GOVERNMENT OF THE PUNJAB

TECHNICAL EDUCATION & VOCATIONAL TRAINING AUTHORITY

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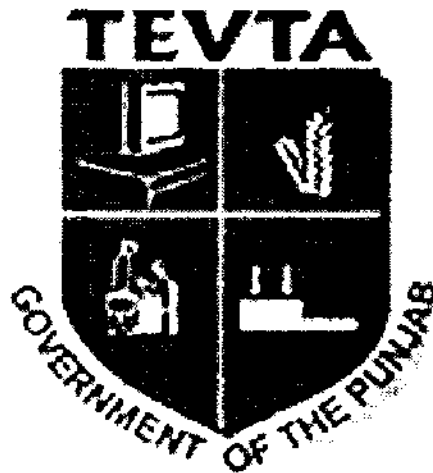
CURRICULUM FOR

COMPUTER APPLICATIONS

(6 – Months Course)
Revised April 2016

APPROVED
Date: 7- 4 - 16
Sign:

CURRICULUM SECTION
ACADEMICS DEPARTMENT
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TRAINING OBJECTIVES

Technological development has changed the whole scenario of our everyday life. The rapid increase of development in computer has a very significant role in our present life. Computer's field is very vast and being used in every field of daily life. Without computers, one cannot think of proper working in life.

This curriculum is developed keeping in view the requirement of the job market, major focus on practical alongwith necessarily required theoretical knowledge and a touch of work ethics.

This curriculum covers the major topics of:

- Components of the computer and their working.

- Common Operating Systems.

- Typing on computer keyboard (40 W.P.M)

- English and Urdu Word-processing.

- Manipulate Spreadsheets.

- Computer Presentation& Develop and run Computer Presentation.

- Database Management.

- Use of Internet and Electronic mail.

CURRICULUM SALIENTS

Name of Course	Computer Applications
Entry Level	Matric
Duration of course	6-Months
Total Training Hours	800 Contact Hours
Training Methodology	Practical 90%
	Theory 10%
Medium of Instruction	Urdu / English

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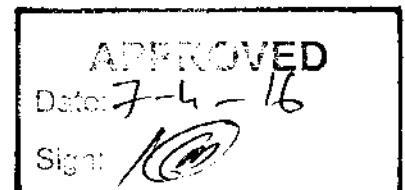
SKILL COMPETENCY DETAILS

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

1.   Switch on & off the computer as per procedures.

2.   Operate the computer and run Software Package.

3.   Work with Disk Operating System. (DOS)/ Windows Environment.

4.   Have acquaintance with window 10 Operating System.

5.   Type on the computer at a speed of 30-40 words per minute.

6.   Type, format and print documents using Microsoft Word (English).

7.   Type, format and print documents using InPage (Urdu Word Processing).

8.   Enter, format, manipulate and print data in MS Excel.

9.   Make and run presentations using MS-Power Point. Learn to display multimedia presentations.

10.   Work with Date Base using Microsoft Access.

11.   Communicate through Internet.

12.   Send and receive messages through E-mail.
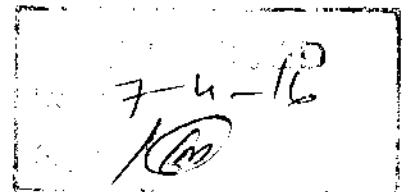
KNOWLEDGE PROFICIENCY DETAILS

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

1.   Explain the computer and general working of CPU, RAM, ROM, Input, Output and Storage Units.

2.   Explain DOS and Windows commands, Windows Objects and their use.

3.   Describe various techniques to improve computer typing.

4.   Recognize usage of Microsoft office applications including their advance features.

5.   Explain the structure of Word Processing (English), learn data editing, formatting, printing and make use of advance features of MS word.

