

GOVERNMENT OF THE PUNJAB



TECHNICAL EDUCATION & VOCATIONAL  
TRAINING AUTHORITY



**MATRIC VOCATIONAL**  
(Computer Group)  
2 – Years Course

**CURRICULUM FOR HEARING IMPAIRED STUDENTS**

DEVELOPED BY CURRICULUM SECTION

ACADEMICS WING

**APPROVED**

Date: 18-3-2022

Sign: *[Signature]*

96-H, GULBERG-II, LAHORE

Ph # 042-9263055-9, 9263064

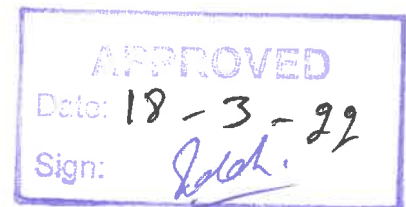
[dg.acad@tevta.gop.pk](mailto:dg.acad@tevta.gop.pk), [director.cur@tevta.gop.pk](mailto:director.cur@tevta.gop.pk)

**TRAINING OBJECTIVES:**

1. 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. The field of Information Technology is vast and used in every field of life. To be successful in life and specifically in professional life its significant to learn computer skills for every person.
2. The aim of this curriculum is to provide basic conceptual & practical training on computer skills in a new stream of Matric.
3. This course will provide the opportunity of vertical mobility academically as well as professionally.
4. The curriculum is designed / developed keeping in view requirements of the modern trends by more focusing on practical.
5. The necessary theoretical knowledge is also imparted along with work ethics in order to produce capable & skillful workforce as per prevailing market demand and self-employed members of the society.
6. Learn the computer applications, computer hardware and computer programming skills.
7. To enhance academic qualification along with skill to produce digital products.

**CURRICULUM SALIENTS**

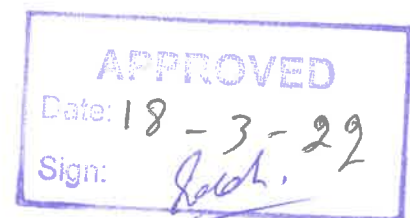
- |                                  |                                    |
|----------------------------------|------------------------------------|
| 1. Name of Course:               | Matric Vocational (Computer Group) |
| 2. Entry level:                  | Middle                             |
| 3. Duration of course:           | 2-Years                            |
| 4. Total training periods/Units: | 2652 Periods                       |
| 5. Training Periods Per Week:    | 40 Periods                         |
| 6. Training Methodology:         |                                    |
| 6.1 Theory                       | 60%                                |
| 6.2 Practical                    | 40%                                |
| 7. Medium of Instructions:       | Urdu/English                       |



**KNOWLEDGE PROFICIENCY DETAILS:**

At the end of the Course the trainees would be able to:

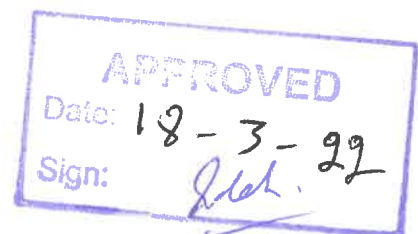
- Define a computer system and identify common parts of PC.
- Describe the brief history of computer and its classifications.
- Differentiate between computer hardware and computer software.
- Describe the uses of computer in different fields of life.
- Define operating system and its functions.
- Identify desktop items and understand basic functions of control panel.
- Understand the keyboard layout for typing.
- Understand the use of fingers for typing.
- Identify different features of Microsoft Word, Excel, PowerPoint and Visio.
- Name and recognize different digital devices.
- Recognize different hardware components inside a system unit.
- Understand the process of software installation and uninstallation.
- Name different programming languages and explain their types.
- Define flow charts.
- Understand World Wide Web, browser, search engine and email.
- Understand folders, files and their types.
- Comprehend the process of data management in files and folders.
- Understand and describe the social media.
- Understand features of In-Page.
- Define a network and its types.
- Differentiate between LAN, MAN & WAN.
- Differentiate between Client and Server.
- Name peripheral devices.
- Differentiate between input and output devices.
- Understand the concept of basic trouble shooting.
- Define programming editors / compiler.
- Understand the structure & syntax of a program in Python.



**SKILL PROFICIENCY DETAILS:**

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

- Turn ON / OFF a computer system.
- Use operating system to run installed programs.
- Learn typing using typing software to achieve at least 35 to 40 W.P.M.
- Use operating system to run windows accessories.
- Use control panel to install / uninstall application programs.
- Prepare documents using Microsoft Word Processing.
- Prepare spreadsheets using Microsoft Excel.
- Prepare presentations using Microsoft PowerPoint.
- Draw Flow Charts using Microsoft Visio.
- Open webpages using web browsers.
- Search online links/resources using search engine.
- Communicate online via email.
- Learn using social media for sharing information.
- Create, name, rename, delete, copy/paste, move files/folders.
- Write essays, letters, stories and applications in Urdu using In-Page.
- Assemble / de-assemble different parts of computer hardware.
- Write basic programs using Python language.



