

GOVERNMENT OF THE PUNJAB
TECHNICAL EDUCATION & VOCATIONAL TRAINING AUTHORITY



CURRICULUM FOR
DIPLOMA IN INFORMATION TECHNOLOGY
(1-Year Course)
Revised June, 2015

CURRICULUM SECTION
ACADEMICS DEPARTMENT
96-H, GULBERG-II, LAHORE
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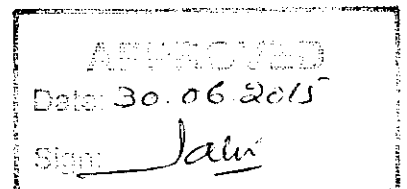
APPROVED
Date: 30.6.2015
Sign: Jalw

TRAINING OBJECTIVES

The course aims on producing the trained man-power in the field of Information Technology to fulfill employment requirement of I.T. industry not only in the country but also abroad. The curriculum is divided into two academic semesters. The curriculum of Semester-I is designed to train the students to work as database developer and manage the offices. The curriculum of semester-II is designed to train the students in the field of E-commerce and interactive web development.

CURRICULUM SALIENT:

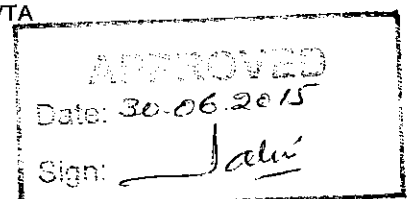
Name of Course: Diploma in Information Technology
Entry Level: Matric or equivalent
Duration: One Year
The course consist of two semesters with 20 weeks of teaching delivery duration each
Total Training Hours: 1600 Hours (800 hours per Semester)
Training Hours per week: 40 Hours/week
7 Hours per day (Friday 05 Hours)
Training Methodology: Practical 80%
Theory 20%
Medium of Training Urdu / English



SKILL COMPETENCY DETAILS:

On successful completion of this course, the trainee should be able to:

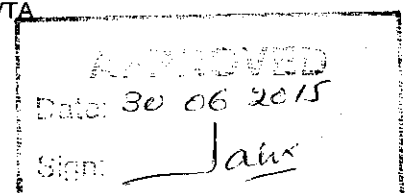
1. Demonstrate different operating systems like DOS, Windows Desktop & Windows Server.
2. Manipulate different business applications (MS-Word 2010, MS-Excel 2010 & MS-Power Point 2010).
3. Apply business communication & report writing skills.
4. Develop and manage database management system.
5. Prepare and analyze E-Commerce Projects.
6. Design, develop and manage interactive websites.
7. Predict financial accounting related issues in E-Commerce/Desktop applications and integrate them in different projects.



KNOWLEDGE PROFICIENCY DETAILS:

On successful completion of this course, the trainee should be able to understand:

1. Define EDP concept
2. Recognize and describe different operating systems (DOS, Windows Desktop & Windows Server).
3. Describe Internet, Word processing, Spread Sheet and Multimedia presentation.
4. Identify business communication issues inside/outside the organization.
5. State database Concepts and requirements with MS-Access.
6. Describe programming logic using flowchart and developing front-end using VB.Net
7. Identify payment processing solutions / merchant Accounts in E-Commerce.
8. Define system analysis and design.
9. Know web designing and development.
10. Recognize web programming with HTML and Java Script.
11. Recall Interactive Web Programming.
12. Know to host and upgrade the Websites.

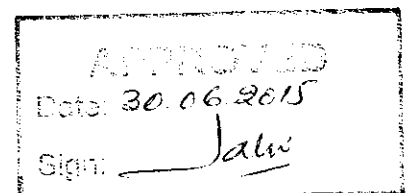


CURRICULUM DELIVERY STRUCTURE**1st SEMESTER**

WEEK	Curriculum Delivery	Make up Session	Revision	Co-Curricular Activities	Final Test	Total
	1-20	21-22	23-24	25	26	26
	20	2	2	1	1	

2nd SEMESTER

WEEK	Curriculum Delivery	Make up Session	Revision	Co-Curricular Activities	Final Test	Total
	1-20	21-22	23-24	25	26	26
	20	2	2	1	1	



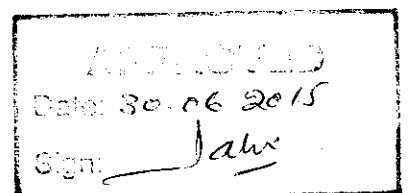
SCHEME OF STUDIES
Diploma in Information Technology
(01 Year)