6.   Explain the structure of Word Processing (Urdu), learn data editing, formatting & printing.

7.   Explain the structure of a Spreadsheet; learn worksheet data entry and manipulation techniques.

8.   Explain the functions of presentation software. Learn MS Power Point for developing and executing a presentation.

9.   Explore the fundamental concepts of Database and Database Management System.

10.   Explain the function of database using MS Access.

11.   Explain internet and its applications to retrieve information.

12.   Explicate electronic mail (e-mail) and its functioning.

13.   Use computer for problem solving.
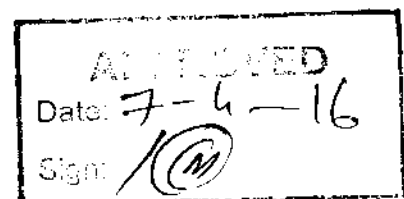
SCHEME OF STUDIES
Computer Applications
(6 - Months Course)

Sr. No.	Main Topics	Theory Hours	Practical Hours	Total Hours
1.	Introduction to Computer	5	2	7
2.	Disk Operating System	3	27	30
3.	Microsoft Windows 10	5	45	50
4.	Touch Typing (Typing Master)	3	82	85
5.	Microsoft Word 2013	12	88	100
6.	Urdu Word Processing (InPage)	2	78	80
7.	MS-Excel 2013 (Spread Sheet)	12	88	100
8.	MS Power Point 2013	7	85	92
9.	Microsoft Access 2013	12	88	100
10.	Internet & Electronic Mail	5	71	76
11.	Functional English	16	64	80
	Total	**82**	**718**	**800**

DETAIL OF COURSE CONTENTS
Computer Applications
(6 – Months Course)

Sr. No.	Detail of Topics	Theory Hours	Practical Hours
1.	**Introduction to Computers** 1.1 Software 1.2 Types of Software 1.3 Hardware 1.4 Types of Hardware	5	2
2.	**Disk Operating System (DOS)** 2.1 Introduction 2.2 Advantages of DOS 2.3 DOS Files 2.4 User Interface of DOS 2.5 DOS Commands 2.6 Internal Commands 2.7 External Commands	3	27
3.	**Microsoft Windows 10** 3.1 Windows 10 Editions 3.2 Features of Windows 10 3.3 Interface of windows 10 3.4 Desktop 3.5 Locking unlocking computers 3.6 Mouse and Keyboard 3.7 Window 3.8 Switching between Windows 3.9 Dialog Boxes 3.10 The Start Button & the Start Menu 3.11 Customizing the Start Menu. 3.12 Customizing the Taskbar 3.13 Customizing the Notification Area 3.14 File Management 3.15 Customizing Control Panel	5	45
4.	**Touch Typing (Typing Master)** 4.1 Overview 4.2 Keyboard and typist's figure position 4.3 Efficient Training Techniques: 4.4 Practice typing random sentences: 4.5 Typing Master Pro -Typing Tutor 4.6 Installing Typing Master Pro V7.10 4.7 Starting Typing Master Pro and Exiting 4.8 Using Typing Master 4.9 Lessons 4.10 Exercises	3	82

	4.11 Review		
	4.12 Typing Test		
5.	**Microsoft Word 2013**	**12**	**88**
	5.1 Introduction to MS Office 2013		
	5.2 Introduction to MS-Word 2013		
	5.3 Starting up MS-Word		
	5.4 MS-Word 2013 Screen/ Interface		
	5.5 Create, Save and Open Documents in MS-Word		
	5.6 Cut, Copy, Paste, Undo and Redo Concepts		
	5.7 Character Formatting		
	5.8 Borders & Shading		
	5.9 Bullets and Numbering		
	5.10 Page Setup		
	5.11 Tables in MS-Word		
	5.12 Spelling and grammar checking		
	5.13 Printing a document		
	5.14 Find & Replace		
	5.15 Header & Footer		
	5.16 Columns		
	5.17 Page break		
	5.18 Options for viewing a document in Word		
	5.19 Inserting Clip Art		
	5.20 Creating WordArt		
	5.21 Mail Merge Wizard		
	5.22 References in MS-word		
	5.23 Table of Contents		
	5.24 MS Word Task Sheet1		
	5.25 MS Word Task Sheet 2		
	5.26 MS Word Task Sheet 3		
6.	**Urdu Word Processing (InPage)**	**2**	**78**
	6.1 InPage Interface		
	6.2 Creating New InPage Document		
	6.3 To open an existing document		
	6.4 Closing a Document		
	6.5 Objects in InPage		
	6.6 Group/Ungroup of Objects		
	6.7 Master Page		
	6.8 Text Formatting		
	6.9 Printing a file		
	6.10 Undo, Cut, Copy and Paste		
	6.11 Clear and Select All		
	6.12 Text Wrap		
	6.13 Sorting Text		
	6.14 Style Sheets		
	6.15 Inserting and Deleting Pages		
	6.16 Inserting Tables		
	6.17 Split or Merge Cells		

