

COMPUTER SCIENCE SEE (Grade Increment) 2081 (2025)

Group 'A'

1. Answer the following questions in one sentence:

- a) Name any two unguided transmission media.
- b) What is online payment?
- c) Write down any two objects of MS-Access.
- d) What is report?
- e) Write the function of 'WRITE' statement.
- f) Write down any two data types used in C-language.

2. Write appropriate technical term for the following:

- a) An illegal activity done through computer and internet.
- b) The rate at which data is transmitted through a given medium.

3. Write the full form of the following:

- a) ISP
- b) G2G

Group 'B'

4. Answer the following questions:

- a) What is data communication? List two modes of data communication.
- b) Define Antivirus software with two examples.
- c) What is software security? Write any two measures of hardware security.

d) What is Internet of Things (IoT)? Write any two importance of it.

e) Define e-commerce with its types.

f) What is table? Which view is used to modify a table?

g) What is Query? List any two importance of it.

h) Define Validation rule and Validation text.

i) Give any two differences between Form and Report.

5. Write down the output of the given program and show them in dry run table:

```
DECLARE SUB Result (A$)
A$="Development"
CALL Result (A$)
END
```

```
SUB Result (A$)
FOR C=1 TO LEN(A$) STEP 2
X$=MID$(A$,C,1)
PRINT X$
NEXT C
END SUB
```

6. Rewrite the given program after correcting the bugs:

```
REM to display records
OPEN "marks.dat" FOR INPUT AS #1
CLS
PRINT "Roll Number", "Name", "English", "Nepali"
DO WHILE NOT EOF()
INPUT #1, RN, N$, E, Ne
DISPLAY RN, N$, E, Ne
WEND
CLOSE
END
```

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

```
DECLARE FUNCTION MUL (A, B)
M = 5
N = 3
```

```
PRINT MUL (M,N)
END
```

```
FUNCTION MUL (A, B)
MUL=A*B
END FUNCTION
```

Questions:

- a) List the parameters used in the above program.
- b) Which procedure is used in the above program?

Group 'C'

8. Convert/Calculate as per the instruction:

- a) $(00101001)_2 = (x)_{16}$
- b) $(86)_{10} = (x)_2$
- c) $(111)_2 \times (10)_2 - (111)_2$
- d) $(1011)_2 \div (10)_2$

9. Answer the following questions:

- a) Write a program in Q-BASIC to ask for three numbers from the user and find the average using SUB PROCEDURE and find the sum by using the FUNCTION PROCEDURE.
- b) Write a program in Q-Basic to create a sequential data file named "record.txt" and store Roll number, Name, Address and Class of few students.

10. Write a program in C-language that asks a number and check whether the input number is odd or even.

OR

Write a program in C-language to display the given series 2, 4, 6, 8, 10, ...100