Bhaktapur Municipality SEE Preparation Exam 2080

Class: 10 **F.M.:** 50

Subject: Opt. Computer Science

Time: 1 hr 30 min

Group "A"

Answer the following questions in one sentence:

- 1. What is an intranet?
- 2. What is cyber bullying?
- 3. While designing table structure which data types are suitable to store information about student's name and date of birth?
- 4. What is the field size of Yes/No field?
- 5. What is local variable?
- 6. Write the format specifier of basic data types of C language.

Write appropriate technical term for the following:

- 7. The ability to understand natural language and is capable of thinking and learning itself.
- 8. Buying and selling of goods through internet.

Write the full form of the following:

- 9. G2G
- 10. LIFI

Group "B"

Answer the following questions:

- 11. Mention differences between client/server architecture and peer-to-peer architecture of the network.
- 12. What is password policy? Write any two important criteria for creating a strong password.
- 13. What is a backup? Why is backup vital to computer security systems?
- 14. What is Online Payment? Write the different forms of e-payment in Nepal.
- 15. Define antivirus software with two examples.
- 16. Differentiate between database and DBMS with example.
- 17. What is data sorting? Write the advantages of the sorted data.
- 18. Write two differences between Select query and Action query.
- 19. List any two major differences between forms and reports.

Write the output of the given program: (Workout with a dry run)

20. Program output question with dry run (SUB SERIES).

Study the following program and answer the given questions:

- 21. List all the parameters used in the program given above.
- 22. List the variable used in the above program.

Group "C"

Convert/Calculate as per the instruction:

```
23. (10111101)<sub>2</sub> into Octal
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24.
$$(4E6)_{16} = (?)_8$$

25.
$$((10101-1110)_2 \times (10)_2)$$

26.
$$(101110)_2 \div (1110)_2 = (?)_2$$

Programming Questions:

- 27. Write a program in QBASIC that asks radius and height of a cylinder and calculate its surface area and volume. Create a user-defined FUNCTION to calculate surface area and SUB program to calculate volume.
- 28. A sequential data file "Salary.dat" contains the information, employee-code, employee-name, post and basic salary. Write a program to display those records whose basic salary is greater than or equal to 15000 and post is "Officer".
- 29. Write a program in C language to check whether the supplied number is divisible by 7 or not.
- 30. Write a program in C language to display the series with their sum 7, 10, 13, 16... up to 10.