department, and Salary. Write a program to display all the information of those employees whose salary is greater than 50,000 and the department is "IT".

**10. Write a program in C language that asks three integer number and display smallest among three numbers.**

**OR**

**Write a program in C language to display reverse of a multi digit integer input number.**