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PG/IVS/MTM-407/14 (Pr.)

M.Sc. 4th Semester Examination, 2014

**APPLIED MATHEMATICS WITH OCEANOLOGY
AND COMPUTER PROGRAMMING**

*(Database Management System and
Software Development)*

(Practical)

PAPER — MTM - 407

Full Marks : 25

Time : 2 hours

Answer any one question

The figures in the right-hand margin indicate marks

[Questions are to be selected by Lottery]

(Turn Over)

1. Create a database file that will maintain a list of Name, Addresses and Telephone numbers. Write a program in FoxPro to obtain a pop-up menu containing the items. 20

(i) Add a new record.

(ii) Delete a record.

(iii) Modify a record.

(iv) Retrieve and display an entire record for a given name.

(v) Generate a complete list of all records.

(vi) Exit from menu.

Enter 5 records and implement (i) and (vi).

2. Create a database file that will maintain a list of Name, Addresses and Telephone numbers. Write a program in FoxPro to obtain a pop-up menu containing the following items : 20

(i) Add a new record.

(ii) Delete a record.

(iii) Modify a record.

(iv) Retrieve and display an entire record for a given name.

(v) Generate a complete list of all records.

(vi) Exit from menu.

Enter 5 records and implement (ii) and (vi).

3. Create a database file that will maintain a list of Name, Addresses and Telephone numbers. Write a program in FoxPro to obtain a pop-up menu containing the following items : 20

(i) Add a new record.

(ii) Delete a record.

(iii) Modify a record.

(iv) Retrieve and display an entire record for a given name.

(v) Generate a complete list of all records.

(vi) Exit from menu.

Enter 5 records and implement (iii) and (vi).

(5)

4. Create a database file that will maintain a list of Name, Addresses and Telephone numbers. Write a program in FoxPro to obtain a pop-up menu containing the following items : 20

(i) Add a new record.

(ii) Delete a record.

(iii) Modify a record.

(iv) Retrieve and display an entire record for a given name.

(v) Generate a complete list of all records.

(vi) Exit from menu.

Enter 5 records and implement (iv) and (vi).

5. Create a database file that will maintain a list of Name, Addresses and Telephone numbers. Write a program in FoxPro to obtain a pop-up menu containing the following items : 20

(i) Add a new record.

(ii) Delete a record.

(iii) Modify a record.

(iv) Retrieve and display an entire record for a given name.

(v) Generate a complete list of all records.

(vi) Exit from menu.

Enter 5 records and implement (v) and (vi).

7. Create a database file that will maintain a list of Name, Addresses and Telephone numbers. Write a program in FoxPro to obtain a pop-up menu containing the items. 20

(i) Add a new record.

(ii) Delete a record.

(iii) Modify a record.

(iv) Retrieve and display an entire record for a given name.

(v) Generate a complete list of all records.

(vi) Exit from menu.

Enter 5 records and implement (ii), (v) and (vi).

8. Create a database file that will maintain a list of Name, Addresses and Telephone numbers. Write a program in FoxPro to obtain a pop-up menu containing the items. 20

(i) Add a new record.

(ii) Delete a record.

(iii) Modify a record.

(iv) Retrieve and display an entire record for a given name.

(v) Generate a complete list of all records.

(vi) Exit from menu.

Enter 5 records and implement (iii) and (vi).

9. Create a database file containing the list of countries and their corresponding capitals. Write a program in FoxPro to obtain a pop-up menu containing the following items : 20

(i) Add a new record.

(ii) Searching the country whose capital is given.

(iii) Searching the capital whose country is given.

(iv) Delete a record.

(v) Generate a complete list of all countries and capitals.

(vi) Exit from menu.

Enter 5 records and implement (i) and (vi).

10. Create a database file containing the list of countries and their corresponding capitals. Write a program in FoxPro to obtain a pop-up menu containing the following items : 20

- (i) Add a new record.**
- (ii) Searching the country whose capital is given.**
- (iii) Searching the capital whose country is given.**
- (iv) Delete a record.**
- (v) Generate a complete list of all countries and capitals.**
- (vi) Exit from menu.**

Enter 5 records and implement (ii) and (vi).

11. Create a database file containing the list of countries and their corresponding capitals. Write a program in FoxPro to obtain a pop-up menu containing the following items : 20

- (i) Add a new record.**
- (ii) Searching the country whose capital is given.**
- (iii) Searching the capital whose country is given.**
- (iv) Delete a record.**
- (v) Generate a complete list of all countries and capitals.**
- (vi) Exit from menu.**

Enter 5 records and implement (iii) and (vi).

12. Create a database file containing the list of countries and their corresponding capitals. Write a program in FoxPro to obtain a pop-up menu containing the following items : 20

- (i) Add a new record.
- (ii) Searching the country whose capital is given.
- (iii) Searching the capital whose country is given.
- (iv) Delete a record.
- (v) Generate a complete list of all countries and capitals.
- (vi) Exit from menu.

Enter 5 records and implement (iv) and (vi).

13. Create a database file containing the list of countries and their corresponding capitals. Write a program in FoxPro to obtain a pop-up menu containing the following items : 20

- (i) Add a new record.**
- (ii) Searching the country whose capital is given.**
- (iii) Searching the capital whose country is given.**
- (iv) Delete a record.**
- (v) Generate a complete list of all countries and capitals.**
- (vi) Exit from menu.**

Enter 5 records and implement (v) and (vi).

14. Create a database file containing the list of countries and their corresponding capitals. Write a program in FoxPro to obtain a pop-up menu containing the following items : 20

- (i) Add a new record.**
- (ii) Searching the country whose capital is given.**
- (iii) Searching the capital whose country is given.**
- (iv) Delete a record.**
- (v) Generate a complete list of all countries and capitals.**
- (vi) Exit from menu.**

Enter 5 records and implement (i), (v) and (vi).

15. Create a database file containing the list of countries and their corresponding capitals. Write a program in FoxPro to obtain a pop-up menu containing the following items : 20

(i) Add a new record.

(ii) Searching the country whose capital is given.

(iii) Searching the capital whose country is given.

(iv) Delete a record.

(v) Generate a complete list of all countries and capitals.

(vi) Exit from menu.

Enter 5 records and implement (iv), (v) and (vi).

16. Design a class for matrix system in C++ to include necessary members and member functions for addition, input and output operators. Demonstrate the class. 20

17. Design a class for matrix system in C++ to include necessary members and member functions for subtraction, input and output operators. Demonstrate the class. 20
18. Design a class for matrix system in C++ to include necessary members and member functions for multiplication, input and output operators. Demonstrate the class. 20
19. Design a class for matrix system in C++ to include necessary members and member functions for addition, subtraction, input and output operators. Demonstrate the class. 20
20. Design a class for matrix system in C++ to include necessary members and member functions for addition, multiplication, input and output operators. Demonstrate the class. 20

21. Design a class for matrix system in C++ to include necessary members and member functions for addition, transpose, input and output operators. Demonstrate the class. 20
22. Design a class for matrix system in C++ to include necessary members and member functions for determinant value, input and output operators. Demonstrate the class. 20
23. Design a class for matrix system in C++ to include necessary members and member functions for inverse, input and output operators. Demonstrate the class. 20

[Note Book + Viva : 5 Marks]