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	6.18 Document		
	6.19 Inserting Symbols		
	6.20 Date & Time		
	6.21 Find and Replace		
	6.22 Spelling Checking		
	6.23 Importing Text and Picture		
	6.24 Objects Ordering		
	6.25 Hide/Show Ribbon		
	6.26 Help Menu		
	6.27 Making Headlines		
	6.28 Writing Mathematical Equations		
	6.29 Short Cuts		
7.	**MS Excel 2013 (Spread Sheet)**	12	88
	7.1 Spread Sheet		
	7.2 MS. Excel		
	7.3 Important Features of Excel		
	7.4 Starting Excel		
	7.5 Interface Of Ms Excel Screen		
	7.6 Getting Help		
	7.7 What's New In Ms Excel 2007		
	7.8 Navigating In An Excel Worksheet		
	7.9 Selection In A Work Sheet		
	7.10 Customizing Quick Access Toolbar		
	7.11 The Office Button		
	7.12 Working With The Sheet Tab		
	7.13 Data Editing In Excel		
	7.14 Inserting Cells, Rows And Columns		
	7.15 Deleting Cells, Rows and Columns		
	7.16 Resizing Column/ Row		
	7.17 Hide Redisplay Column, Row, Cell		
	7.18 Formatting Data		
	7.19 Auto Fill		
	7.20 Sorting		
	7.21 Filtering Data		
	7.22 Charts & Graphs		
	7.23 Formula		
	7.24 Cell References		
	7.25 Functions		
	7.26 Formula Auditing		
	7.27 Printing		
	7.28 Practical Exercise		
8.	**MS Power Point 2013**	7	85
	8.1 What Is PowerPoint		
	8.2 Presentations		
	8.3 The PowerPoint Interface		
	8.4 Creating a New Presentation		
	8.5 Entering and Editing Text		
	8.6 Changing the Slide Layout		
	8.7 Saving a Presentation		

	8.8 Power Point Views 8.9 The Normal View 8.10 Slide Sorter View 8.11 Notes Page View 8.12 Slide Show View 8.13 Printing the slides 8.14 Formatting Slides 8.15 Formatting Text 8.16 The Format Painter 8.17 Charts: 8.18 Chart Types 8.19 Tables 8.20 Inserting a table into an existing slide: 8.21 Table Styles 8.22 Themes 8.23 Headers and Footers 8.24 Inserting Video and Audio Clips 8.25 Hyperlinks 8.26 Transition and animation effects 8.27 Slide Transitions 8.28 Animating Text		
9.	**Microsoft Access 2013** 9.1 Data 9.2 What is a database 9.3 Starting Access 2013 9.4 Creating an Access 2013 Database 9.5 Introducing the Ribbon 9.6 The Relational Data Model 9.7 Relational keys 9.8 Creating a Table in Design View 9.9 Data Type 9.10 Viewing a Table in Datasheet View 9.11 Relationships 9.12 Creating Table Relationships 9.13 Form 9.14 Creating a Form 9.15 Querying the Database 9.16 Create a query 9.17 SQL View of Query 9.18 Action Queries 9.19 The Make Table query 9.20 The Append Query 9.21 Update Query 9.22 Delete Query 9.23 Cross Tab Query 9.24 Report 9.25 Create a report 9.26 The Page Header and the Page Footer Sections	12	88

	9.27 Introduction to Data Expressions 9.28 Switchboard 9.29 Projects		
10.	**Internet & Electronic Mail** 10.1 Internet 10.2 Difference between Internet and Intranet 10.3 Terms related to Internet 10.4 Internet Service Provider 10.5 How you connect to the internet: 10.6 Internet Explorer 10.7 Website 10.8 How to Design a web page in HTML 10.9 E-Mail 10.10 How E-mail Works on the Internet 10.11 Creating E-Mail Account on Yahoo 10.12 Checking E-Mail from Your E- Mail Account 10.13 Sending E-Mail 10.14 Create E-Mail account on HOTMAIL	5	71
	Total	66	654