**SCHEME OF STUDIES****MATRIC VOCATIONAL  
(COMPUTER GROUP)****1<sup>st</sup> Year (9<sup>th</sup> Class)**

Sr. No.	Detail of Topics	Theory Hours	Practical Hours	Total Hours
01	Islamiyat-I	50	0	50
02	Pakistan Studies-I	50	0	50
03	Urdu-I	204	0	204
04	English-I	204	0	204
05	Mathematics-I	204	0	204
06	Computer Applications-I	34	204	238
07	Computer Hardware & Networks-I	34	102	136
08	Computer Programming-I	34	204	238
<b>Total</b>		<b>816</b>	<b>510</b>	<b>1326</b>

**2<sup>nd</sup> Year (10<sup>th</sup> Class)**

Sr. No.	Detail of Topics	Theory Hours	Practical Hours	Total Hours
01	Islamiyat-II	50	0	50
02	Pakistan Studies-II	50	0	50
03	Urdu-II	204	0	204
04	English-II	204	0	204
05	Mathematics-II	204	0	204
06	Computer Applications-II	34	204	238
07	Computer Hardware & Networks-II	34	102	136
08	Computer Programming-II	34	204	238
<b>Total</b>		<b>816</b>	<b>510</b>	<b>1326</b>

**APPROVED**  
 Date: 18-3-22  
 Sign: *[Signature]*

**DETAIL OF COURSE CONTENTS****MATRIC VICATIONAL  
(Computer Group)  
(02-YEARS)****9<sup>th</sup> CLASS****1. Islamiyat-I**

Sr. No	Detail of Topics	Theory Periods	Practical Periods
1.	As Per General Education (for sp. Edu.)	50	-
<b>Total</b>		<b>50</b>	<b>-</b>

**2. Pakistan Studies-I**

Sr. No	Detail of Topics	Theory Periods	Practical Periods
1.	As Per General Education (for sp. Edu.)	50	-
<b>Total</b>		<b>50</b>	<b>-</b>

**3. Urdu-I**

Sr. No	Detail of Topics	Theory Periods	Practical Periods
1.	As Per General Education (for sp. Edu.)	204	-
<b>Total</b>		<b>204</b>	<b>-</b>

**4. English-I**


Sr. No	Detail of Topics	Theory Periods	Practical Periods
1.	As Per General Education (for sp. Edu.)	204	-
<b>Total</b>		<b>204</b>	<b>-</b>

**5. Mathematics-I**

Sr. No	Detail of Topics	Theory Periods	Practical Periods
1.	As Per General Education (for sp. Edu.)	204	-
<b>Total</b>		<b>204</b>	<b>-</b>

**APPROVED**

Date: 18-3-22

Sign: 

**6. COMPUTER APPLICATIONS-I**

Sr. No.	Detail of Topics	Theory Hours	Practical Hours
01	<b>Computer Fundamentals</b>	24	0
	1.1 Understanding a computer System		
	1.2 Identify common parts of computer system		
	1.3 Brief history of computer system		
	1.4 Describe uses of computer systems in different fields		
	1.5 Understand computer hardware		
	1.6 Understand computer software		
	1.7 Classifications of computers		
02	<b>Operating system</b>	10	16
	2.1 Turn ON & OFF a computer		
	2.2 Understand Microsoft Windows Operating system Interface		
	2.3 Identify Desktop Items		
	2.4 Use Start Menu to launch applications		
	2.5 Taskbar		
	2.6 Use windows accessories		
	2.4 Understand Basic functions of Control Panel		
03	<b>Typing software</b>	0	38
	3.1 Understand the keyboard layout		
	3.2 Learn the names of fingers		
	3.3 Learn the rules of using of fingers for typing		
	3.4 Use typing software to learn typing		
	3.5 Practice on typing lessons to achieve 45 WPM speed.		
04	<b>Word processor</b>	0	90
	4.1 Launching Microsoft Word		
	4.2 Understand word 2016 interface		
	4.3 The menu bar and commands		
	4.4 Create a new document		

**APPROVED**  
 Date: 18-3-22  
 Sign: *[Signature]*

	<ul style="list-style-type: none"> <li>4.5 Entering text</li> <li>4.6 Editing text</li> <li>4.7 Undo &amp; Redo</li> <li>4.8 Saving documents</li> <li>4.9 Opening files in word</li> <li>4.10 Copy / paste command</li> <li>4.11 Cut / paste command</li> <li>4.12 Find &amp; replace text</li> <li>4.13 Text Formatting (Font, Font size, Bold, Italic, Underline, Change Case)</li> <li>4.14 Paragraph Formatting (Text alignment, Line spacing, bullets &amp; numbering, using DropCap and Columns command)</li> <li>4.15 Page setup (Page Size, Page Margins, Page Orientation, Printed Water Mark, Page Color, Page Borders)</li> <li>4.16 Inserting picture</li> <li>4.17 Insert Header &amp; Footer</li> <li>4.18 Inserting shapes</li> <li>4.19 Inserting Word Art</li> <li>4.20 Inserting Smart Art</li> <li>4.21 Inserting Tables</li> <li>4.22 Formatting Tables</li> <li>4.23 Printing a document</li> </ul>		
<p><b>05</b></p>	<p><b>Presentation</b></p> <ul style="list-style-type: none"> <li>5.1 Launch Microsoft PowerPoint</li> <li>5.2 Understand PowerPoint Interface</li> <li>5.3 Create a new presentation</li> <li>5.4 Insert New Slide</li> <li>5.5 Inserting objects in slides (text, images, shapes, tables, smart art etc.)</li> <li>5.6 Formatting objects (text, shapes, images, tables etc.)</li> </ul>	<p>0</p>	<p>60</p>