SEMESTER – 01

Sr. No	Main Topics	Theory Hrs.	Practical Hrs.	Total Hrs.
1	Introduction to Computer & Operating System (DOS, Windows Desktop & Server)	20	120	140
2	Business Application: MS-Word 2010	16	84	100
3	Business Application: MS-Excel 2010	14	86	100
4	Business Application: MS-Power Point 2010	10	60	70
5	Business Application: Internet	-	10	10
6	Database Management using MS-Access 2010	20	80	100
7	Programming Fundamentals, Flow Charts and Programming with VB. Net.	40	180	220
5	Functional English-I	20	20	40
6	Work Ethics-I	20	-	20
		160	540	700

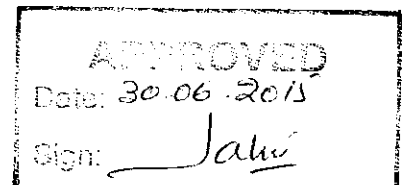
SEMESTER – 02

Sr. No	Main Topics	Theory Hrs.	Practical Hrs.	Total Hrs.
1	Graphics Design & Animation	20	180	200
2	System Analysis & Design	20	20	40
3	Introduction to Computer Networking	20	120	140
4	Web Development.	40	240	280
5	Project	-	60	60
6	Functional English-II	20	20	40
7	Work Ethics-II	20	-	20
		140	620	760

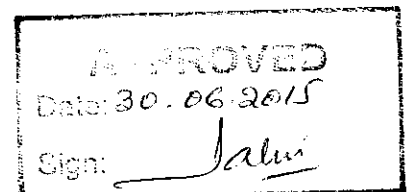


DETAIL OF COURSE CONTENTS**Diploma in Information Technology
(01 –Year Course)****Semester-I**

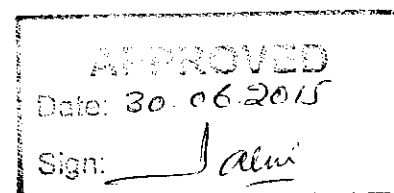
Sr. No.	Detail of Topic	Theory Hours	Practical Hours	Total Hrs.
1.	Introduction to Computer & Operating Systems (DOS, Windows Desktop & Windows Server)	20	120	140
1.1	<u>INTRODUCTION TO DATA PROCESSING & COMPUTER</u>	1		
	1.1.1. History of Computer			
	1.1.2. Definition of Computer			
	1.1.3. Importance and Capabilities of Computers			
	1.1.4. Data and its Types			
	1.1.5. Difference Between Data and Information			
	1.1.6. Data Processing Cycle			
1.2	<u>TYPES OF COMPUTERS</u>	1		
	1.2.1. Digital Computer			
	1.2.2. Analog Computer			
	1.2.3. Hybrid Computer			
1.3	<u>INTRODUCTION TO EDP SYSTEM</u>	1		
	1.3.1. Elements of an EDP System			
	1.3.2. Hardware			
	1.3.3. Software			
	1.3.4. User Program			
	1.3.5. Procedures			
	1.3.6. Personnel			
1.4	<u>HARDWARE CONFIGURATOIN</u>	1		
	1.4.1. Input/Output Devices			
	1.4.2. Fixed Drives (HDD: IDE, SATA & SCSI)			
	1.4.3. Removable Drives (CD, DVD, Spare Drives)			
1.5	<u>CENTRAL PROCESSING UNIT (CPU)</u>	1		
	1.5.1. Arithmetic & Logic Unit (ALU)			
	1.5.2. Control Unit (CU)			
1.6	<u>TYPES OF COMPUTERS STORAGE</u>	1		
	1.6.1. Bit, Nibble and Byte			
	1.6.2. Memory Unit, Cache Memory, Virtual Memory			
	1.6.3. Storage (Primary and Secondary)			
1.7	<u>INTRODUCTION TO COMPUTER SOFTWARE</u>	1		
	1.7.1. Hierarchy of Language			
	1.7.2. Low Level Language			
	1.7.3. High Level Language			
	1.7.4. Language Translators			



