

**Readersnepal.com**  
**Model Question**  
**SUBJECT: Computer Science**

**TIME: 1:30hrs**

**CLASS: X**

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

**FM: 50**

**PM: 20**

**Group 'A' Very Short Answer [10x1=10]**

**1) Answer the following questions in one sentence: [6x1=6]**

- a. What is internet?
- b. What is cloud computing?
- c. Which data type is used to store salary of an employee in MS-Access?
- d. What is an extension of MS-Access database?
- e. What are modules in QBASIC?
- f. Write any two data type used in C language.

**2) Write appropriate technical term for the following: [2x1=2]**

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

**3) Write the full form of the following: [2x1=2]**

SMTP, CDMA

**Group 'B' Short Answer [12x2=24]**

**4) Answer the following questions: [9x2=18]**

- a. Differentiate between bus and star topology with figure.
- b. What is computer crime? Give any four example of it
- c. What is hardware security? Write any two measures of software security.
- d. What is E-Commerce? Write its importance.
- e. What is mobile computing? Write any two importance of it.
- f. Differentiate between database and DBMS with example
- g. What is primary key? List any two advantages of it.
- h. What is data sorting? List any two advantages of using it.
- i. 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$, A, C
INPUT #1, N$, 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

- What is the main objective of the program given above?
- List all the parameters used in above program.

**Group 'C' Long Answer [4x4=16]**

**8) Convert / calculate as per the instruction: [4x1=4]**

- $(1110001110)_2 = (?)_8$
- $(111)_{10} = (?)_2$
- $(1000)_2 - (111)_2 = (?)_2$
- $(111111)_2 \div (111)_2$

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