

# MAHARISHI MAHESH YOGI VEDIC VISHWA VIDYALAYA

## DIRECTORATE OF DISTANCE EDUCATION

### SCHEME FOR DIPLOMA IN COMPUTER APPLICATION

#### (DCA)

THIS IS A ONE YEAR PROGRAMME LEADING TO DIPLOMA IN COMPUTER APPLICATION

<b>Sub. Code</b>	<b>Paper</b>	<b>Nomenclature</b>
1DDCA1	I	Fundamentals of Maharishi Vedic Science (Maharishi Vedic Science –I)
1DDCA2	II	Fundamentals of Computer and Information Technology
1DDCA3	III	Application Programming in FoxPro
1DDCA4	IV	PC Package
1DDCA5	V	Programming in Visual Basic
1DDCA6	VI	Desk Top Publishing (Page Maker, Corel Draw, Photoshop)
1DDCA7	VII	Internet and Web Page Designing
1DDCA8	VIII	Practical - PC Package & Programming in FoxPro and Programming in Visual Basic
1DDCA9	IX	Project Work

# FUNDAMENTALS OF MAHARISHI VEDIC SCIENCE

## (MAHARISHI VEDIC SCIENCE – I)

DIPLOMA/ADVANCED DIPLOMA/UG COURSES

### UNIT-1

Meaning & importance of Guru Pujan.

Meaning of meditation, Mann, Intelligence, Chita, Ego, Thought .

### UNIT-II

Name of forty areas of Vedic Science and their expression in Human Physiology and characteristics of consciousness.

Consciousness, types of consciousness, characteristics of higher stages of consciousness.

### UNIT-III

Maharishi's Yoga, Transcendental Meditation- a general Introduction, Types of Speech, TM Sidhi Programme, Principle of Yoga Asanas and their Concept.

### UNIT-IV

Introduction: Maharishi Vedic Management.

Fundamental elements of Vedic Management –Totality

Management of Science and Art .

### UNIT-V

Vedic Management and Leadership.

The Idea Leadership is based upon the Totality of Employee's Style

### Suggested Readings:

- Chetna –His Holiness Maharishi Mahesh Yogijee
- Maharishi Sandesh -1 and 2 , II-His Holiness Maharishi Mahesh Yogijee
- Scientific Yoga Ashanas –Dr.Satpal.
- Dhyani Shailly by Brahmchari Dr. Girish Ji

MMYV DDE

## FUNDAMENTAL OF COMPUTER AND INFORMATION TECHNOLOGY

**UNIT-1** Introduction to computer and information technology : History of development of computers, computer system concept , characteristics, capabilities and limitation , types of computer –analog , digital , hybrid , general, special purpose, micro, mainframe, super , generation of computer , personal computer (PCs) –IBM PCs, characteristics , PC/PCXT/PCAT-configurations, Pentium and Newer PCs specification and main characteristics , types of PCs-Desktop, Laptop, Notebook, Palmtop , Workstation etc , their characteristics.

Computer Organizations and Working: Basic component of a computer system –control unit, ALU, INPUT /Output function and characteristics, memory –RAM, ROM, EPROM, PROM and other types of memory.

**UNIT-II** Input Devices: Keyboard, Mouse, Trackball, Joysticks, Digitizing tablet, Scanner, Digital Camera, MICR, OCR, OMR, BAR-CODE Reader, Voice Recognition, Light Pen, and Touch Screen.

Output Devices: Monitor –characteristics and types of monitor –digital , analog size, resolution, refresh rate , Interlaced /Non Interlaced , Dot Pitch , Video Standard –VGA,SVGA,XGA etc, Printer –Daisy wheel , Dot Matrix, Inkjet , Laser , line printer , plotter , sound card and speakers.

Storage Devices: Storage Fundamental –Primary VS Secondary , Data Storage and Retrieval method –Sequential , Direct and Index Sequential , Various Storage Devices –Magnetic Tape ,Magnetic disks , Cartridge Tape , data drives, hard disk drives, floppy (Winchester disks), Disks , Optical Disks , CD,VCD,CD-R,CD-RW, ZIP Drive.