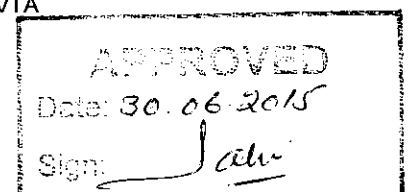
1.7.5.	Definition of Operating System			
1.8	<u>DATA PROCESSING</u>	1		
1.8.1.	Definition of Data Processing			
1.8.2.	Data Processing Cycle			
1.8.3.	Concept of Multi Processing			
1.8.4.	Concept of Multi-Tasking			
1.8.5.	Concept of Time Sharing			
1.9	<u>OPERATING SYSTEM</u>	1	6	
1.9.1	Definition of Operating System			
1.9.2	Types of Operating Systems			
1.10.	<u>DEVICE DRIVERS (Input/Output Devices)</u>	1	2	
1.10.1	Definition of Drivers			
1.10.2	How to install Drivers			
1.11.	<u>PRACTICE FOR INSTALLING DRIVERS</u>		4	
1.12.	<u>DISK OPERATING SYSTEM (DOS)</u>	1	2	
1.12.1	Definition of Operating System			
1.12.2	Characteristics of MS-DOS			
1.12.3	Creating a file in DOS			
1.12.4	Concept of Internal & External DOS Commands			
1.12.5	Concept of Interface			
1.12.6	Command Line Vs. GUI			
1.13.	<u>PRACTICE FOR CREATING AND SAVING DOS FILES</u>		2	
1.14.	<u>PURPOSE, SYNTAX AND USE OF MS-DOS COMMANDS</u>		4	
1.14.1	CLS, TYPE, MD, COPY, DATE, DIR, CD, XCOPY, TIME, EXIT			
1.14.2	RD, MOVE, COPY CON, REN, DEL/ERASE, DELTREE			
1.15.	<u>PRACTICE FOR USING DOS COMMANDS</u>		2	
1.16.	<u>WINDOWS</u>	1		
1.16.1	What is graphical User Interface (GUI)			
1.16.2	Features of Windows Operating System			
1.16.3	History of Windows Operating System			
1.17.	<u>WINDOWS DESKTOP (Icons)</u>	1	6	
1.17.1	Computer			
1.17.2	Explorer			
1.17.3	Recycle Bin			
1.17.4	My Documents			
1.17.5	Network Places			
1.17.6	Taskbar			



1.17.7	Start Button		
1.17.8	Notification Area		
1.17.9	Start Menu		
1.17.10	Programs / Accessories / Applications		
1.17.11	DOS Prompt		
1.17.12	Documents		
1.17.13	Setting		
1.17.14	Search / Find Files & Folders		
1.17.15	Using Help		
1.17.16	Run and Shut Down Options		
1.17.17	Comparison of DOS and Windows Operating Systems		
1.18.	<u>PRACTICE FOLLOWING COMMANDS</u>	1	6
1.18.1	Working with Windows		
1.18.2	Opening an Icon		
1.18.3	Maximizing and Restoring a Window		
1.18.4	Opening a Task bar Button		
1.18.5	Resizing and Moving Windows		
1.18.6	Scrolling and Closing a Windows		
1.19.	<u>PRACTICE FOR USING SAID OPTIONS</u>		2
1.20.	<u>USING MY COMPUTER</u>		2
1.20.1	Browsing through different drives		
1.21.	<u>PRACTICE FOR USING SAID OPTIONS</u>		2
1.22.	<u>PRACTICE FOLLOWING COMMANDS</u>		2
1.22.1	Selecting single or more Files & Folders		
1.22.2	Delete, Rename, Cut/Move, Paste, Copy, Drag & Drop Options		
1.22.3	Short keys / Menu and Tool Bars		
1.22.4	Creating Shortcuts		
1.23.	<u>WINDOWS EXPLORER</u>	1	6
1.23.1	Using Explorer		
1.23.2	Using Windows Explorer and Files/Folder Tree		
1.23.3	Checking Files & Folders Properties		
1.24.	<u>PRACTICE FOR USING ABOVE SAID OPTIONS</u>		2
1.25.	<u>USING CONTROL PANEL</u>		2
1.25.1	Opening Control Panel		
1.25.2	Changing System Date, Time, Regional Settings		
1.25.3	Customizing Mouse and Keyboard		
1.26.	<u>PRACTICE FOR USING ABOVE SAID OPTIONS</u>		2
1.27.	<u>ADVANCED DISPLY SETTINGS</u>	1	6
1.27.1	Desktop Background		