**APPROVED**

Date: 18-3-22

Sign: *[Signature]*



5.7	Apply Slide layouts		
5.8	Apply Slide Designs		
5.9	Apply slide Transitions		
5.10	Apply slide Animations		
5.11	Run slide shows		
<b>Total</b>		<b>34</b>	<b>204</b>

**APPROVED**  
 Date: 18-3-22  
 Sign: *[Signature]*

**7. COMPUTER HARDWARE & NETWORKS-I**

Sr. No.	Detail of Topics	Theory Hours	Practical Hours
<b>01</b>	<b>Digital devices</b> 1.1 What are digital devices? 1.2 What is modem? 1.3 What is router? 1.4 Difference between Hub & Switch? 1.5 What is network card? 1.6 Usage of graphics card	17	0
<b>02</b>	<b>Inside the system unit</b> 2.1 System Unit Vs CPU 2.2 Functions of system unit 2.3 What is mother board? 2.4 What is processor? 2.5 Difference between RAM & ROM? 2.6 What is Hard Disk Drive? 2.7 What is the function of power supply? 2.8 Different types of ports, serial & parallel port?	17	0
<b>03</b>	<b>Assembling and De-assembling</b> 3.1 Assembling & de-assembling the hard-disk 3.2 Assembling & de-assembling the RAM 3.3 Assembling & de-assembling power supply 3.4 Assembling & de-assembling the processor 3.5 Assembling & de-assembling CD/DVD ROM	0	34
<b>04</b>	<b>Software Installation &amp; Un-installation</b> 4.1 Operating system installation (Windows) 4.2 Install & update device drivers 4.3 Install utility software 4.4 Install application software (MS-Office)	0	68
<b>Total</b>		<b>34</b>	<b>102</b>

**APPROVED**  
Date: 18-3-22  
Sign: *[Signature]*

**8. COMPUTER PROGRAMMING-I**

Sr. No.	Detail of Topics	Theory Hours	Practical Hours
01	Introduction to computer Programming	08	0
02	Define programming languages	04	0
03	Types of programming languages	10	0
	Program development lifecycle 3.1 Program definition 3.2 Problem analysis 3.3 Algorithm development 3.4 Coding & Documentation 3.5 Testing & debugging 3.6 Maintenance		
04	Drawing Flow charts	04	54
05	Use Microsoft Visio to create Flow Charts 5.1 Run Microsoft Visio 5.2 Create New file 5.3 Save File 5.4 Open File 5.5 Draw Basic shapes 5.6 Move shapes 5.7 Delete shapes 5.8 Edit Shapes 5.9 Format shapes 5.10 Use lines & arrows to connect shapes 5.11 Draw Flow Chart Shapes 5.12 Edit Flow Chart Shapes 5.13 Connect Flow Chart Shapes 5.14 Draw Flow Charts 5.15 Page Setup 5.16 Print a flow chart drawing	04	100
06	Writing Algorithms	04	50
<b>Total</b>		<b>34</b>	<b>204</b>

**APPROVED**  
 Date: 18-3-22  
 Sign: *[Signature]*

**DETAIL OF COURSE CONTENTS**

**MATRIC VICATIONAL  
(Garment Group)  
(02-YEARS)  
for  
10<sup>th</sup> CLASS**

**1. Islamiyat-II**

Sr. No	Detail of Topics	Theory Periods	Practical Periods
1.	As Per General Education (for sp. Edu.)	50	-
<b>Total</b>		<b>50</b>	<b>-</b>

**2. Pakistan Studies-II**

Sr. No	Detail of Topics	Theory Periods	Practical Periods
1.	As Per General Education (for sp. Edu.)	50	-
<b>Total</b>		<b>50</b>	<b>-</b>

**3. Urdu-II**


Sr. No	Detail of Topics	Theory Periods	Practical Periods
1.	As Per General Education (for sp. Edu.)	204	-
<b>Total</b>		<b>204</b>	<b>-</b>

**4. English-II**

Sr. No	Detail of Topics	Theory Periods	Practical Periods
1.	As Per General Education (for sp. Edu.)	204	-
<b>Total</b>		<b>204</b>	<b>-</b>

**5. Mathematics-II**

Sr. No	Detail of Topics	Theory Periods	Practical Periods
1.	As Per General Education (for sp. Edu.)	204	-
<b>Total</b>		<b>204</b>	<b>-</b>

**APPROVED**  
Date: 18-3-22  
Sign: 

**6. COMPUTER APPLICATIONS-II**

Sr. No.	Detail of Topics	Theory Hours	Practical Hours
01	<b>Internet</b> 1.1 Understanding the internet 1.2 Uses of internet 1.3 Advantage and disadvantages of internet 1.4 Introduction to World Wide Web (WWW) 1.5 Internet service provider (ISP) 1.6 Internet explorer and other web browsers 1.7 Search the web using search engines	24	14
02	<b>Electronic Mail</b> 2.1 Introduction to email 2.2 Create email account 2.3 Understand the email interface 2.4 Use inbox to check an email 2.5 Download an attachment 2.6 Send reply to sender an email 2.7 Forward an email 2.8 Compose a new email 2.9 Attach a file with email 2.10 Delete an email	10	14
03	<b>File &amp; Folder Management</b> 3.1 Create new folder 3.2 Copy Files & Folders from PC to Flash Drive 3.3 Move files from one folder to another 3.4 Rename Files & Folders 3.5 Delete Files & Folders 3.6 Restore Files & Folders 3.7 Understand types of files 3.8 Search Files & Folders	0	20
04	<b>Using social media</b>	0	20