**UNIT-III** Computer Software: Need, types of software –system software, application software, system software-operating system, utility program, programming Language, assemblers, compiler and interpreter.

Operating System: Function, types –batch, single, Multiprogramming, Multiprocessing. Programming languages-Machine, Assembly High Level, 4GL, their merit and demerits.

Application Software: Word –processing, spreadsheet, presentation graphics, data base management software, characteristics, user and example and area of application of each of them.

Number System: Data representation in computer, number system of computer –Binary, Octal, Hexa-Representation & their conversion, coding system –ASCII, BCD, EBCDIC etc.

**UNIT-IV** Data Communication and Networks: communication channels –twister , coaxial , fiber , optic .Types of Networks –LAN,WAN,MAN etc, Topologies of LAN –Ring , BUS ,STAR,MESH and TREE topologies , components of LAN-media , NIC,NOS, Bridges, HUB, Routers Repeater and Gateway .

**UNIT-V** Computer virus: Virus working principles, types of viruses, virus detection and prevention, viruses on networks. Use of communication and IT in daily life.

### **Text & Reference Books:-**

1. Learning Window 98 step by step by Rajeev Mathur , BPB Publication.
2. Learning Word 97 for Window by Rajeev Mathur , BPB Publication,
3. Learning Excel 97 for Window by Rajeev Mathur , BPB Publication.
4. A First Course in Computer by Sanjay Saxena , Vikas Publishing House New Delhi.
5. Microsoft Office 2000 by A. Mansoor by Pragya Publications.
6. Office 97 Interactive Course by Greg Perry, Tec media.
7. Microsoft Office 2000 by A. Mansoor by Pragya Publications.

## APPLICATION PROGRAMMING IN FOXPRO

**UNIT-I FOXPRO-** The RDBMS for PC FoxPro – Version , features, requirement of hardware and Software FoxPro- Menu System , Working with FoxPro ,Creating Database File Some common operation on data CREATE,LIST,APPEND,CLOSE,QUIT, FoxPro – Data types Viewing and editing data displaying and monitoring command – Display , List , Locate ,Edit ,Change, Brower , Replace , Delete ,Recall, Pack(All Command with various Option) Modify Structure , Memo Field Utilities –File Utilities in FoxPro – Display Directory , Copy, Delete , Remane.

**UNIT-II** Sorting and Indexing of Date Base files : sorting & Indexing ,Concept Sort Command – Single & Multiple Key Advantage & Disadvantage of Sort , Indexing vs Sorting , single & Multiple Key ,Indexing , find seek, Rushmore Technology, Printing report and labels , FoxPro report –its creation , features & utilities , review , Printing Custom Report grouping & Sub grouping . FoxPro Label-Designing & Printing.

**UNIT-III** Memory Variables , Date & Time Function and keyboard macros: Memory variables – creation and uses , simple vs array , saving and restoring Memory Variable „??/??/?? command , time & date function and command , Date Arithmetic ,Converting defining function Keyboard Macros – Creating and using, Mathematical Command and Function : Arithmetic operation , Mathematical function , mathematical Command , Statistical Function.

**UNIT-IV** Programming with FoxPro: Concept of FoxPro command file , modify command , conditioning ,branching and looping within program files with do-while End do, If- Endif, Scan –Endscan, for Endfor ,Do case –Endcase , Text- Endtext ,Executing command from other command files, macro substitution Error condition and program debugging aids common error Massage, Debugging technique and commands.

**UNIT-V MULTIPLE DATA FILES :** concept of Multiple Database files – using multiple database files Relationing the database – SET RELATION, UPDATE,APPEND FROM,COPYTO ,JOIN ,relation Query by Example and SQL

Custom Screens & user Define Function & Other tools:create custom screen with @ , @-GET, @\_EDIT, \_SAY\_GET\_READ,Creating box & Lines , user Define Function , Custom Screen , Designing and their use, Fodor for documentation.

