

M.Sc. 4th Semester Examination, 2012

**APPLIED MATHEMATICS WITH OCEANOLOGY
AND COMPUTER PROGRAMMING**

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

PAPER—MTM-207

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.

F41. 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) Adding of new record(s).
- (iv) Sorting on roll no. or name.
- (v) Listing of roll no. and name of all records of the sorted file.
- (vi) Exiting from the menu.

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

F42. 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) Adding of new record(s).
- (iv) Sorting on roll no. or name.
- (v) Listing of roll no. and name of all records of the sorted file.
- (vi) Exiting from the menu.

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

F43. 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) Adding of new record(s).
- (iv) Sorting on roll no. or name.
- (v) Listing of roll no. and name of all records of the sorted file.
- (vi) Exiting from the menu.

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

F44. 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) Adding of new record(s).
- (iv) Sorting on roll no. or name.
- (v) Listing of roll no. and name of all records of the sorted file.
- (vi) Exiting from the menu.

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

F31. 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).

F32. 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).

F33. 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).

F34. 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).

F35. 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).

F21. 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).

F22. 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).

F23. 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).

F24. 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).

F25. 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).

F11. 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).

F12. 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).

F13. 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).

F14. 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.