Syllabus
COMPUTER COURSE
(UG Programs)
<u>Admitted Batch 2008 - 2009</u>
(For all B.A./ B.Sc./ B.Com./ B.Sc.(Home Science),BCA,B.A.(OL),BBM & BEM programs with no computer course as core subject)

May 2008

A.P. State Council of Higher Education

<u>SUBJECT COMMITTEE</u>

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11. Sri S.Krishna Rao,
     Managing Director,
     Infopark Software Technologies,
     Vijayawada.

B.Sc. Courses (Structure)

First year:

S.no.	Subject	Hrs per week
1.	English language including communication skills	6
2.	Second language	4
3.	Core1-I	4
4.	Core2-I	4
5.	Core3-I	4
6.	Core1-lab I	3
7.	Core2-lab I	3
8.	Core3-lab I	3
9.	Foundation course	3
10.	Computer skills	2
	Total	**36**

Second year:

S.no.	Subject	Hrs per week
1.	English language including communication skills	6
2.	Second language	4
3.	Core1-II	4
4.	Core2-II	4
5.	Core3-II	4
6.	Core1-lab II	3
7.	Core2-lab II	3
8.	Core3-lab II	3
9.	Environmental studies	4
10.	Computer skills	2
	Total	**37**

Third year:

S.no.	Subject	Hrs per week
1.	Core1-III	3
2.	Core1-IV	3
3.	Core2-III	3
4.	Core2-IV	3
5.	Core3-III	3
6.	Core3-IV	3
7.	Core1-lab III	3
8.	Core1-lab IV	3
9.	Core2-lab III	3
10.	Core2-lab IV	3
11.	Core3-lab III	3
12.	Core3-lab IV	3
13.	Foundation course	3
	Total	**39**

STRUCTURE

(For all B.A./B.Sc./B.Com. programs with no computer course as core subject)

YEAR	Paper	Name of the Subject	Hours / Week
I Year	Theory - 1	Introduction to Computers	2
II Year	Theory - 2	Office Automation Tools	2

ANDHRA UNIVERSITY
For all B.A./B.Sc./B.Com. programs with no computer course as core subject
Admitted Batch 2008-09

60 hrs
(2 hrs/ week)

I Year
Theory Paper-1

Introduction to Computers

Unit-1 :   Exploring Computers   12 hrs

Exploring Computers and their uses :

Overview: Computers in our world, The computer defined, Computers for individual users, Computers for organizations, Computers in society, Why are computers so important.

Looking inside the computer system:

Overview: Detecting the ultimate machine, The parts of a computer system, The information processing cycle, Essential computer hardware: processing devices, memory devices, Input and output devices, Storage devices, System software, Application software, Computer data, Computer users.

Using the keyboard and mouse:

Overview: The keyboard and mouse, The keyboard, How the computer accepts input from the keyboard, The mouse, Variants of the mouse, Ergonomics and input devices.

Inputting data in other ways:

Overview: Options for every need and preference, Devices for hand, optical input devices, Audio-visual input devices.

Video and Sound :

Overview: Reaching our senses with sight and sound, Monitors, Ergonomics and monitors, Data projectors, Sound systems.

Unit-2 :   Storage Devices and Operating System Basics   12 hrs

Printing :

Overview: putting digital content in your hands, Commonly used printers, High-quality printers, Thermal-wax printers, Dye-sublimation printers, Plotters.

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Transforming data into information:

Overview: The difference between data and information, How computers represent data, How computers process data, Machine cycles, Memory, Factors effecting processing speed, The computer's internal clock, The Bus, Cache memory.

Types of storage devices:

Overview: An ever-growing need, Categorizing storage devices, Magnetic storage devices—How data is stored on a disk, How data is organized on a magnetic disk, How the operating system finds data on a disk, Diskettes, hard disks, Removable high-capacity magnetic disks, Tape drivers, Optical storage devices, Solid-state storage devices, Smart cards, Solid-state disks.

Operating system basics :

Overview: The purpose of operating systems, Types of operating systems, Providing a user interface, Running programs, Managing hardware, Enhancing an OS utility software.

Networking Basics :

Overview: Sharing data anywhere, anytime, The uses of a network, Common types of networks, Hybrid networks, How networks are structured, Network topologies and protocols, Network media, Network hardware.

Unit-3 :   Data Communications and Computer Programs   12 hrs

Data Communications :

Overview: The local and global reach of networks, Data communications with standard telephone lines and modems, Modems, uses for a modem, Using digital data connections, Broad band connections, Wireless networks.