### **Ref Books:**

Foxpro made Simple by R.K. Taxali, BPB Publication.

FoxPro Pragya Publication

## PC PACKAGE

**UNIT-I:** WINDOW 95/98: Window concept , Features , Windows structure , desktop , taskbar, start menu , My computer , Recycle Bin , WINDOW ACCESSORIES : Calculators , Notepad , Paint , WordPad , character map, Window Explorer : Creating folder and other Explore facilities , Entertainment : CD Player , DVD Player , Media Player , sound recorder , volume control, : Managing Hardware & Software- Installation of Hardware & Software , Using Scanner , Communication : Dial-up Networking , Hyper Terminal, Phone dialer , Sharing Information Between Program- understanding OLE, Embed/Link using cut and paste , embed /link using insert object manage embedded /linked object.

**UNIT-II:** Word-processing : MS-Word : Introduction to word processing , introduction to ms – word : features , creating , saving and opening document in word , interface , Toolbars , Ruler, Menus , Keyboard Shortcut , Editing a document – moving , scrolling in a document , opening multi document window , editing text selecting , inserting , delete , moving text , previewing document , printing document – Print a document from the standard toolbars , print a document from the menu , shrinking a document to fit a page , reduce the number of pages by one , formatting document : paragraph format , Aligning text and Paragraph , Border and shading , header and footer, multiple columns.

**UNIT-III:** Word-processing : Advanced Feature of MSWord: Find and replace , checking the grammar and spelling , formatting via find and replace , using the thesaurus , using Auto correct , Auto complete and Auto Text , Word count , Hyphenating , Mail merge , mailing labels Wizard and Templates, handling graphic , tables insert and modification , converting of tables, converting a word document into various formats like – Text, Rich Text Format , Word Perfect , HTML etc.

**UNIT-IV:** Worksheet : MS-Excel : Worksheet basics , Creating worksheet , entering data into worksheet , heading information , data , text dates , alphanumeric , values , saving & quitting worksheet , opening and moving around in an existing worksheet , toolbars and menus , keyboard shortcut , working with single and multiple worksheet , coping , renaming , moving between work books , working with formulas & cell referencing – Auto sum , Coping formulas , absolute & relative addressing , working with range – creating editing and selecting range , formatting of worksheet – Auto format , changing –alignment , character styles , column width , date format , border & colours , currency sign.

**UNIT-V:** Worksheet : MS-Excel: Previewing & Printing Worksheet- Page setting , print titles , Adjusting margins , page break , headers and footer, graphs and chart – using wizard , various chart types , formatting grid lines & legends , previewing & printing charts , database – creation , sorting , query & filtering a database , function – database , date and times , maths & Trigonometry , statistical , Text and logical function , creating and using macros , multiple worksheet – concept , creating and using.

## PROGRAMMING IN VISUAL BASIC

### Unit-I Integrated Development Environment of Visual Basic.

- Integrated Development Environment of VB, User Interface Designing ,Basic of Event Driven Programming.
- From – designing , Showing & hiding

### Unit-II Visual Basic Language

- Data types , variable & Constant , arrays, dynamic array , array as function , collections, procedures, arguments passing , function return values.
- Control flow statements :if –then –else, select case, looping statement: Do-loop, For-next, While-Wend , Nested Control Structure , Exit stmt.

### Unit-III Building Blocks of Visual Basic

- Basic Active X Control & their Use –Textbox , list box, combobox, scrollbar, slider&fire controls.
- Graphic controls, Image Handling in VB, Coordinate System, Graphic method- Text Drawing , lines& shape , filling shape , grid methods,

### Unit-IV Components of visual Basic

- Menu editor : pull down and pop-up menus
- Multiple Document interface –parent & Child form & Methods.
- Error handling :Types of Error , Error handling method and function

### Unit-V Database Programming with VB

- Database programming with VB-Data Control – method , Properties, Connectivity with database.

