

# SEE COMPUTER SCIENCE 2080 MODEL SET 1

**Subject:** Opt. II Computer Science

**Full Marks:** 50

**Time:** 2 hrs.

*Candidates are required to write their answers according to the instructions given.  
Attempt all questions.*

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## Group 'A' (10×1=10)

### 1. Answer the following questions in one sentence: (6×1=6)

- a) What is web browser?
- b) Mention any two services provided by Internet.
- c) What is the maximum length of field name in MS-Access?
- d) Which is the logical data type of MS-Access?
- e) What is modular programming?
- f) Mention any two basic data types of C language.

### 2. Write appropriate technical term for the following: (2×1=2)

- a) Network of Networks.
- b) Computer program that protects computer from computer virus.

### 3. Write the full form of the following: (2×1=2)

- a) FTP:
  - b) MAN:
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## Group 'B' (9×2=18)

### 4. Answer the following questions:

- a) What is network topology? List any two types of network topology.
  - b) Define cyber law and cyber crime.
  - c) What is password? Write any two importance of password protection.
  - d) What is online payment? Write any two online payment in Nepal.
  - e) Define virtual reality. Write any two areas where virtual reality is used.
  - f) What is DBMS? Write four objects of MS-Access.
  - g) What are validation text and validation rule?
  - h) What is form? Write any two advantages of it.
  - i) What is foreign key? Why is primary key necessary in record?
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**5. Write the output of the given program: Show with dry run in table. (2)**

```
DECLARE SUB Series(A)
CLS
A=20
CALL Series(A)
END
SUB Series(A)
  FOR K=1 to 5
    PRINT A;
    A=A+10
  NEXT K
END SUB
```

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**6. Re-Write the given program after correcting the bug: (2)**

```
REM Program to make a word reverse
DECLARE FUNCTION Rev$(N$)
CLS
INPUT "Enter a word"; N$
DISPLAY "Reversed is"; Rev$(N$)
END
FUNCTION Rev$(N$)
  FOR K=LEN(N$) to 1 STEP -1
    B$=B$+MID$(N$,1,K)
  NEXT K
  B$=REV$
END FUNCTION
```

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**7. Study the following program and answer the given questions: (2×1=2)**

```
OPEN "EMP.DAT" FOR INPUT AS #1
DO
    INPUT #1, N$, A$, S
    IF UCASES(A$)="KATHMANDU" THEN
        PRINT N$, A$, S
    END IF
LOOP WHILE NOT EOF(1)
CLOSE #1
END
```

- a) Write the use of statement "INPUT #1, N\$, A\$, S" in the above program.  
b) What happens if you remove "UCASES" from the above program?
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**8. Convert/Calculate as per the instruction: (4×1=4)**

- a)  $(10110011)_2 - (?)_{16}$   
b)  $(410)_{10} = (?)_2$   
c)  $(1001 + 110)_2 - (1000)_2$   
d)  $(10110)_2 / (101)_2$
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**9.**

- a) Write a program to calculate Area of circle using Function procedure and use SUB procedure to calculate its circumference in Q-Basic. [Hint:  $A=\pi r^2$ ,  $C=2\pi r$ ] (4)  
b) Write a program to create a sequential data file named "Employee.dat" to store Name, Post, Address and Salary for the number of employees. The program should terminate on user's choice. (4)
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**10. Write a program in C language to input a number and then check whether the number is positive, negative or zero number. (4)**

**OR**

Write a program in C language to display the series with their sum 1, 2, 3, 4, ... up to 10th terms. (4)