M.Sc. 4th Semester Examination, 2011

APPLIED MATHEMATICS WITH OCEANOLOGY AND COMPUTER PROGRAMMING

(*Practical on Database Management System and Software Development*)

PAPER—MA-2211

Full Marks : 25

Time : 2 hours

Answer **one** question

Problem : 20 marks; Lab. Note Book and Viva : 5 marks

Question will be selected by lottery.

F11. Create a database file for some students with the following fields

- Name
- Roll No.
- Date of birth

Write a program in FoxBase+ to draw the pop-up menu containing the following items

(*i*) Display the records of each student in a given format.

(*ii*) Display the records of a particular student whose roll no. is given in the given format.

(*iii*) Add new record(s).

(*iv*) Sort on roll no. or name.

(*v*) List roll no. and name of all records of the sorted file.

(*vi*) Exit from the menu.

Enter 10 records and implement (*i*) and (*vi*).

F12. Create a database file for some students with the following fields

- Name
- Roll No.
- Date of birth

Write a program in FoxBase+ to draw the pop-up menu containing the following items

(*i*) Display the records of each student in a given format.

(*ii*) Display the records of a particular student whose roll no. is given in the given format.

(*iii*) Add new record(s).

(*iv*) Sort on roll no. or name.

(*v*) List roll no. and name of all records of the sorted file.

(*vi*) Exit from the menu.

Enter 10 records and implement (*ii*) and (*vi*).

F13. Create a database file for some students with the following fields

- Name
- Roll No.
- Date of birth

Write a program in FoxBase+ to draw the pop-up menu containing the following items

(*i*) Display the records of each student in a given format.

(*ii*) Display the records of a particular student whose roll no. is given in the given format.

(*iii*) Add new record(s).

(*iv*) Sort on roll no. or name.

(*v*) List of roll no. and name of all records of the sorted file.

(*vi*) Exit from the menu.

Enter 10 records and implement (*iii*) and (*vi*).

F14. Create a database file for some students with the following fields

- Name
- Roll No.
- Date of birth

Write a program in FoxBase+ to draw the pop-up menu containing the following items

(*i*) Display the records of each student in a given format.

(*ii*) Display the records of a particular student whose roll no. is given in the given format.

(*iii*) Add new record(s).

(*iv*) Sort on roll no. or name.

(*v*) List roll no. and name of all records of the sorted file.

(*vi*) Exit from the menu.

Enter 10 records and implement (*iv*), (*v*) and (*vi*).

F21. Create a database file that will maintain a list of

- Names
- Addresses
- Telephone numbers

Write a program in FoxBase+ to draw a pop-up menu that contains the following items

(*i*) Add new record(s)

(*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 the menu.

Enter 10 records and implement (*i*) and (*vi*).

F22. Create a database file that will maintain a list of

- Names
- Addresses
- Telephone numbers

Write a program in FoxBase+ to draw a pop-up menu that contains the following items

(*i*) Add new record(s)

(*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 the menu.

Enter 10 records and implement (*ii*) and (*vi*).

F23. Create a database file that will maintain a list of

- Names
- Addresses
- Telephone numbers

Write a program in FoxBase+ to draw a pop-up menu that contains the following items

(*i*) Add new record(s)

(*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 the menu.

Enter 10 records and implement (*iii*) and (*vi*).

F24. Create a database file that will maintain a list of

- Names
- Addresses
- Telephone numbers

Write a program in FoxBase+ to draw a pop-up menu that contains the following items

(*i*) Add new record(s)

(*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 the menu.

Enter 10 records and implement (*iv*) and (*vi*).

F25. Create a database file that will maintain a list of

- Names
- Addresses
- Telephone numbers

Write a program in FoxBase+ to draw a pop-up menu that contains the following items

(*i*) Add new record(s)

(*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 the menu.

Enter 10 records and implement (*v*) and (*vi*).

F31. Create a database file containing the list of countries and their corresponding capitals.

Write a program to obtain a popup menu containing the items.

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

Enter 10 records and implement (*i*) and (*vi*).

F32. Create a database file containing the list of countries and their corresponding capitals.

Write a program to obtain a popup menu containing the items.

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

Enter 10 records and implement (*ii*) and (*vi*).

F33. Create a database file containing the list of countries and their corresponding capitals.

Write a program to obtain a popup menu containing the items.

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

Enter 10 records and implement (*iii*) and (*vi*).