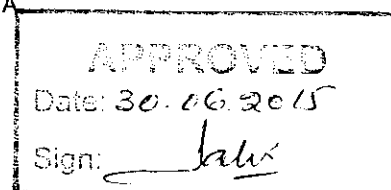
1.27.2	Screen Saver			
1.27.3	Resolution and System Colours			
1.27.4	System and Event Sound Settings			
1.27.5	Add New Hardware/Software			
1.28.	<u>PRACTICE FOR USING ABOVE SAID OPTIONS</u>			2
1.29.	<u>ACCESSORIES</u>	1		8
1.29.1	System tools			
1.29.2	Scandisk Tool			
1.29.3	Maintenance Wizard			
1.29.4	Disk Clean up			
1.29.5	Task Scheduler			
1.29.6	Disk Defragmentation			
1.29.7	System Information			
1.29.8	System Restore			
1.30.	<u>PRACTICE FOR USING ABOVE SAID OPTIONS</u>			2
1.31.	<u>CALCULATOR</u>			1
1.31.1	Opening and Operating			
1.31.2	Copying Calculator to Application			
1.31.3	Adding Office to Shortcuts to Desktop			
1.31.4	LAB: Practice for using above said options			
1.32.	<u>MS-PAINT</u>			6
1.32.1	Drawing Rectangles, Ellipse, Circles, Squares, Paint Tools etc.			
1.32.2	LAB: Practice for using above said options			
1.33.	<u>WORD PAD</u>			4
1.33.1	Word Process of the Documents			
1.33.2	Copy, Cut, Paste Operations			
1.33.3	LAB: Practice for using above said options			
1.34.	<u>PROGRAM / APPLICATIONS</u>			6
1.34.1	How to run application through all programs menu			
1.34.2	Move text from on application to another			
1.34.3	Simultaneously opening two windows on desktop			
1.34.4	LAB: Practice for using above said options			
1.35.	<u>WINDOWS SERVER 2012</u>	1		6
1.35.1	Windows Server			
1.35.2	Introduction to cloud computing			
1.35.3	Basic services of Windows Server			
1.35.4	Installing Server Operating System and Data Center (Introduction)			



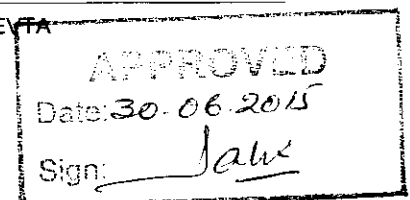
	<p>1.36. INSTALLING SERVER OPERATING SYSTEM & DATA CENTER</p> <p>1.36.1 System Requirements 1.36.2 Installation / Update prerequisites 1.36.3 Installation steps 1.36.4 Rename Server 1.36.5 Domain Joining 1.36.6 Windows Update Settings 1.36.7 Enable Disable Firewall 1.36.8 Enable Remote Desktop Management 1.36.9 Enable/Disable Internet Explorer Enhances Security Configuration 1.36.10 Setup and Configure DNS for Windows Server 2012 1.36.11 LAB: Practice for using above said options</p>	2	25	
2.	BUSINESS APPLICATIONS (Microsoft Word 2010)	16	84	100
	<p>2.1. GETTING STARTED WITH WORD</p> <p>2.1.1 Identify the Elements of the Word 2.1.2 Definition of Computer 2.1.3 Identify the Elements of the Word 2010 Interface 2.1.4 Identify New Documents Navigation Pane and Search 2.1.5 Using Microsoft Word Help 2.1.6 Customizing Word 2010 ribbon 2.1.7 Customize quick Access Toolbar</p>	2	12	
	<p>2.2. WORKING WITH DOCUMENTS</p> <p>2.2.1 Identify the Elements of the Word 2.2.2 Creating a New Document 2.2.3 Create a Documents from a Template 2.2.4 Save and Reuse Template 2.2.5 Opening & Saving Recent Documents 2.2.6 Save Documents in PDF and XPS Format 2.2.7 Delete a Documents 2.2.8 Typing & Selecting Text 2.2.9 Selecting Default Font 2.2.10 Documents Protection 2.2.11 spelling check and Correction 2.2.12 Toolbars 2.2.13 Change Documents Compatibility Mode 2.2.14 Document Sharing 2.2.15 Maintaining Documents Versions</p>	2	12	
	<p>2.3. EDITING DOCUMENTS</p> <p>2.3.1 Undo, Redo 2.3.2 Copy, Cut/Move, Paste</p>	1	4	
	<p>2.4. FINDING y REPLACING TEXT</p> <p>2.4.1 Find & Replace 2.4.2 Go to</p>	1	4	

