

SEE Pre-Qualifying Examination – 2081

Subject: Optional Computer Science

Time: 2 hrs | FM: 50

Group A [20 Marks]

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

- a) List any two examples of unguided media.
- b) Write any one disadvantage of social media.
- c) What is the purpose of table in database?
- d) What data type is used to store images in MS-Access?
- e) What is the use of EOF() function?
- f) What is the function of scanf() and printf() in C language?

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

- a) Device used to connect a PC with a telephone line.
- b) Law that governs the legal issues in cyberspace.

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

- a) TCP/IP
 - b) BIT
-

Group B [24 Marks]

4. Answer the following questions. (9×2=18)

- a) What is network topology? Write down the advantages of BUS topology.
- b) What is computer ethics? Write any two commandments of it.
- c) What is biometric verification?
- d) Differentiate between traditional commerce and e-commerce.
- e) Define cloud computing. Name any two services of it.
- f) What is DBMS? Give some examples of DBMS.
- g) What is data sorting?
- h) What is query? List the different types of query.
- i) List any two major differences between forms and reports.

5. Write the output of the given program showing the dry run table. (2)

6. Re-write the following program correcting the bug. (2)

7. Read the program given below and answer the questions that follow. (2)

- a) Write down the use of MOD in the program.
 - b) How many times does the loop execute in the program?
-

Group C [16 Marks]

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

- i) $(111011 + 11011) - (10011)$
- ii) $(10011 \times 101) \div 111$
- iii) $(458)_{10}$ into octal
- iv) $(8C3)_{16}$ into binary

9. Answer the following. (4+4=8)

- a) Write a program in QBASIC that allows the user to enter radius of a circle. Create user-defined FUNCTION...END FUNCTION to find area of circle and SUB...END SUB to find volume of a cylinder.
- b) Write a program to open data file NEW.DAT which may contain name, address, phone no. and salary. The program should allow the user to add few records on it.

10. Write a program in C language. (4)

- a) To check whether the supplied number is divisible by 5 or not.

OR

- b) To find the sum of first ten natural numbers.