**APPROVED**

Date: 18-3-22

Sign: *Solahi*

	<p>4.1 Types of social media</p> <p>4.2 Create &amp; Manage accounts</p> <p>4.3 Uploading and editing posts</p>		
<b>05</b>	<p><b>Urdu word processing</b></p> <p>5.1 Run In-Page Software</p> <p>5.2 Understanding In-Page Interface</p> <p>5.3 Set Keyboard Preferences</p> <p>5.4 Use Phonetic Keyboard Layout</p> <p>5.5 Create a new file</p> <p>5.6 Type a paragraph</p> <p>5.7 Format Text</p> <p>5.8 Apply Font, Font Size, Bold, Italic</p> <p>5.9 Align Text</p> <p>5.10 Use Hand Tool</p> <p>5.11 Use Selection Tool</p> <p>5.12 Use Text Box</p> <p>5.13 Format Text Box</p> <p>5.14 Insert Shapes</p> <p>5.15 Insert Images</p> <p>5.16 Insert Tables</p> <p>5.17 Toggle Between Languages</p> <p>5.18 Print a file</p> <p>5.19 Import of text and pictures</p>	0	76
<b>06</b>	<p><b>Spread Sheet: Microsoft Excel</b></p> <p>6.1 The Excel Application</p> <p>6.2 Toolbar and formatting</p> <p>6.3 Working with number</p> <p>6.4 Data entry</p> <p>6.5 Formula entry in cells</p> <p>6.6 Formatting the worksheet</p> <p>6.7 Chart types</p> <p>6.8 Sorting datasheet</p> <p>6.9 Using functions in excel</p>	0	60

**APPROVED**

Date: 18-3-22

Sign: *Solih*

	6.10 Managing sheets in MS-excel 6.11 Formatting cells 6.12 Creating and formatting tables		
<b>Total</b>		<b>34</b>	<b>204</b>

**APPROVED**  
 Date: 18-3-22  
 Sign: *[Signature]*

**7. COMPUTER HARDWARE & NETWORKS-II**


Sr. No.	Detail of Topics	Theory Hours	Practical Hours
01	<b>Network and its types</b> 1.1 What is network? 1.2 Difference between LAN, MAN & WAN? 1.3 Applications of different networks? 1.4 What are different types of network models? 1.5 Difference between client and Server model?	24	0
02	<b>Peripheral devices</b> 2.1 What are peripheral devices 2.2 Describe input devices 2.3 Describe output devices 2.4 Attach/Detach peripheral devices	10	20
03	<b>Software Installation</b> 3.1 Install and Un-Install Utility software 3.2 Install and Un-Install Application software	0	48
04	<b>Basic Trouble shooting</b> 4.1 What is trouble shooting 4.2 How to find the error? 4.3 How to fix the error? 4.4 Trouble shooting with the help of internet.	0	34
<b>Total</b>		<b>34</b>	<b>102</b>

**APPROVED**  
Date: 18-3-22  
Sign: *[Signature]*



**8. COMPUTER PROGRAMING-II**

Sr. No.	Detail of Topics	Theory Hours	Practical Hours
01	Introduction to programming editors	04	
02	Introduction to Python Editor (Compiler)	06	04
03	Use Python Editor (Compiler) to create a program	8	12
04	Structure & syntax of a program in Python	16	12
05	Create Program using Python 5.1 Use Variables to store numbers & strings 5.2 Use PRINT statement 5.3 Use INPUT Statement 5.4 Use Addition Operator to add numbers 5.5 Use Subtraction Operator to subtract numbers 5.6 Use Multiplication Operator to multiply numbers 5.7 Use Division Operator to divide numbers 5.8 Divide two given numbers 5.9 Use logical Operator to find the greater number 5.10 Use IF statement for conditional test.		176
<b>Total</b>		<b>34</b>	<b>204</b>

