**BOOST UP EXAM 2081**

**SUBJECT: Computer Science**

**TIME: 1:30hrs**

***Candidates are required to give their answers in their own words as far as practicable.***

**Group ‘A'**

**Very Short Answer [10×1=10]**

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

1. What is online banking?
2. What is mobile computing?
3. Which data type is used to store salary of an employee in MS-Access?
4. What is an extension of MS-Access database?
5. What are modules in QBASIC?
6. Write any two data type used in C language.

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

1. The rate at which data are transferred in a given medium
2. The use of computer technology to create a simulated environment.

**3. Write the full form of the following: [2×1=2]**

ISDN, CDMA

**Group ‘B'**

**Short Answer [12×2=24]**

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

1. Differentiate between bus and star topology with figure.
2. What is computer ethics? Give any four commandments of it
3. What is software security? Write any two measures of software security.
4. What is M-Commerce? Write its importance.
5. What is cloud computing? Write any two importance of it.
6. Differentiate between database and DBMS with example
7. What is primary key? List any two advantages of it.
8. What is data sorting? List any two advantages of using it.
9. Define query? Write its importance

**5. Write down the output of the given program. Show with dry run-in table. [2]**

DECLARE SUB SHOW (A, B)

CLS

X=1 : Y=2

CALL SHOW (X, Y)

END

SUB SHOW (A, B)

I=1

DO

PRINT A;

A=A+B

B=A+B

I=I+1

LOOP WHILE I <= 5

END SUB

**6. Re-write the given program after correcting the bugs: [2]**

REM to store record in data file

CLS

OPEN “info.dat” FOR INPUT AS #1

DO

INPUT “Enter Name, address and class “; N$, A, C

INPUT #2, N$, A, C

INPUT “Do you want to continue”; Y$

WHILE UCASE$(Y$) = “Y”

CLOSE “info.dat”

END**7. Study the following program and answer the given questions:      [2]**

DECLARE FUNCTION text$(N$)

CLS

INPUT “Enter any string”; X$

PRINT text$(X$)

END

FUNCTION text$(N$)

           FOR i=len (N$) TO 1 STEP -1

                       W$=W$+MID$(N$, I, 1)

           NEXT i

           text$ = W$

END FUNCTION

1. What is the main objective of the program given above?
2. Write the output if N$=“9812345678”

**Group ‘C' Long Answer [4×4=16]**

**8. Convert / calculate as per the instruction:                           [4×1=4]**

1. (11100011100)2 = (?)8
2. (10110)10 = (?) 2
3. (1000) 2 – (111) 2 = (?) 2
4. (111111) 2 ÷ (111) 2

9. Write a program in QBASIC to input radius of circle and calculate its area using sub and circumference using function procedure [ Area=pi\*r2 and Circumference=2\*pi\*r] [4]

10. A sequential data file called “Record.txt” has stored data under the field heading Roll No., Name, Gender, English, Nepali, Math’s and Computer. Write a program to display all the information of female students who pass in all subjects. Also, female name must end with “ita” [Note: Pass mark in all subject is 40] [4]

11. Write a program in C language to convert days into respective years, months and days. [4]

**OR**

Write a program in ‘C' language to input two number and find greatest among two number.

**The End**