Productivity Software :

Overview: Software to accomplish the work of life, Acquiring software, Commercial software, Freeware and public domain software, Open-source software, Word processing programs, Spreadsheet programs, Presentation programs, Presenting information managers.

Database management Systems :

Overview: The mother of all computer applications, Databases and Database Management Systems, Working with a database.

Creating Computer programs :

Overview: What is a computer program, Hardware/Software interaction, Code, machine code, programming languages, Compilers and interpreters, Planning a computer program, How programs solve problems.

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Programming languages and the programming process:

Overview: The keys to successful programming, The evolution of programming languages, World wide web development languages, The Systems development life cycle for programming.

Unit-4 :   MS-Word   **12 hrs**

Word Basics : Starting word, Creating a new document, Opening preexisting document, The parts of a word window, Typing text, Selecting text, Deleting text, Undo, Redo, Repeat, Inserting text, Replacing text, Formatting text, Cut , Copy, Paste – Formatting Text and Documents : Auto format, Line spacing, Margins, Borders and Shading.

Headers and Footers : Definition of headers and footers, creating basic headers and footers, creating different headers and footers for odd and even pages.

Tables : Creating a simple table, Creating a table using the table menu, Entering and editing text in a table, selecting in table, adding rows, changing row heights, Deleting rows, Inserting columns, Deleting columns, changing column width.

Graphics : Importing graphics, Clipart, Insert picture, Clip Art Gallery, using word's drawing features, drawing objects, text in drawing.

Templates : Template types, using templates, exploring templates, modifying templates.

Macros : Macro, Record in macros, editing macros, running a macro.

Mail Merge : Mail Merge concept, Main document, data sources, merging data source and main document, Overview of word menu options word basic tool bar.

Unit-5 :   Ms-Power Point   **12 hrs**

Power Point : Basics, Terminology, Getting started, Views

Creating Presentations : Using auto content wizard, Using blank presentation option, Using design template option, Adding slides, Deleting a slide, Importing Images from the outside world, Drawing in power point, Transition and build effects, Deleting a slide, Numbering a slide, Saving presentation, Closing presentation, Printing presentation elements.

Prescribed Books :

1. Peter Norton, Introduction to Computers, sixth Edition, Tata
   McGraw Hill (2007) (Chapters 1,2,3,4,5,6,7,10,11,12)
2. Ran Mansfield, working in Microsoft Office, Tata McGraw Hill
   2008). (Chapters : 4 to 9, 11, 12, 24, 25, 28)

Reference Books :

1. Michael Miller, Absolute Beginner's guide to computer Basics,
   Fourth Edition, Pearson Education (2007).
2. Deborah Morley, Charles S.Parker, understanding computers today
   and tomorrow, 11th edition, Thomson (2007).
3. Ed Bott, woody Leonhard, using Microsoft Office 2007, Pearson
   Education (2007).

<u>Andhra University</u>
For all B.A./B.Sc./B.Com. programs with no computer course as core subject
Academic Year 2009-10
60 hrs
(2 hrs/ week)
II Year
Theory Paper-2

Office Automation Tools

Unit-1 :   MS EXCEL BASICS   12 hrs

Excel basics : The usual spread sheet features, Overview of excel features, Getting Started, Creating a new work sheet, Selecting cells, Navigating with the mouse and keyboard, Entering and editing text, text boxes, text notes, checking spelling, undoing and repeating actions, entering and formatting numbers, entering and editing formulas, referencing cells, order of evaluation in formulas, look up tables, copying entries and equations to minimize typing, more auto fill examples, creating custom fill lists, protecting and un protecting documents and cells.

Rearranging worksheets : Moving cells, copying cells, sorting cell data, inserting rows, inserting columns, inserting cells, inserting as you paste, deleting parts of a worksheet, clearing parts of a worksheet, how formulas react to worksheet design changes, Auditing tools help spot potential problems.

Excel formatting tips and techniques : Excel page setup, Changing column widths and row heights, auto format, manual formatting, using styles, format codes alter a number's appearance, format painter speeds up format copying, changing font sizes and attributes, adjusting alignments, centering text across columns, using border buttons and commands, changing colors and shading, inserting and removing page breaks, hiding rows and columns.

Organizing large projects : Using names, splitting windows and fixing titles, outlining your worksheets, working with multiple worksheets, using multiple worksheets in a workbook, viewing multiple windows, summarizing information from multiple worksheets.

An introduction to functions : Parts of a function, functions requiring add-ins, online functions help, the function wizard, examples of functions by category, error messages from functions.