**APPROVED**  
Date: 18-3-22  
Sign: 

**LIST OF PRACTICAL****MATRIC VICATIONAL  
(Garment Group)  
(02-YEARS)****9<sup>th</sup> CLASS**

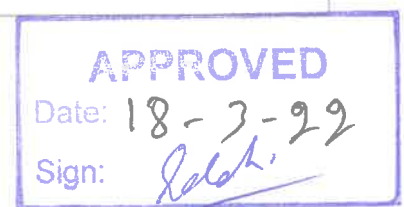
<b>Sr. No</b>	<b>TOPICS</b>
1.	Turn the computer ON & OFF.
2.	Launch CALCULATOR, MS-PAINT, MS-WORD using start menu.
3.	Draw the National Flag of Pakistan using MS-Paint.
4.	RUN Control Panel and change the View of Items.
5.	Practice correct use of fingers for typing using any typing software like Typing Instructor Platinum, Typing Master or Typing Tutor etc.
6.	Open Windows WordPad. Type the sentence "A quick brown fox jumps over the lazy dog." Apply all typing rules and correct use of fingers. Practice typing this sentence 25 times in 5 minutes to achieve typing speed of 45 WPM.
7.	Compose and format a "Letter Head" of your school/institute using Microsoft Word Processing as per given sample.
8.	Compose and format an advertisement for admissions in Matric Vocational (Computer Group) as per given sample using Microsoft Word Processing.
9.	Compose and format the "Result Card" of Matric as per sample of BISE, Lahore using Microsoft Word Processing.
10.	Compose and format your "Resume/CV" as per given sample using Microsoft Word Processing.
11.	Prepare a presentation containing at 5 slides on self-introduction using Microsoft PowerPoint. Insert your snap on first slide. Apply suitable designs.
12.	Prepare a presentation containing 5 to 10 slides regarding "The Pakistan Day (23rd March 1940)" using Microsoft PowerPoint. Insert relevant images. Apply suitable designs & transitions.
13.	Prepare a presentation containing 5 to 10 slides regarding "The Pakistan Independence Day (14th August 1947)" using Microsoft PowerPoint. Insert relevant images. Apply suitable designs, transitions and animations.
14.	Prepare a presentation containing 5 to 10 slides regarding "The Pakistan Defense Day (6th September 1965)" using Microsoft PowerPoint. Insert

**APPROVED**


Date: 18-3-22

Sign: 

	relevant images. Apply suitable designs, transitions and animations.
15.	Prepare a presentation containing 5 to 10 slides regarding “Youm-e-Takbir (28th May 1998)” using Microsoft PowerPoint. Insert relevant images. Apply suitable designs, transitions and animations.
16.	Prepare a presentation containing 5 to 10 slides regarding “The Operation Swift Retort (27th February 2019)” using Microsoft PowerPoint. Insert relevant images. Apply suitable designs, transitions and animations.
17.	Remove & Connect the “Power Cable” of system unit, LCD/LED and printer. Remove & Connect the “Data Cable” of LCD/LED and printer. Remove & connect the USB cable of Mouse & Keyboard.
18.	De-assemble & Assemble components of a System Unit using tool kit.
19.	Install Windows operating system
20.	Install & Update device drivers
21.	Install Microsoft Office Applications
22.	Draw different shapes used in a flow chart, on a paper using a led pencil.
23.	Draw a Flow Chart for “Dialing A Phone Call to Your Friend” on a paper using a led pencil and fill shapes with pencil colors.
24.	Draw a Flow Chart for “Making A Cup of Tea” on a paper using a led pencil. And fill shapes wit pencil colors.
25.	Draw a Flow Chart for “Dialing A Phone Call to Your Friend” using Microsoft Visio. Fill shapes with colors.
26.	Draw a Flow Chart for “Making A Cup of Tea” using Microsoft Visio. Fill shapes with colors.
27.	Draw a Flow Chart for “Preparing a glass of Banana Milk shake” using Microsoft Visio. Fill shapes with colors.
28.	Draw a Flow Chart for “Crossing a Road” using Microsoft Visio. Fill shapes with colors.
29.	Draw a Flow Chart for “Saving a File in MS-Word” using Microsoft Visio. Fill shapes with colors.
30.	Draw a Flow Chart for “Renaming a Folder” using Microsoft Visio. Fill shapes with colors.
31.	Draw a Flow Chart for “Copy Data from Computer to Flash Drive” using Microsoft Visio. Fill shapes with colors.
32.	Draw a Flow Chart for “Adding two numbers on a calculator” using Microsoft Visio. Fill shapes with colors.
33.	Write an algorithm for “Dialing A Phone Call to Your Friend”.
34.	Write an algorithm for “Making a cup of tea”.
35.	Write an algorithm for “Preparing a glass of Banana Milk shake”.



36.	Write an algorithm for “Crossing a Road”.
37.	Write an algorithm for “Adding two numbers on a calculator”.
38.	Write an algorithm for “Copying a file from Computer to Flash Drive”.
39.	Write an algorithm for “installing Microsoft Office”.

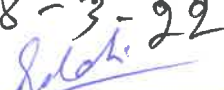
APPROVED  
Date: 18-3-22  
Sign: 