APPROVED
 Date: 30-06-2015
 Sign: *Jawid*

2.5.	<u>INSERTING</u>	1	12
2.5.1	Cover Page, Blank Page & Page Break		
2.5.2	Header & Footer		
2.5.3	Symbols		
2.5.4	Date & time		
2.5.5	Page Number		
2.5.6	Drop Cap		
2.5.7	Hyper Link, Bookmark & Cross Reference		
2.5.8	Picture, Clip Art & Shape		
2.5.9	Watermark, Smart Art & Word Art		
2.5.10	Charts, Equation & Symbol		
2.5.11	Page Border		
2.5.12	Page Orientation		
2.6.	<u>FORMATTING</u>	2	10
2.6.1	Fonts, Character & Paragraph		
2.6.2	Border & Shading		
2.6.3	Auto text		
2.6.4	Bullets & Numbering		
2.6.5	Tabs and Margins		
2.6.6	Line Spacing		
2.6.7	View Documents and Layout		
2.6.8	Page Width		
2.7.	<u>TABLES</u>	2	10
2.7.1	Insertion & Selection		
2.7.2	Cells, Rows, Columns		
2.7.3	Deleting Table, Rows & Columns		
2.7.4	Merging & Splitting Cells		
2.8.	<u>REPORTS WRITING AND RESEARCH RELATED COMMANDS</u>	2	10
2.8.1	Bibliography		
2.8.2	Headings		
2.8.3	Table of Contents		
2.8.4	Endnote & Footnote		
2.8.5	Caption		
2.8.6	Table of Figures		
2.8.7	References		
2.8.8	Mailing		
2.8.9	Review Documents, Spelling & Grammar Check		
2.8.10	Translate and Language Selection		
2.8.11	Commenting in Documents		
2.9.	<u>PRINTING</u>	3	10
2.9.1	Printer Selection		
2.9.2	Print preview		
2.9.3	Print Documents or Selected Pages		
2.9.4	Printer Preferences and Setting		



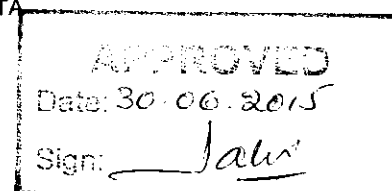
	2.9.5	Print both sides of Paper (Duplex Printing) in Words			
3.		BUSINESS APPLICATIONS (Microsoft EXCEL 2010)	14	86	100
	3.1.	GETTING STARTED WITH EXCEL 2010	2	5	
	3.1.1	An overview of Excel			
	3.1.2	Using Microsoft excel Help			
	3.1.3	Navigate and Select cells in excel			
	3.1.4	Select Data			
	3.1.5	Enter Data			
	3.1.6	Save a Workbook			
			2	5	
	3.2.	MODIFYING A WORKSHEET			
	3.2.1	Move and Copy Data Between cells			
	3.2.2	Fill Cells with Series of Data			
	3.2.3	Edit Cell Data			
	3.2.4	Insert and Delete Cells, Columns, and Rows			
	3.2.5	Find, Replace, and Go To Cell data, Spell Check a Worksheet			
			1	10	
	3.3.	PERFORMING CALCULATIONS			
	3.3.1	Change Font size and Type			
	3.3.2	Add Borders and Color to cells			
	3.3.3	Change Column Width and Row height			
	3.3.4	Merge Cells			
	3.3.5	Apply Number Formats			
	3.3.6	Create a Custom Number Format			
	3.3.7	Align Cell Contents			
	3.3.8	Find and Replace Formats			
	3.3.9	Apply and AutoFormat			
	3.3.10	Apply Styles			
			1	5	
	3.4.	DEVELOPING A BASIC WORKBOOK			
	3.4.1	Format Worksheet Tabs			
	3.4.2	Reposition Worksheets in a Workbook			
	3.4.3	Insert and Delete Worksheets			
	3.4.4	Copy and Paste Worksheets			
	3.4.5	Copy a Workbook			
			1	8	
	3.5.	PRINTING WORKBOOK CONTENTS			
	3.5.1	Set a Print Title			
	3.5.2	Create a Header an a Footer			
	3.5.3	Set Page Margins			
	3.5.4	Change Page Orientation			
	3.5.5	Insert and Remove Page Break			
	3.5.6	Print a Range			
			1	8	
	3.6.	CUSTOMIZING LAYOUT			
	3.6.1	Split a Worksheet			
	3.6.2	Arrange Worksheets			
	3.6.3	Freeze and Unfreeze Rows and Columns			
	3.6.4	Hide and Unhide Worksheet			



