

COURSE MODULES - IT TRAINING PROGRAMMES W.E.F 2017

For all Honours and & Major subjects

Year	Curriculum	Topics
1 st Year	Computer Fundamentals	<ul style="list-style-type: none"> • Identification & Description of Different parts of a Computer. • History and Generations of Computer. • Advantage and disadvantage of Computer. • Work Areas & Work Procedures(Input-Processing-Output) • Memory & Classification of Memory. • Software, Hardware Vs. Software, Classification of Software, Etc.
1 st Year	Operating System	<ul style="list-style-type: none"> • Concepts, Functions & Classifications(Single & Multi User and Single & Multi Tasking) • Identifying different Desktop Icons. My Computer, My Documents, etc • Changing Desktop Backgrounds, Mouse Pointer, Screen Saver, Date & Time, etc • Working with Accessories-Notepad , WordPad, MS Paint, Calculator, etc
1 st Year	MS Word	<ul style="list-style-type: none"> • Introduction to MS Office & Word Processing Software • Document formatting options - Font, Alignment, paragraph formatting, Bullets and Numbering, Drop Cap, Water Mark, Change Case, Script, Etc. • Insert Picture, Clipart, Shapes, WordArt, Text Box, Symbol, Etc • Page Layout, Header & Footer, Page Number, Page Break, Columns, Page Border • Spelling & Grammar, Find & Replace, Cut-Copy-Paste • Working with Table • Mail Merge, Advantages, Procedure • Macro • Projects
1 st Year	MS Excel	<ul style="list-style-type: none"> • Introduction of Spreadsheet & Excel • Cell, Row, Column, Active Cell, Worksheet, Workbook • Cell Formatting Options -Alignment, Merge, Gridline, Inserting & Deleting of Row & Column, Inserting & Deleting of Worksheet, Cut, Copy, Paste, Background picture, Etc. • Formulas and Functions- Types of Formula,

		<ul style="list-style-type: none"> • Text (Concatenate, Left, Right, Mid, Upper, Lower, Rept, Len, Trim) • Math (Log, Round, Int, Product, Sum, Fact, Power, Sqrt) • Stat(Average, Min, Max, Count, Countif) • Date & Time (Now, Today, Time) • Logical (If, Or, And), • Financial (PMT, etc) • Charts, Chart Types, Insert & Formatting of Chart, Etc • Database Handling, Sorting, Subtotal, Filter (Auto & Advanced), What if Analysis, etc • Macro • Projects
1 st Year	Database Management System	<ul style="list-style-type: none"> • Concept of Data, Information, Record & Database, DBMS & RDMS. • Introduction of MS Access & its utilities • Working with Tables, Forms, Queries & Reports • Projects
1 st Year	MS Powerpoint	<ul style="list-style-type: none"> • Introduction of Presentation & Power Point. • Concept of Slide, Insert & Delete of Slide, Difference View in PPT. • Adding objects (text/graphics/table/chart/organization chart), Using background & Design template • Animating Presentation-Loop/Slide transition/Object & Text animation, Adding sound effects, Objects Grouping & Ungrouping, Inserting Paint Object • Projects
1 st Year	Internet	<ul style="list-style-type: none"> • What is Internet? How Internet works? Types of Internet browsers and Web pages. • Internet Vs. Intranet • Networking, Types of Networking-Topological (bus/star/ring/ tree), Structural (LAN/MAN/WAN) • Concept of (HUB/Switch/ Router/ Gateway/ISDN/Broadband/ HTTP/FTP/ISP/Browser). • Internet Marketing • Cyber Laws & Cyber Security • Virus & Antivirus

For all B.A Hons, Geography, Economics, and Psychology Hons & Major

Year	Curriculum	Topics
2 nd Year	Adobe Page Maker	<ul style="list-style-type: none"> • Introduction to various versions, concepts and applications of PageMaker • Working with tool bar & Setting defaults • Working with various Page Setup • Inserting and removing pages • Flowing text, resizing the object • Adjusting graphics or text objects • Mask and group, unmask and ungroup. • Constrain move vertically/horizontally • Paste items, editing objects, rotating text box • Layout window, viewing pages, changing previous and next pages, zooming and hyperlinks • Font style, size, case • Subscript and superscript • Inserting Special characters, bullets, page numbering • Spacing of character, line, word and paragraph • Breaking and non breaking • Text editing– electing word, paragraph and a range of text • Indenting/Tabs • Find and change dialogue box • Using Palletes control, colour palletes, styles palet and master pages pallet • Removing master page objects from pages, control pallets • Making tables, editing data in tables. • Wrapping, grouping and ungrouping, locking and unlocking, mask/unmask image, polygon setting, rounded corners • Project
	Corel Draw	<ul style="list-style-type: none"> • Introduction to various versions, concepts and applications of Corel Draw • Working with tool bar • Setting defaults • Use of various tools such as Pick tools, Zoom tools, Free hand tool, Square tool, Rectangle tool, Text tool, Fill tool etc. • Adding special effects, Exporting drawings, outlining & filling objects • Grouping, Ungrouping locking and Unlocking objects. • Designing of monograms, logos, posters, stickers, greeting cards, wedding cards, visiting cards, etc.