**LIST OF PRACTICAL****MATRIC VICATIONAL  
(Computer Group)  
(02-YEARS)****10<sup>th</sup> CLASS**

Sr. No	TOPICS
1.	<p>Open link following links using Microsoft Edge browser / google chrome / Mozilla Firefox and browse for links available on these webpages in new tab;</p> <ol style="list-style-type: none"> <li>1. <a href="https://pakistan.gov.pk">https://pakistan.gov.pk</a></li> <li>2. <a href="https://www.nadra.gov.pk">https://www.nadra.gov.pk</a></li> <li>3. <a href="http://cpec.gov.pk">http://cpec.gov.pk</a></li> <li>4. <a href="https://pitb.gov.pk">https://pitb.gov.pk</a></li> <li>5. <a href="https://www.pakrail.gov.pk">https://www.pakrail.gov.pk</a></li> <li>6. <a href="https://citizenportal.gov.pk">https://citizenportal.gov.pk</a></li> <li>7. <a href="https://schools.punjab.gov.pk">https://schools.punjab.gov.pk</a></li> <li>8. <a href="https://www.biselahore.com">https://www.biselahore.com</a></li> <li>9. <a href="https://hec.gov.pk/english/pages/home.aspx">https://hec.gov.pk/english/pages/home.aspx</a></li> <li>10. <a href="https://tevta.punjab.gov.pk">https://tevta.punjab.gov.pk</a></li> <li>11. <a href="https://navttc.mne.skillingpakistan.org">https://navttc.mne.skillingpakistan.org</a></li> <li>12. <a href="http://www.lesco.gov.pk">http://www.lesco.gov.pk</a></li> <li>13. <a href="https://iiu.edu.pk/default.htm">https://iiu.edu.pk/default.htm</a></li> <li>14. <a href="https://www.paknavy.gov.pk">https://www.paknavy.gov.pk</a></li> <li>15. <a href="https://www.nts.org.pk/new">https://www.nts.org.pk/new</a></li> <li>16. <a href="https://www.pakistanarmy.gov.pk">https://www.pakistanarmy.gov.pk</a></li> <li>17. <a href="https://www.numl.edu.pk">https://www.numl.edu.pk</a></li> <li>18. <a href="http://militarycollege.edu.pk/new">http://militarycollege.edu.pk/new</a></li> <li>19. <a href="https://paf.gov.pk/#">https://paf.gov.pk/#</a></li> <li>20. <a href="https://ispr.gov.pk">https://ispr.gov.pk</a></li> <li>21. <a href="http://labard.com.pk">http://labard.com.pk</a></li> </ol>
2.	Signup to create an email account using gmail service
3.	Compose a new email. Attach you picture with the email. Add 2 recipients in

**APPROVED**

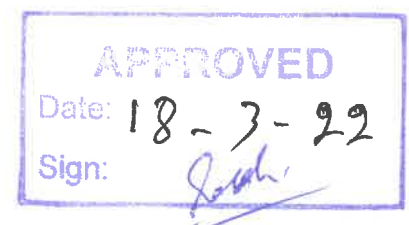
Date: 18-3-22

Sign: 

	"TO:" 1 recipient in "CC:" and put your own email ID in "BCC:". Type "TEST E-MAIL" under "SUBJECT" heading. Type some text in BODY of email. Then send the email.
4.	Check your email. Download attached file and save it to your computer.
5.	Select any email and delete it.
6.	Go to the trash and restore and email.
7.	Go to the trash, select any email and delete it forever.
8.	Create three new folders in Drive D: with the names; PAKISTAN, LAHORE & KARACHI Move the folders LAHORE & KARACHI and Paste in the folder PAKISTAN.
9.	Copy your picture from flash drive into the folder PAKISTAN Now send the folder PAKISTAN to your flash drive.
10.	Search for the folder PAKISTAN using Windows search feature
11.	Create a new ID using "Twitter". Sign in to check the tweets posted by others. Follow any account then unfollow. Like and share any tweet. Post a new tweet.
12.	Use "google Meet" feature of gmail for a video call.
13.	Type the following sentence using Urdu In-Page software; <p style="text-align: center;">"ایک ٹیلے پر واقع مزار خواجہ فرید الدین گنج شکر کے احاطہ صحن میں  ذرا سی ڈالہ باری چاندی کے ڈھیروں کی مثل بڑے غصب کا نظارہ  دیتی ہے"</p>
14.	Type your introduction in Urdu using Urdu In-Page software
15.	Type and format قومی ترانہ in Urdu using Urdu In-Page software
16.	Type and format essay میرا وطن in Urdu using Urdu In-Page software
17.	Type 5 numbers in Column A and add them using SUM Function using Excel Sheet.
18.	Write the table of 2 using Microsoft Excel. Use formula for multiplication.
19.	You purchased 5 stationery items from a shop. Prepare a bill for it using Excel Sheet. Apply formula/function for calculations.
20.	Prepare a result card in Excel Sheet. Use functions for calculating marks. Add sample data of 5 students in the sheet.
21.	Sort the data available in sheet prepared at sr.no.20.
22.	Apply appropriate formatting on Result Card prepared under sr. no. 20.
23.	Identify five input and five output peripheral devices

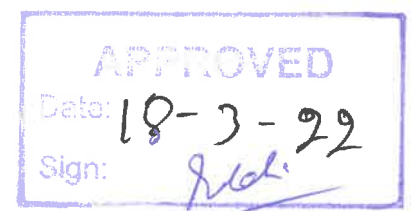
**APPROVED**  
Date: 18-3-22  
Sign: *Saleh*

24.	Attach/Detach an LCD/LED with system unit
25.	Attach/Detach a Multimedia Projector with system unit
26.	Attach/Detach a printer with system unit
27.	Attach/Detach a scanner with system unit
28.	Attach/Detach a Microphone with system unit
29.	Install “Avast Antivirus” utility software on a computer using control panel.
30.	Install “WINRAR” utility software on a computer using control panel.
31.	Install “Microsoft Visio” application software on a computer using control panel.
32.	Find errors/troubles using “Trouble Shooting” feature of Control Panel.
33.	Trouble shoot & Fix errors using “Trouble Shooting” feature of Control Panel.
34.	Trouble shoot using internet
35.	Identify the elements of User Interface of Python Editor
36.	Use Python Editor to PRINT your name on screen.
37.	Create a program using Python. Save your age in variable1 and save your name in variable2.
38.	Use PRINT statement to print your age and name
39.	Use INPUT Statement to get the value of variable from user.
40.	Write a program to add two numbers using Python Language.
41.	Write a program to subtract 2nd number from 1st number using Python.
42.	Write a program to multiply 1st number with 2nd number using Python.
43.	Write a program to divide 1st number with 2nd number using Python.
44.	Write a program to find the greater number out of given two numbers using Python.
45.	Write a program. Use IF statement to find the greater number and print on screen using Python.