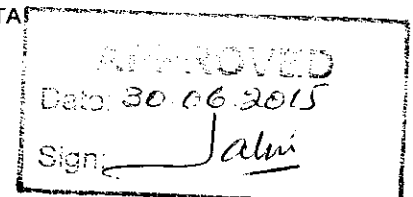
3.7.	<u>CALCULATING DATA WITH ADVANCED FORMULAE</u>	1	8	
3.7.1	Apply Cell and Range Names			
3.7.2	Calculate Data across Worksheets			
3.7.3	Use Special zed Functions			
3.7.4	Analyze Data with Logical and Lookup Functions			
3.8.	<u>ORGANIZING WORKSHEETS AND TABLE DATA</u>	1	8	
3.8.1	Create and Modify Tables			
3.8.2	Format Tables			
3.8.3	Sort or Filter Worksheets or Table Data			
3.8.4	Use Function and calculate Data in a Table or Worksheet			
3.9.	<u>PRESENTING DATA USING CHARTS</u>	1	8	
3.9.1	Create Charts			
3.9.2	Modify Charts			
3.9.3	Format Charts			
3.10.	<u>USING PIVOT TABLES, SLICERS & PIVOT CHARTS</u>	1	7	
3.10.1	Create a PivotTable Report			
3.10.2	Filter Data Using Slicers			
3.10.3	Analyze Data Using Pivot charts			
3.11.	<u>INSERTING GRAPHIC OBJECTS</u>	1	7	
3.11.1	Insert and Modify Pictures and ClipArt			
3.11.2	Draw and Modify Shapes			
3.11.3	Illustrate Workflow Using Smart Art Graphics			
3.11.4	Layer and Group Graphic Objects			
3.12.	<u>CUSTOMIZING WORKBOOK & EXCEL ENVIRONMENT</u>	1	7	
3.12.1	Customize the Excel Environment			
3.12.2	Customize Workbooks			
3.12.3	Manage Themes			
3.12.4	Create and Use Template			
4.	<u>BUSINESS APPLICATIONS (Microsoft Power Point 2010)</u>	10	60	70
4.1.	<u>GETTING STARTED WITH POWER POINT 2010</u>	1	2	
4.1.1	Identify the Elements of the Power Point			
4.1.2	2010 Interface			
4.1.3	View a Presentation			
4.1.4	Save a Presentation			
4.1.5	User Microsoft Power Point Help			
4.2.	<u>CREATING BASIC PRESENTATION</u>	1	4	
4.2.1	Select a Presentation type			
4.2.2	Enter Text			

4.2.3	Edit Text		
4.2.4	Format Text Placeholders		
4.2.5	Add slide to a Presentation		
4.2.6	Arrange Slides		
4.2.7	Work with Themes		
4.3.	<u>FORMATTING TEXT ON SLIDES</u>	1	2
4.3.1	Apply character Styles		
4.3.2	Format the text		
4.4.	<u>ADDING GRAPHICAL OBJECT TO A PRESENTATION</u>	2	4
4.4.1	Insert Images to Presentation		
4.4.2	Add Shapes		
4.4.3	Adding Visual Style to Text in a Presentation		
4.5.	<u>MODIFYING GRAPHICAL OBJECTS IN PRESENTATION</u>	2	4
4.5.1	Edit Graphical Objects on a Slide		
4.5.2	Format Graphical Objects on a Slide		
4.5.3	Group Graphical Objects on a Slide		
4.5.4	Arrange Graphical Objects on a Slide		
4.5.5	Apply an animation Effects to a Graphical Objects		
4.6.	<u>WORKING WITH TABLES</u>	1	4
4.6.1	Insert a Table		
4.6.2	Format Tables		
4.6.3	Import tables from other Microsoft Office Applications		
4.7.	<u>WORKING WITH CHARTS</u>		5
4.7.1	Insert Charts		
4.7.2	Modify Charts		
4.7.3	Import Charts from other Microsoft Office Applications		
4.8.	<u>PREPARING TO DELIVER A PRESENTATION</u>	1	6
4.8.1	Review the Content of a Presentation		
4.8.2	Divide a Presentation into sections		
4.8.3	Add Transitions		
4.8.4	Add Speaker Notes		
4.8.5	Print Presentation		
4.8.6	Deliver a Presentation		
4.9.	<u>CUSTOMIZING POWER POINT ENVIRONMENT</u>		6
4.9.1	Customizing he Power Point Interface		
4.9.2	Set Option for Working with Power Point		
4.10.	<u>CUSTOMIZING A DESIGN TEMPLATE</u>		6
4.10.1	Set up slides master		
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5.2.	<u>BUSINESS APPLICATIONS (E-Commerce)</u> <u>E-COMMERCE</u> 5.2.1 The Internet and Business 5.2.2 E-Commerce and its types 5.2.3 Domain Registration & Hosting 5.2.4 E-Commerce standards and terminologies 5.2.5 On line Payment Processing Solution/Merchant Account 5.2.6 Security issues in E-Commerce		5	