### Ref. Books:-

Beginner's Guide to V.B. 6 by Reeta Sahoo

V.B. by Pragma Publication

## DESK TOP PUBLISHING

### Unit-I

- Introduction to DTP
- Definition Importance, characteristics
- Use of DTP in publishing & Newspaper Printing
- Various DTP Software
- Bit stream & vector graphics
- Printers –Dot Matrix, Inkjet and Laser
- Introduction to offset printing technology
- Typography – history , element , selection of fonts, point use of blank spaces and dashes, white spaces , various breaks ,Good designing and Easy readability . Different Measurement used in DTP printing

### Unit-II

- Introduction to Adobe PageMaker
- Why Page Maker popular in publication
- Toolbox , Styles, Menus, Templates
- Page Orientation & Page Setup
- Importing &Text block
- Spell Check & find & Replace
- Working with text and graphics
- Columns & gutters
- Different Page Layouts
- Master page , page Numbering
- Auto flow
- Story Editor & Layout view
- Attribute setting , Alignments , grids, and Guides etc.
- Tab setting

### Unit-III

- Import & Export of files
- Styles & Palettes
- Using colors
- Fonts: Post script font , true types fonts, bit stream & vector fonts
- Column Balancing , Breaks
- I Reverse Text
- Reverse Command

- Printing Options
- Placing Text & Graphic
- Picture Editing
- Bullets, Masking
- Window & Orphan Lines
- Text Wrapping
- Drop Caps
- Control Palette

#### Unit-IV

- Clips & Image Files
- OLE & Embedding
- Plugging
- Tables Editors
- Filters , Layer , PDF files
- Header & Footers
- Key board Control
- Linking
- Mathematics equation
- Printing Options
- Frame options

#### Unit-V

##### Presentation Graphics: MS PowerPoint

- Features and various version
- Creating presentation using Slide Master and plate in various color schemes
- Working with Slide– Make new slide, move copy , delete , duplicate , lay outing of slide, zoom in or out slide.
- Editing and formatting text : Alignment , editing , inserting , deleting, selecting , formatting of text find and replace text.
- Bullet, footer , paragraph formatting spell checking.
- Printing presentation –Print Slides , note, handout and out –lines
- Inserting Object –Drawing and inserting object using clipart , Picture and charts
- Slide sorter , slide transition effect and other animation effect
- Presenting the show making stand alone presentation , pack and go wizards.

# INTERNET & WEB PAGE DESIGNING

## Unit-I Internet

- Evolution , Protocols, Concept , Internet Vs Intranet , growth of Internet , ISP, Connectivity ,Dial-up , leased line , VSAT etc, URIs, Domain names , Portals , Application.

### E-Mail

- Concept , POP and Web Based E-mail, merit ,address , basics of sending & Receiving , E-mail protocols , mailing list , free E-mail services.

## Unit-II File transfer Protocols, Telnet & chatting

- Data Transmission Protocols, Client /Server Architecture & its Characteristics, FTP & Its usages telnet Concept, Remote Logging, Protocols, Terminal Emulation Message Board, Internet chatting –voice chat, text chat.

## Unit-III World Wide Web (WWW)

- History, Working, web Brower, its function, Concept of Search Engine, Searching the web HTTP, URLS, Web server , web protocols.

## Unit-IV Web Publishing

- Concept , Domain name Registration , space on Host Server for web site , HTML,Design tools, HTML,editor , Image editor , issues in web site creation & maintenance , FTP software for upload web site.

## Unit-V HTML

- Concept of Hypertext , Version of HTML , Element of HTML, syntax , head & body section Building HTML document , Inserting Text , Image , Hyperlinks , Background and color controls , different HTML tag , Tables , Tables layout and presentation use of size & Attributes , List types and its tags.

## Text & Refrence Books

1. Level Madul M. 1.2 Internet & Web page Designing by Y.K Jain, BPB Publication
2. Internet for Dummies –Pustak Mahal , New Delhi.
3. Internet & E-commerce A. Mansoor & Dr.Anrag Seetha ,Pragya Publication .