**LIST OF LABS**

1. One computer lab with adequate facilities/finishing/renovated as suitable for the equipment.





**LIST OF TOOLS / EQUIPMENT / MACHINERY / FURNITURE ETC**

(For A Class of 25 Students)

<b>Name of Trade</b>	<b>Matric Vocational (Computer Group)</b>
Duration of Course	02-YEARS

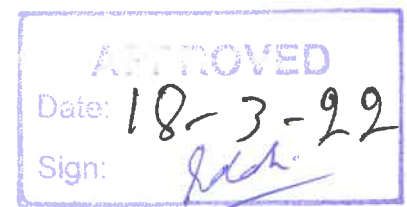
**The specifications of Tools/Equipment should be as per latest Notification issued by MIS Department of TEVTA (Please visit TEVTA website to download the latest Notification)**

<b>SIZE OF LAB</b>
Size of Lab is measured as the No. of students x 15 sq.ft. x 1.5 (e.g for a class of 20 students the area will be calculated as: 20 x 15 x 1.5 = 450 sq.ft.) NOTE: 15 sq.ft is standard area per student whereas rest of the space is preferred for Almirah, teaching Aids, File Record etc.

Sr. No.	Equipment / Tool	Quantity
<b>Computer Hardware</b>		
1.	Desktop/Client Computer	26 Nos. (25 for Students 01 for Instructor)
2.	Wireless Access Point/Router	One
3.	Scanner Legal size	One
4.	Laser Printer (Black & White Medium Duty)	One
5.	Power Failure Alternative (UPS / Power generator / Solar Panel)	For all computer
<b>Computer Software to be installed on each system</b>		
6.	1. Operating System (MS Windows 10 or later) 2. Microsoft Office (Latest Version) 3. Microsoft Visio (Latest Version) 4. Drivers for peripheral devices 5. Typing Software for English typing practice 6. Urdu In-Page (Latest Version) 7. Social Media App (Skype or Zoom or Meet etc.) 8. Python Language Editor/Compiler	One setup for Each computer
<b>Other Tools &amp; Equipment</b>		
7.	Smart LED HD 54" or Higher <b>OR</b> Multimedia Projector (Priority wise)	One
8.	External Hard Disk Drive (2 TB)	02 No.

**APPROVED**  
Date: 18-3-22  
Sign: *[Signature]*

9.	Webcam (Standard Quality/USB supported)	06 No.
10.	Mouse Pads	26 Nos.
11.	Internet Connection Min 16 Mbps (Dedicated for LAB only)	One each
12.	Toolkit (for assembling & de-assembling computer systems)	06 No.
<b>List of Furniture/Fixture</b>		
13.	Computer Table (Standard Quality)	26 Nos.
14.	Computer Chairs (standard quality)	26 Nos.
15.	Additional Tables for Hubs / Switches / Cables / Printer / Scanner etc.	As required
16.	Office Table	01 No.
17.	Office Chair	03 No.
18.	Steel Almirah	02 No.
19.	Soft Board (Pin board / notice board)	02 No.
<b>LAB ENVIRONMENT</b>		
20.	Split Air Conditioning Unit 2 Tons	04 No.
21.	Aluminum Framed Glass Doors with self-door closure mechanism	As required
22.	Aluminum Framed glass Windows	As required
23.	Laboratory must be Adequate for Computer Usage, Air Conditioned and Dust Proof Complete Wiring and Electrical Fittings	As required

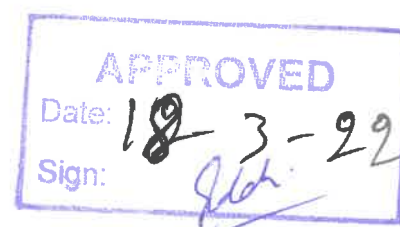


**LIST OF CONSUMABLE ITEMS**

(For A Class of 25 Students)

<b>Name of Trade</b>	<b>Matric Vocational (Computer Group)</b>
<b>Duration of Course</b>	<b>02-YEARS</b>

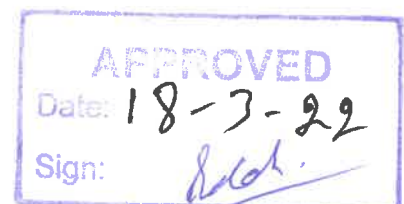
<b>Sr. No.</b>	<b>Name of Item</b>	<b>Quantity</b>
1.	Printer Paper Ream A4 Size	30 No.
2.	Printer Toner Cartridge (Black & White)	12 No.
3.	Flash Drive 64 GB (Standard Quality)	04 No.
4.	Whiteboard Marker (Erasable)	50 No.
5.	Whiteboard Eraser	12 No.
6.	Paper Cutter (Standard Quality)	04 No.
7.	Stapler (Standard Quality)	02 No.
8.	Stapler pins box/set (Standard Quality)	12 No.
9.	Punching hole Machine (Standard Quality)	02 No.
10.	Scale (Plastic/12")	04 No.
11.	Gum Stick (Standard Quality)	10 No.
12.	File Covers (Legal Size / Standard Quality)	100 No.
13.	File Flappers (Standard Quality)	25 No.
14.	Ballpoint	30 No.
15.	Led Pencil	12 No.
16.	Sharpener	06 No.
17.	Eraser	06 No.
18.	Thumb Pin Box/Set (Standard Quality)	06 No.