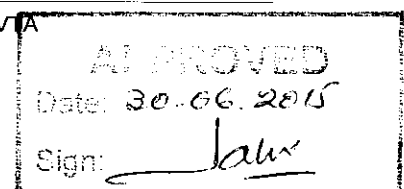
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7.3.2	Symbols			
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7.6.	<u>Decision Structures and Loops</u>	4	14	
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7.7.5	Using a function to perform a calculation			
7.7.6	Subroutines and Functions			
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7.8.4	Using class Inheritance		
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7.9.	<u>Working with VB.NET Tool Box control</u>	3	16
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7.9.3	Menu and Toolbars		
7.9.4	Data		
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7.9.7	Components		
7.9.8	Creating Menus		
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7.9.10	Creating a Status-Bar		
7.9.11	Using ADO.NET		
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7.9.13	Deploying Application		
7.9.14	Introduction to Deployment		
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7.10.2	Three types of Errors		
7.10.3	Using Debugging Mode		
7.10.4	Tracking Variables by using a Watch Window		
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7.10.6	Using the Immediate and Command Windows		
7.11.	<u>Working with Windows Form</u>	3	18
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7.11.4	Configuring Standard Controls		
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7.11.6	Windows Forms Data Binding		
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7.11.8	Localizing a Windows Form		
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7.12.2	Data Source Window		
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7.12.5	Using the Data Control		
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	7.13. Reporting		3	18	
	7.13.1 Design VB.Net Report				
	7.13.2 Using Crystal Report				
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9.	WORK ETHICS		20		
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1.1.	Digital Imaging/Template Designing using Adobe Photoshop CS Technology		5	45	
1.1.1	Discussion on Publishing Media		1		
1.1.2	Bitmap Graphics & Vector Graphics		1	4	
1.1.3	Basic Design Issues		1		
1.1.4	Lines, Shapes, Polygons, Rectangles & Ellipses			4	
1.1.5	Web Color Theory & Color Wheel		1		
1.1.6	Transform & Free Transform			4	
1.1.7	Use of Layers Techniques			4	
1.1.8	Filters/Plug Ins			4	
1.1.9	Use of Different Selection Types			3	
1.1.10	Image Adjustment			4	
1.1.11	Use of different image(.jpg, .gif & .png etc) file formats			5	
1.1.12	Different Zoom Options		1	4	
1.1.13	Use of Third Party Tools			4	
1.1.14	Use of Slices & making of HTML files			5	
1.2.	Digital Illustration using Corel Draw X Series		5	45	
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1.2.2	Polygons, Star, Complex Star, Spiral		1	2	
1.2.3	Outline Tool & Fill Tool		1	2	
1.2.4	Interactive Tools Using Blend, Extrude, Drop Shadow, Contour & Transparency		1	4	
1.2.5	Ruler Adjustment & Ratio Setting		1	1	
1.2.6	Editing Tools			5	
1.2.7	Use of Nodes			5	
1.2.8	Importing & Exporting			5	
1.2.9	Use of Bitmaps in Design			6	
1.2.10	Page Layout			1	
1.2.11	Design Arrangements			6	
1.2.12	Use of Symbols & Dockers			6	
1.3.	2D Animation with Adobe Flash CS Technology		5	45	
1.3.1	Types of Animations		1	2	
1.3.2	Animation Techniques		1	2	
1.3.3	Difference between different types of Animations		1		
1.3.4	Stage/Paste Board Setting		1	2	
1.3.5	Frames & Key frames		1	2	
1.3.6	Layer Masking & Guide Layer			6	