LIST OF PRACTICALS

TYPING

1. Recognize keyboard layout
2. Practice use of figures
3. Practice typing lessons using typing software

MICROSOFT WINDOWS

1. Install windows operating system on a PC
2. Install drivers
3. Install Microsoft Office
4. Customize the desktop
5. Create and manage files and folders
6. Use control panel to add and remove programs

DOS

1. Run command line interface
2. Understand the prompt
3. List files and directories
4. Move in different Drives and Directories
5. Create directory
6. Move and copy files and directories
7. Rename a file/directory
8. Delete a file
9. Remove directory
10. Apply DOS internal commands
11. Apply DOS external commands

MICROSOFT WORD

1. Use a template
2. Create a new document and save
3. Develop a document as well as enter and edit text
4. Insert and delete text and blank lines
5. Use spelling and grammar checking
6. Cut and copy text
7. Change fonts and type sizes
8. Bold and color text
9. Change paragraph alignment
10. Crate and format a table
11. Insert and size pictures
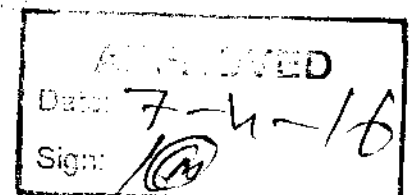12. Set page orientation
13. Print a document

MICROSOFT EXCEL

1. Use templates
2. Create new worksheets
3. Enter and edit data
4. Modify column widths
5. Copy and paste cell contents
6. Create formulas
7. Insert and delete rows and columns
8. Format cells and cell contents
9. Hide and unhide rows and columns
10. Create a basic chart
11. Format values as a date
12. Preview and print a worksheet
13. Display and print formulas
14. Change worksheet orientation and scale content

MICROSOFT POWER POINT

1. Use a template to create a presentation
2. View and edit a presentation
3. Copy and move selected slides
4. Move, copy, and promote items
5. Use a numbered list
6. Change fonts and formatting
7. Insert and modify clip art
8. Insert and modify Smart Art, Clip Art, Picture, table
9. Use slide layouts
10. Apply slide designs
11. Apply slide transitions
12. Apply slide animations
13. Run a slide show
14. Preview and print a presentation

MICROSOFT ACCESS

1. Plan, create and modify a database
2. Create and save a table structure
3. Create, open and close a database
4. Define field names, data types, field properties, and primary key fields
5. Enter and edit data
6. Switch between object views
7. Adjust column widths
8. Use the best fit feature
9. Create a second table
10. Navigate among records
11. Add, copy and move fields
12. Add and delete records
13. Preview and print a table

14. Change page orientation

INTERNET

1. Open a webpage using a web browser
2. Use Search engine to find web links
3. Sign up to create an email ID
4. Sign in to email
5. Open email inbox to check mail
6. Compose and send an email
7. Delete email
8. Attach file with email
9. Download attachment from email

INPAGE

1.   Run INPAGE program
2.   Create a new file
3.   Set keyboard preferences
4.   Type and format a paragraph
5.   Change font and font size of text
6.   Add text box
7.   Insert picture
8.   Insert a new page
9.   Set page layout
10. Print a file

SCHEME OF STUDIES

Functional English

S.No	Main Topics	Theory Hours	Practical Hours	Total Hours
1.	Use of past indefinite tense	2	6	8
2.	Use of 'was' 'were' ' questions and negatives	3	6	8
3.	Explaining a situations/ analysis	2	6	8
4.	Communication in writing	2	6	8
5.	Comprehension	1	6	7
6.	Application/ C.V.	1	6	7
7.	Dialogues	1	9	10
8.	Understand vocabulary	1	3	4
9.	Writing complaints/ answers to complaints	1	9	10
10.	Interviews	2	7	10
	Total	**16**	**64**	**80**

