

SEE COMPUTER SCIENCE 2080 MODEL SET 3

Full Marks: 50

Time: 2 hrs.

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

Group 'A' (10×1=10)

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

- a) What is network protocol?
- b) What is antivirus software?
- c) What is the default size of text field in MS-Access?
- d) Which data type is used to store photo in MS-Access?
- e) What is looping?
- f) Write any two features of C language.

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

- a) Law that governs the legal issues of cyberspace.
- b) The smallest unit to represent information on quantum computer.

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

- a) UTP:
 - b) IoT:
-

Group 'B' (9×2=18)

4. Answer the following questions:

- a) Write any two advantages and disadvantages of computer network.
- b) What is computer ethics? Write down any two ethics of it.

- c) What is computer security? Write any two hardware security measures.
- d) Give two differences between E-commerce and Traditional Commerce.
- e) Define artificial intelligence (AI). Write any two uses of AI.
- f) What is RDBMS? Write any two examples of DBMS.
- g) What is report in MS-Access? Mention the importance of report in database.
- h) What is data sorting? List any two advantages of using it.
- i) List the field name and records used in the following table structure:

| Symbol_N | Name | Marks |
|----------|------|-------|
|----------|------|-------|

| | | |
|-----------|------------|----|
| 001009010 | Hari Thapa | 85 |
|-----------|------------|----|

| | | |
|-----------|-------------|----|
| 00100901Q | Binu Sharma | 91 |
|-----------|-------------|----|

5. Write the output of the given program: Show with dry run in table. (2)

```

DECLARE SUB ABC(A)
CLS
A=2
CALL ABC(A)
END
SUB ABC(A)
  FOR J=1 TO 5
    PRINT A;
    A=A+3;
  NEXT J
END SUB

```

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

```

DECLARE SUB Series()

CLS
EXECUTE Series
END

SUB Series()
  REM Program to generate 1 1 2 3 5 ..... upto the 20th terms

```

```

A=1
B=1
FOR ctr=1 TO 20
    DISPLAY A;B
    A=A+B
    B=A+B
NEXT ctr
END SUB

```

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

```

OPEN "Detail.dat" FOR INPUT AS #1
OPEN "Temp.dat" FOR OUTPUT AS #2
INPUT "Enter name of the students"; S$
FOR I=1 TO 10
    INPUT #1, Nm$, C1, A
    IF S$<>Nm$ THEN
        WRITE #2, Nm$, C1, A
    END IF
NEXT I
CLOSE #1, #2
KILL "Detail.dat"
NAME "Temp.dat" AS "Detail.dat"
END

```

- What is the main objective of the program given above?
 - Do you get any problem in the above program if "KILL" statement is removed?
-

8. Convert/Calculate as per the instruction: (4×1=4)

- $(11111101)_2 = (?)_{16}$
 - $(245)_{10} = (?)_2$
 - $(10110)_2 \times (101)_2$
 - $(101110)_2 / (110)_2$
-

9.

a) Write a program in QBASIC that will ask the user to input length, breadth and height of a room then use SUB procedure calculate its volume and FUNCTION procedure to calculate its area of four walls. (4)

b) A sequential data file called "Record.dat" has stored data under the field heading Roll No., Name, Gender, English, Nepali, Maths and Computer. Write a program to display all the information of those students whose marks in English is more than 40. (4)

10. Write a program in C language that asks a number and check whether it is odd or even. (4)

OR

Write a program in C language to display the series 1, 1, 2, 3, 5, 8 up to 10th terms. (4)