	1.3.7	Types of Symbols (Graphic, Button & Movie Clip)		6	
	1.3.8	Scenes		7	
	1.3.9	Timeline & Timeline Effects		6	
	1.3.10	Introduction to Basic Actions		4	
	1.3.11	Web Publishing		8	
	1.4.	<u>Web Compilation using Adobe Dreamweaver CS Technology</u>	5	45	
	1.4.1	Making of HTML Static Page	1	3	
	1.4.2	Use of Design View & Code View	1	3	
	1.4.3	Defining a Site	1	3	
	1.4.4	Table Layout	1	3	
	1.4.5	Use of Div Function	1	6	
	1.4.6	Use of Buttons & Navigation Bars		6	
	1.4.7	Form Designing & Use of Frames		4	
	1.4.8	Use of Spry Lists with CSS		3	
	1.4.9	Use of Layers Show/Hide behavior		3	
	1.4.10	Hyperlinks & Hot Spots		2	
	1.4.11	Uploading Procedure & Updating Techniques using File Zilla		8	
2.	<u>System Analysis & Design</u>		20	20	40
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	2.1.1	The System concept			
	2.1.2	Elements of a system			
	2.1.3	Characteristics of a system			
	2.1.4	Types of a System			
	2.2.	<u>Information System</u>	1		
	2.2.1	Definition			
	2.2.2	Components of information system			
	2.3.	<u>New System</u>	1		
	2.3.1	Consideration for the new system			
	2.3.2	Evaluation of old system			
	2.3.3	Technique and procedures for the implementation of the new system			
	2.3.4	SDLS (System Development Life Cycle)			
	2.4.	<u>System Analyst</u>	1		
	2.4.1	Importance of System Analyst in SAD (System Analysis & Design)			
	2.4.2	Responsibilities of System Analyst			
	2.5.	<u>Feasibility Study</u>	1		
	2.5.1	Definition and Types of feasibility study			
	2.5.2	Presentation of case study			
	2.5.3	Cost-benefit Analysis			
	2.5.4	Feasibility study report			

2.6.	<u>Fact Finding Technique</u> Fact gathering methods & tools for company project (Interviews, questionnaires, on-site observation, record reviewing, sampling)	3	3	
2.6.1				
2.7.	<u>The Tools of Structured Analysis</u>	2	10	
2.7.1	Design Diagram			
2.7.2	Computer based flow charting			
2.7.3	E_R diagrams,			
2.7.4	Data Flow diagram			
2.7.5	Maintaining a data dictionary			
2.7.6	Decision Tools			
2.7.7	Decision tree			
2.7.8	Decision table and Structured English			
2.8.	<u>The Tools of Object-Oriented Analysis</u>	2	3	
2.8.1	Class Diagram			
2.8.2	Use case diagram			
2.8.3	Sequence Diagram			
2.9.	<u>Input Designing Concept</u>	2	2	
2.9.1	Input Stages			
2.9.2	Input Types			
2.9.3	Input Media			
2.9.4	Input Specification			
2.9.5	Input Screen Designing			
2.9.6	Layout Chart			
2.10.	<u>Output Designing Concept</u>	2	2	
2.10.1	Output Definition			
2.10.2	Output Media			
2.10.3	Output Specification			
2.10.4	Layout Charts			
2.10.5	Specification of Printed output for the Programmer			
2.10.6	Designing (case study)			
2.11.	<u>Testing and Debugging of System</u>	1		
2.11.1	Concepts of Testing and Debugging			
2.12.	<u>Documentation of System</u>	1		
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2.13.	<u>System Information</u>	1		
2.13.1	Preparation of Implementation			
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	3.1.3	Concentrator			
	3.1.4	Connectivity Devices (Repeaters, Hubs Bridges, Switch, Routers and Gateways)			
	3.2.	<u>Networking Resource Access Models</u>	3	20	
	3.2.1	Peer to Peer			
	3.2.2	Client/Server			
	3.2.3	Server based			
	3.3.	<u>Types of Network</u>	3	20	
	3.3.1	LAN			
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	3.3.3	WAN			
	3.4.	<u>Primary Network Components</u>	1	6	
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	3.6.2	Types of Protocols			
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4.	WEB DEVELOPMENT		40	240	280
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	4.1.4	HTML Headings	1	1	
	4.1.5	HTML Paragraph Tag	1	1	
	4.1.6	HTML Hyperlink	1	1	
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	4.1.8	Internal Anchor Tags	1	1	
	4.1.9	HTML Attributes		1	
	4.1.10	Common HTML Attributes		1	
	4.1.11	HTML Formatting Tags		1	
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	4.1.20	HTML Multiple Level Lists		2	
	4.1.21	HTML Div and Span Tag		2	
	4.1.22	HTML Div Element		2	
	4.1.23	HTML Span Element		2	
	4.1.24	HTML Forms		2	
	4.1.25	Many HTML Form Inputs		2	
	4.1.26	Bottom of Form		2	
	4.1.27	Text Field		2	
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