DETAIL OF COURSE CONTENTS

Functional English

S. No	Detail of Topics	Theory Hours	Practical Hours
1	**Use of past indefinite tense** 1.1 Describing past events	2	6
2	**Use of 'was' 'were' ' questions and negatives**	2	6
3	**Explaining a situations/ analysis** 3.1 Making a plan 3.2 Visiting factory area 3.3 Giving justifications	2	6
4	**Communication in writing** 4.1 Asking for list of stationery items 4.2 Submitting report of performance of team of technicians 4.3 Submitting joining report	2	6
5	**Comprehension: practice sets**	2	6
6	**Job application/C.V.**	1	6
7	**Dialogues**	1	9
8	**Understand vocabulary**	1	3
9	**Writing complaints/ answers to complaints**	1	9
10	**Interviews**	2	7
	Total	**16**	**64**

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Sign:

LIST OF PRACTICALS

Functional English

S. No.	Practical
1.	Group discussion
2.	Interviews
3.	Role play

LIST OF LABS

➤   Computer Lab with internet connection

LIST OF TOOLS AND EQUIPMENT

Computer Applications
(6 - Months Course)

Name of Trade	Computer Applications
Duration of Course	6 - Months

Sr. No.	Name of Equipment	Quantity
1.	Desktop computer (Specifications as per notification issued by MIS Section, TEVTA)	26 (1 No. for each Student & 1 No. for teacher)
2.	Printer(Laser)	01 No.
3.	Air Conditioner 1 ½ Ton	02 No.
4.	Scanner	01 No.
5.	Internet Connection (at least 1 MB)	01 No.
6.	UPS 10 KVA	01 No.
7.	Multimedia Projector	01 No.

Note: *The specifications of Tools/Equipment should be as per latest Notification issued by MIS Department of TEVTA*
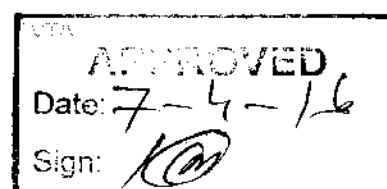
LIST OF CONSUMABLE MATERIAL

S. No.	Item	Quantity
1.	Printing Paper	As per requirement
2.	Printer Toner	As per requirement

Functional English

S. No.	Item	Quantity
1.	Stationery	As per requirement
2.	Board Markers	As per requirement

MINIMUM QUALIFICATION OF TEACHER / INSTRUCTOR

- BCS from HEC recognized university.

Functional English

- M.A (English)

<u>REFERENCE BOOKS</u>

1. Introduction to Computer by *Peter Norton*

2. DOS The Easy Way by *Everett Murdock*

3. Windows 10: Windows 10 for Dummies by Andy Rathbone

4. Microsoft® Office Professional 2013 Step by Step by *Joyce Cox, Steve Lambert and Curtis Frye*

5. InPgae User Manual *Concept Software, India*

6. In page Urdu Complete Tutorial by *Rizwan*

7. Internet and E-mail with Windows 10 by *Studio Visual Steps*
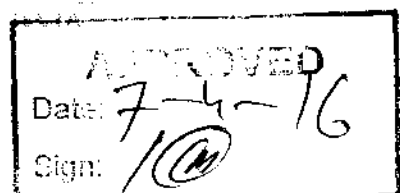

<u>Functional English</u>

1. High School English Grammar By Wren & Martin

2. Oxford English Grammar

EMPLOYABILITY OF PASS-OUTS

The pass outs of this course may find job / employment opportunities in the following areas / sectors:

- IT Industry

- Computer Departments

- Computer composer offices / shops

- Data Entry Section

- Data Processing Section

LIST OF TRADE RELATED JARGON

Windows	DOS	Excel	PowerPoint
Desktop	Command Line	Spread Sheet	Presentation
Screen Saver	Prompt	Columns	Pictures
Start Menu	Directory	Rows	Graphs
Folder	Files	Sort	Tables
Properties	Path	Filters	Animation
Control Panel	Command	Cell	Video
Notification	CLS	Cell Formatting	Audio
Authentication	Del	Formula	Voice
Login	Copy <A> <B>	Graphs	Path
Logout	Parameters	Wrap	Source
User ID	Root Directory	Merge	Shapes
Drives	Sub Directory	Align	Text Box
Microsoft Word			
File	Layout	Format Painter	Screen Shots
Alignment	Design	Paragraph	Equation
Justify	Mailings	Clipboard	WordArt
Tabs	Review	SmartArt	Header/ Footer
Columns	References	Hyperlink	Bookmark

7-4 —16

Curriculum Revision Committee

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