## EMPLOYABILITY OF THE PASS OUTS

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

1. Self-Employment
2. Computer Lab Attendant
3. Computer Lab Assistant
4. IT industry
5. Marketing & advertisement
6. Computer departments
7. Offices



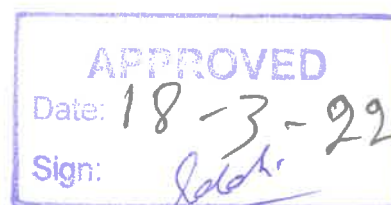
**MINIMUM QUALIFICATION OF TRAINER**

<b>Subject</b>	<b>Minimum Qualification / Experience</b>
Islamiyat	<ul style="list-style-type: none"> <li>▪ B.A. (Relevant Subject) with B.Ed.</li> <li>▪ Preference will be given to Masters in Special Education in Hearing Impairment.</li> <li>▪ Degrees from HEC recognized universities will be acceptable only.</li> </ul>
Pakistan Studies	
Urdu	
English	
Mathematics	
Computer Subjects	<ul style="list-style-type: none"> <li>▪ D.A.E (CIT) with 03-Years Teaching Experience in relevant subject.</li> <li>▪ Preference will be given to the degree holders in BSCS/BSIT/BSSE or equivalent (16-Years Degree).</li> <li>▪ Degrees from HEC recognized universities will be acceptable only.</li> </ul>

**APPROVED**  
Date: 18-3-22  
Sign: *[Signature]*

**REFERENCE BOOKS**

Sr. No.	Book Title	Author / Publisher
1.	Introduction to Computers	Peter Norton
2.	ICT (Information & Communication Technology)	Graham Brown Brian Sargent David Watson.
3.	Python Basics	David Amos, Dan Bader, Joanna, Fletcher
4.	Microsoft Office online Resources	<a href="https://www.microsoft.com/en-in/microsoft-365/free-office-online-for-the-web">https://www.microsoft.com/en-in/microsoft-365/free-office-online-for-the-web</a>
5.	Microsoft Visio 2016 Step By Step	Scott A. Helmers
6.	Computer Applications for DAE 1st Year	TEVTA Academics Wing
7.	Computer Studies for Class 9th	Punjab Text Book Board Lahore
8.	Computer Studies for Class 10th	Punjab Text Book Board Lahore
9.	Computer Studies for Class 11th	Punjab Text Book Board Lahore
10.	Computer Studies for Class 12th	Punjab Text Book Board Lahore
11.	Computer Studies for Class 9th	Alalma Iqbal Open University, Islamabad
12.	Computer Studies for Class 10th	Alalma Iqbal Open University, Islamabad
13.	Computer Studies for Class 11th	Alalma Iqbal Open University, Islamabad
14.	Computer Studies for Class 12th	Alalma Iqbal Open University, Islamabad
15.	Practical Notebook of Computer Science for ICS Part 1 & 2 (IT Series)	Tariq Mahmood, Imran Saeed Abid Masood



**CURRICULUM DEVELOPMENT / EVALUATION COMMITTEE**

**MR. MUHAMMAD ALI BUTT**

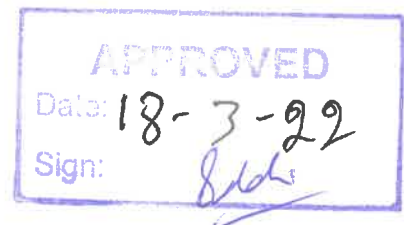
Senior Instructor,  
Government Technical Training Institute Gulberg  
Lahore.

**Convener**

**MR. UMAIR ALI**

Computer Instructor,  
Government VTCDP  
Lahore.

**Member**





**GOVERNMENT OF THE PUNJAB**  
**TECHNICAL EDUCATION & VOCATIONAL TRAINING AUTHORITY**  
**96-GULBERG ROAD, LAHORE.**  
**PABX: 99263055-59, Fax: 99263054**  
**Web site: [www.tevta.gop.pk](http://www.tevta.gop.pk)**



No.TEVTA/MIS/

January 21, 2021

## NOTIFICATION

No.TEVTA/MIS/1-198 Technical Specifications for procurement of following IT Equipment are hereby notified.

1. Entry Level Server
2. Work Station / Desktop Computer
3. Laptop
4. Printers
5. Multimedia Projector
6. Scanners
7. Network Equipment

The Purchase procedure will be followed as per Punjab Procurement Regulatory Authority (PPRA) Rules 2014.

  
(NAEEM ASLAM)  
Chief Technology Officer

A copy is forwarded for information to:

- a) All General Managers and Deputy General Managers (TEVTA)
- b) All Zonal Managers and District Managers (TEVTA)
- c) Manager (Procurement), Manager (Admn.) TEVTA Secretariat
- d) All Committee Members
- e) Manager (MIS) TEVTA Secretariat to place on Website and Circulate through email
- f) SA to the Chairperson, PS to the COO, PA to Advisor Projects
- g) PA to General Manager Academics
- h) Master File