Unit-2 :   EXCEL CHARTS, GRAPHICS AND FUNCTIONS   12 hrs

Excel's chart features : chart parts and terminology, instant charts with the chart wizard, creating charts on separate worksheets, resizing and moving charts, adding chart notes and arrows, editing charts, rotating 3-D charts, Changing worksheet values by dragging chart parts, printing charts, deleting charts, setting the default chart type, controlling which series on which axis, adding overlay charts, creating trend lines, data map.

Working with graphics in Excel : Creating and placing graphic objects, resizing graphics, positioning graphics on worksheets, drawing lines and shapes, examples of graphics in Excel, possible sources of excel graphics, Excel slide shows.

Introduction to Excel's command macros : Recording your own macros, running macros, assigning macros to buttons.

Using worksheets as databases : Database concepts and terms, Creating an excel database, Working with data forms, filtering—a better way to find, sorting excel databases, cross-tabulating databases, adding subtotals to databases.

Automating what-if projects : General organizational tips, scenario manager, finding the right number with solver.

Auditing and trouble shooting worksheets : Using error values to locate problems, using iteration to solve circular references, using the info window to find errors, using the auditing command to trouble shoot.

Unit-3 :   **MS ACCESS BASICS**   **12 hrs**

Introduction to Access : Access concepts and terms, starting and quitting access, the access workspace and tools, the views.

Creating a simple database and tables : The access table wizard, creating databases without the wizard, field names, data types and properties, adding or deleting fields in tables, renaming fields and their captions, moving fields, deleting fields in tables, resizing fields, changing the appearance of text in tables, freezing columns, primary key fields, indexing fields, viewing a list of database properties.

Forms : The form wizard, saving forms, modifying forms.

Entering and editing data : Typing, adding records, duplicate previous entries without retyping, switching out of data entry mode, when do entries get saved?, undo, correcting entries, global replacements, moving from record to record in a table, entry and navigational shortcuts.

Finding, sorting and displaying data : Queries and dynasets, creating and using select queries, returning to the query design, multiple search criteria, finding incomplete matches, using wildcards in queries, requesting range of records, hiding columns, reformatting dynasets, multilevel sorts, showing all records after a query, saving queries for latter use, cross tab queries, find and replace.

Unit-4 :   **ACCESS REPORTS, FORMS AND GRAPHICS**   **12 hrs**

Printing reports, forms, letters and labels: simple table, form, and database printing, defining advanced reports, manual reporting and modifying, modifying section contents, properties in reports, saving report formats for reuse, printing mailing labels, changing label designs.

Relational databases : Flat versus relational, how relationships work, Exercise: creating a simple relationship, types of relationships, defining and redefining relationships, deleting relationships, creating relationships.

Expressions, macros and other automation : Expressions, using expressions in reports, using expressions in queries, using expressions in forms, expression builders.

Graphics in databases : Objects: linked, embedded, bound and unbound, unbound graphics as form and report embellishments, bound graphics in records, adding graphics to buttons, chart wizard: charting your data.

Linking, importing and exporting records : Importing versus linking, linking other databases as tables, importing data from spread sheet files, importing data from word files, exporting access data.

Unit-5 :   FUNDAMENTALS OF INTERNET   12 hrs

The Internet and the World Wide Web : Overview: what is Internet, The Internet's history, The Internet's major services, Understanding the world wide web, Using your browser and the world wide web, navigating the web, closing your browser, getting help with your browser, searching the web, search results and web sites.

E-mail and other Internet Services : Overview: communicating through the Internet, Using E-mail, Using an E-mail program, Stomping out spam, Using web-based e-mail services, More features of the Internet.

Connecting to the Internet: Overview: Joining the Internet phenomenon, Connecting to the Internet through wires, How PC applications access the Internet, Connecting to the Internet wirelessly.

Doing business in the online world : Overview: commerce on the world wide web, E-commerce at the consumer level, E-commerce at the business level, Business, the Internet and every thing, Telecommuters.

Prescribed books:

1. Ron Mansfield, Working in Microsoft office, Tata McGraw Hill (2008)
   (chapters 13 to 23 and 29 to 38)
2. Peter Norton, Introduction to computers, Sixth Edition Tata
   McGraw Hill (2007)(Chapters 8A, 8B, 9A, 9B).

Reference Books :

1. Michael Miller, Absolute Beginner's guide to computer Basics,
   Fourth Edition, Pearson Education (2007).
2. Deborah Morley, Charles S.Parker, understanding computers today
   and tomorrow, 11th edition, Thomson (2007).
3. Ed Bott, woody Leonhard, using Microsoft Office 2007, Pearson
   Education (2007).
4. Rajkamal, Internet and web Technologies, Tata McGraw Hill(2007).