2 nd Year	Photo Shop	<ul style="list-style-type: none"> • Introduction to various versions, concepts and applications of Photoshop Photo editing /inserting starting with Setting Up, introduction of layers • The Interface Managing Palettes • Working With Photoshop Tools Working With Layers • WEB & WEB GALLERY using internet explorer in photo shop. Creating animations using image ready, creating animations & presentations. • Working with Images in Photoshop. Working with Palettes, i.e., layers palette, navigator palette, info palette, color palette, Swatches palette, Styles palette, History palette, Actions Palette, Tool preset palette, Channels Palette and Path Palette. Working with Layers. • Photo editing. • Image adjustment options – Labels, Auto labels, Auto contrasts, Curves, Color balance, Brightness / Contrast, Posterize , Variations. • Preparing the file and work area. Creating different shapes. • Creating three Dimensional effects using Layers. • Working with the magic wand tool and lasso tool. • Creating images using Symbol Sprayer Tool. • Edit the images using options of Warp Tool. Using Dodge tool, Burn tool, Sponge Tool and Clone Stamp Tool. • Editing Selections. • Creating images and giving special effects using Filters. • Using Layer Styles. • Produce an image by mixing two or more different images using Layer Masking & Vector Masking.
	Bengali / Hindi Font Application	<ul style="list-style-type: none"> • Bengali / Hindi Font Application in Page Maker, Corel Draw & Photoshop

For all B.Sc Hons(Economics, Mathematics, Physics, Chemistry Hons)

Year	Curriculum	Topics
2 nd Year	Programming with C	<ul style="list-style-type: none"> • Introduction to Programming & Basics in 'C' • C Operators • Control Statements • Loop Control Instructions • String Manipulation • Arrays • Pointers • Structures and Unions • Functions • Storage Classes • File Handling • Data Structures(Linear & Non Linear) • Project
2 nd Year	Programming with C++	<ul style="list-style-type: none"> • Introduction to OOPS & Basics in C++ • Control Structures, Arrays, Strings & Functions • Basic concepts of Object Oriented Programming • Classes and Objects • Constructors and Destructors • Inheritance • Pointers • Operator Overloading • Polymorphism and Virtual function • Templates • Exception Handling • File Handling • Project

For all B.A Hons, Geography and Psychology Hons & Major

Year	Curriculum	Topics
3 rd Year	HTML & Javascript	<ul style="list-style-type: none"> • Introduction to HTML Using HTML editor, creating simple HTML documents, containing heading, body text and comments • Creation of web pages containing tables of different formats. • Practice on modification of tables. Creating Lists using • Bullets and Numbers. • Using HTML for creating web pages with links to other pages different points of a page and link to tables and list. • Creating webpage containing images • Inserting Images, Video & Sound effects. Marquees of Scrolling text. • Practice cascading style sheets • Javascript : • Concepts, Designing Web Pages using Java Script, JS output, If – else, switch, loops, • break and Math object .
3 rd Year	Adobe Flash	<ul style="list-style-type: none"> • Adobe Flash :Concept and application • Working with Flash Action Script • Adobe Authorware: Concept & application related media • Understanding the SCROM compliance issues for Elearning • Create interactive animations and applications using Flash • Create Interactive Applications and Elearning modules • Twitter Bootstrap and Zurb foundation :Concept & application
3 rd Year	Sound forge (optional)	<ul style="list-style-type: none"> • Different Audio file formats – AVI, WAV, WMA, MP3, MP4 • Audio editing tools • Audio/ Sound effects • Recording of Audio, importing of Audio files. • Editing of Audio and inserting effects.
3 rd Year	Adobe Premier (optional)	<ul style="list-style-type: none"> • Different formats of Video files • Video Editing tools • Time line

		<ul style="list-style-type: none"> • Insertion & Editing of graphics, animation clippings, Photos and video clippings • Video Transition effects • Voice over
3 rd Year (Geography)	GIS & Remote Sensing	<ul style="list-style-type: none"> • Principles of GIS • GIS and Environment • Geographical Information and Planning • Qualitative Research Methods • Digital Image Processing for Environmental Remote Sensing

For all B.Sc Hons(Economics, Mathematics, Physics, Chemistry Hons)

Year	Curriculum	Topics
3 rd Year	Visual Basic	<ul style="list-style-type: none"> • Introduction to VB & Visual Basic Studio • Interface Designing using various tools(Button, Option, Label, Frame, List, Scroll, Combo, Etc) • Working with Msg Box, Variables & Data Types • Loop, If – Else, Etc • Project
3 rd Year	JAVA	<ul style="list-style-type: none"> • Java Language Fundamentals • Java Virtual Machine • Java Run Time Environment • Java Classes and OOPS implementation • Attributes, Methods, Accessing Object Members • Constructors and Destructors • Package, Data Type, Identifiers, Keywords, Identifiers, Variables, Declarations, and Assignments • Java Reference Types Constructing and Initializing Objects • Memory Allocation and Layout • Executing the Constructor • Variables and Scope • Variables Initialization • Logical Operators • Casting • Switch Statements • Looping Statements • Break Statement • Continue Statement • Expressions and Flow Controls

		<ul style="list-style-type: none"> • Array Class Design • Java Servlet, Database Connection, Hibernate, Etc • Project
3 rd Year (Economics)	Tally ERP	<ul style="list-style-type: none"> • User Interface and Company Management • Masters – Ledgers & Groups • Vouchers & Day Book in Tally • Masters: Inventory • Value Added Tax (VAT) • Purchase & Sales Voucher with VAT • Billing Features in Tally • Bank Reconciliation in Tally • Stock Analysis and Reports • Cash and Bank Reports • Financial Reports • Payroll Accounting in Tally • Printing Reports • Shortcut Keys