APPENDIX ‘A’

(Outlines of Tests)

Paper - A:

This paper will consist of two parts:

Part - I  Introduction to Information Technology

Theory 35 Marks
Practical 15 Marks

Part - II  Computer Programming

Theory 35 Marks
Practical 15 Marks

100 Marks

Paper - B:

This paper will consist of two parts:

Part - I  Data Base Management Systems

Theory 35 Marks
Practical 15 Marks

Part - II  System and Network Administration

Theory 35 Marks
Practical 15 Marks

Grand Total 200 Marks

APPENDIX ‘B’

(Syllabi and Courses of Reading)

Paper - A:

100 Marks

Note: This paper will consist of Part-I and II.

Part-I 50 Marks
Part-II 50 Marks
PART - I : Introduction to Information Technology (50 Marks)

Theory:

Recommended Books:
1. “Introduction to Computers” by Peter Norton.

Practical:

Windows 2000

1. Exploring Windows 2000 work place: desktop component and customizing them, exploring parts of a window, menu and dialog boxes, multitasking, and shutting down windows.
2. Working with the Accessories: calculator, notepad, wordpad, paint program, media player, etc.
3. Organizing files and folders using window explorer.
5. Using Internet: working with Internet explorer, surfing with Internet explorer, working with e-mail.

**Word 2000:**
2. Saving and opening documents.
3. Editing and formatting text.
4. Formatting and printing documents.
5. Working with tables and graphics.
6. Working with Mail Merge and hyper links.

**Excel 2000:**
2. Worksheet basics: entering data, editing worksheet, inserting & deleting cell, hiding data, copying data and auto fill.
3. Formatting and printing a worksheet.
5. Creating charts and adding graphics.

**Front Page 2000:**
1. Exploring Front Page environment.
2. Designing documents: working from Page View.
3. Developing the basic page: text, list, and hyperlinks, tables, frames.
4. Enhancing pages with graphics and multimedia.

**Recommended Books:**
PART - II: COMPUTER PROGRAMMING (50 Marks)

Tool: Visual Basic

Theory:

Introductory Programming Concept: problem solving, algorithms and pseudo code.
Programming Techniques: visual programming, event driven programming, object oriented programming, structured programming. Visual Basic Integrated Development Environment. Control Elements: Data Types, Variables and Assignment Statements. Arithmetic Operators and Scope: data conversions, expressions, variable scope, declaring form and project variables and constants. Modules and Procedures: sub-procedures, event procedures, function procedures, and optional argument. Branching and Looping: procedures, function procedures, and optional argument. Branching and Looping: relational operators and logical expressions, logical operators, if-then-else, case, for-next, looping with do and while loop; menu and dialog boxes; arrays searching and !
Sorting: what is array, declaring arrays, using arrays, control arrays, enumerations user defined types. Error Handling. Sequential Files: file details, file operators, add report to programs, programming with fixed report length. Introductory database programming: why use database, data control, and creating data-bound controls.

Recommended Books:

1. "Computer programming with Visual Basic 6" by Alka R. Harriger, Susan K.
   Lisack.
2. "Visual Basic 6: How to Program" by Deitel, Deitel and Nieto Prentice-Hall.
3. "Visual Basic 6: How To Program" by Deitel, Deitel and Nieto Prentice-Hall
4. "Using Visual Basic (Special Edition)", by Brian Siler and Jeff Spotts.

Practical:

Students must implement the concepts studied in the theory part. For practice see examples given in "Computer programming with Visual Basic 6" by A. R. Harriger, S.K. Lisack and "Visual Basic 6: How to Program" by Deitel, Deitel and Nieto. Some practical examples. AS guide line are given below:

1. Test if a given integer is odd or even.
2. Given the sides of a triangle, determine the type of the triangle.
3. Print integers in the specified range; make every alternate integer in the output negative.
4. Print leap years in a given century.
5. Given two strings, count the number of times the second string appears in the first string.
6. Create a Program that converts Fahrenheit temperature to the Celsius scale and back again.
7. Search for a given name in an array of names.
8. Reverse an array.
9. Reverse a given string.
10. Build a scientific calculator.

PAPER - B (100 Marks)
PART - I: Database Management System (50 Marks)

Theory:

Recommended Books:
4. "Fundamental of Database Systems" by C. J. Date

Practical:
1. Exploring Access 2000 work place: opening access applications, menus, toll bars other components.
2. Designing and creating a database.
3. Entering and editing data into tables.
4. Designing and using basic forms.
5. Integrating Access with other Microsoft Office applications and Internet.
7. Finding, sorting and filtering information.
8. Creating basic queries.
9. Designing and using basic reports.
10. Creating and using data access Pages.
11. Creating action queries.

Recommended Books:


PAPER - B

PART - II: Operating Systems and Networks (50 Marks)

Theory:


Networking Basic Concepts: line configuration, topologies, transmission modes, categories of network, internetwork. The OSI Model: layered architecture, functions of the layers. TCP IP protocols suite. Transmission Media: twisted-pair, coaxial cable, optical fiber:
Recommended Books:

"Operating Systems" by J.A. Harris (Schaum's outlines) 2002.

"Data Communications and Networking" by B.A. Forcuzan, 2nd edition.

Practical:


6. User Profiles and Hardware Profiles: Local User Profiles, Roaming Profiles, Mandatory Profiles, Managing Hardware Profiles.


Recommended Books: