NEB -XII
Model Question
2079(2023)
Computer Science

Candidates are required to give their answer in their own words as far as practicable. The figures in the margin indicate full marks.

Time:-2 hrs.   **Full Marks:- 50**

Group A

Rewrite the correct options of each questions in your answer sheet.   **(9x1=9)**

1. In which normal form of database, atomicity is introduced?
   A) First   B) Second   C) Third   D) Fourth

2. Which of the following techniques is not implemented to protect a database?
   A) Rollback   B) Backup   C) Recovery   D) Firewall

3. Which one of the following SQL commands is executed to display all the records having a second letter in the LNAME (LAST NAME) as "A" from the customer table?
   A) SELECT * FROM CUSTOMER WHERE LNAME LIKE "?A%";
   B) SELECT * FROM CUSTOMER WHERE LNAME LIKE "_A%";
   C) SELECT * FROM CUSTOMER WHERE LNAME LIKE "A%";
   D) SELECT * FROM CUSTOMER WHERE LNAME LIKE "%A";

4. Which of the following is an incorrect IP address?
   A) 192.168.0.1
   B) 192.168.1
   C) 172.255.0.0
   D) 202.10.79.4

5. Which of the following is a server-side scripting language?
   A) JavaScript   B) MySql   C) PHP   D) Jquery

6. Which of the following keywords are used to declare a variable in JavaScript?
   A) int or var   B) float or let   C) var or let   D) char or var

7. Which of the following commands is executed in PHP to concatenate the variables $x with $y?
   A) $x + $y   B) $x=$y   C) concat ($x,$y)   D) $x.$y

8. Which statement is incorrect about the object-oriented approach?
   A) Emphasis is on data rather than procedure.
   B) Data is hidden and cannot be accessed.
   C) Objects communicate through functions.
   D) It supports abstract data but not the class.

9. Which of the following feasibility study is concerned with cost benefit analysis?
   A) Technical feasibility
   B) Economic feasibility
   C) Operational feasibility
   D) Schedule feasibility

Short Answer Questions [5x5=25]

10. Which type of database system (centralized or distributed) is mostly preferred by financial institution like a bank? Give any four suitable reasons. [1+4]

OR

Nowadays most of the business organizations prefer applying relational model for database design in comparison to other models. Justify the statement with your arguments. 5

11. Develop a program in JavaScript to exchange/swap the values of any two variables. 5

OR

How can you connect a database with PHP? Demonstrate with an example. 5

12. Describe the concept of Object Oriented and Procedure Oriented Programming in brief. 2+3

13. Write down any five qualities of good software. 5

14. Explain mobile computing with its advantages and disadvantages. 5

Group C (Long Answer Questions)

Give the long answers to the following questions. [2x8=16]

15. Why do most of the business organizations prefer setting their network with the client-server architecture? Write its advantages and disadvantages. [2+6]

16. Develop a program in C using structure to ask the information of any 12 students with roll_number, name and marks scored in sub1, sub2, and sub3. Also, display them in proper format along with the calculation of total and percentage. [Note: the full marks of each subject is 100].

OR

Demonstrate a program in C to create a data file named score.dat to store students' information with Reg_no, name, gender, and address. The program should ask the user to continue or not. When finished, the program should also display all the records in the proper format.

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