F34. Create a database file containing the list of countries and their corresponding capitals.

Write a program to obtain a popup menu containing the items.

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

Enter 10 records and implement (*iv*) and (*vi*).

F35. Create a database file containing the list of countries and their corresponding capitals.

Write a program to obtain a popup menu containing the items.

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

Enter 10 records and implement (*v*) and (*vi*).

F41. Write an interactive file oriented program that will maintain a list of roll numbers, name and marks of students. Include a menu that will allow the user to select any of the following activities

(*i*) Add a new record
(*ii*) Delete a record
(*iii*) Search a record
(*iv*) Generate a complete list of roll no., names and marks.
(*v*) End of execution

Enter 10 records and implement (*i*) and (*v*).

F42. Write an interactive file oriented program that will maintain a list of roll numbers, name and marks of students. Include a menu that will allow the user to select any of the following activities

(*i*) Add a new record
(*ii*) Delete a record
(*iii*) Search a record
(*iv*) Generate a complete list of roll no., names and marks.
(*v*) End of execution

Enter 10 records and implement (*ii*) and (*v*).

F43. Write an interactive file oriented program that will maintain a list of roll numbers, name and marks of students. Include a menu that will allow the user to select any of the following activities

(*i*) Add a new record
(*ii*) Delete a record
(*iii*) Search a record
(*iv*) Generate a complete list of roll no., names and marks.
(*v*) End of execution

Enter 10 records and implement (*iii*) and (*v*).

F44. Write an interactive file oriented program that will maintain a list of roll numbers, name and marks of students. Include a menu that will allow the user to select any of the following activities

(*i*) Add a new record
(*ii*) Delete a record
(*iii*) Search a record
(*iv*) Generate a complete list of roll no., names and marks.
(*v*) End of execution

Enter 10 records and implement (*iv*) and (*v*).

C11. Write a class for matrix containing the following :

(*i*) Overload get (>>) and put (<<) operators.
(*ii*) Overload matrix addition
(*iii*) Overload matrix subtraction
(*iv*) Overload matrix multiplication

Implement (*i*) and (*ii*) and demonstrate your program.

C12. Write a class for matrix containing the following :

(*i*) Overload get (>>) and put (<<) operators.
(*ii*) Overload matrix addition
(*iii*) Overload matrix subtraction
(*iv*) Overload matrix multiplication

Implement (*i*) and (*iii*) and demonstrate your program.

C13. Write a class for matrix containing the following :

(*i*) Overload get (>>) and put (<<) operators.
(*ii*) Overload matrix addition
(*iii*) Overload matrix subtraction
(*iv*) Overload matrix multiplication

Implement (*i*) and (*iv*) and demonstrate your program.

C14. Write a class for matrix containing the following :

(*i*) Overload get (>>) and put (<<) operators.
(*ii*) Overload matrix addition
(*iii*) Overload matrix subtraction
(*iv*) Overload matrix multiplication

Implement (*i*) and (*iii*) and demonstrate your program.

C15. Write a class for matrix containing the following :

(*i*) Overload get (>>) and put (<<) operators.
(*ii*) Overload matrix addition
(*iii*) Overload matrix subtraction
(*iv*) Overload matrix multiplication

Implement (*i*) and (*ii*) and also find the value of 3A, where A is a matrix.

M11. Write a class for matrix containing the following :

(*i*) Overload get (>>) and put (<<) operators.

(*ii*) Overload matrix addition

(*iii*) Overload matrix subtraction

(*iv*) Overload matrix multiplication

Implement (*i*), (*ii*), (*iii*) and (*iv*). Use your class to find the value of A-B+A*(B+A), where A, B, C are matrices.

M12. Write a class for matrix containing the following :

(*i*) Overload get (>>) and put (<<) operators.

(*ii*) Overload matrix addition

(*iii*) Overload matrix subtraction

(*iv*) Overload matrix multiplication

Implement (*i*), (*ii*), (*iii*) and (*iv*). Use your class to find the value of A + C - B*A, where A, B, C are matrices.

M13. Write a class for matrix containing the following :

(*i*) Overload get (>>) and put (<<) operators.
(*ii*) Overload matrix addition
(*iii*) Overload matrix subtraction
(*iv*) Overload matrix multiplication

Implement (*i*), (*ii*), (*iii*) and (*iv*). Use your class to find the value of A-B+A*C, where A, B, C are matrices.
