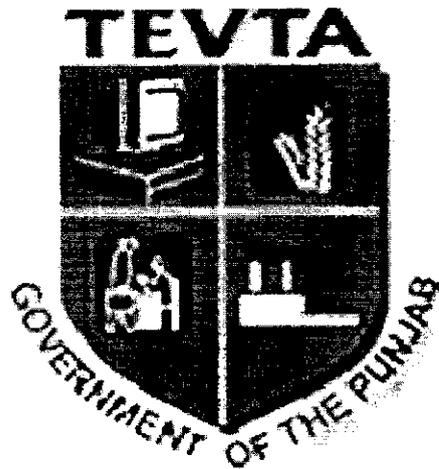


GOVERNMENT OF THE PUNJAB
TECHNICAL EDUCATION & VOCATIONAL
TRAINING AUTHORITY



CURRICULUM FOR
HOUSE CARPENTER

(3 – Month Course)
Revised April 2016

APPROVED

Date: 7-4-16

Sign: 

CURRICULUM SECTION
ACADEMICS DEPARTMENT
96-H, GULBERG-II, LAHORE
Ph # 042-99263064, 99263055-59
gm.acad@tevta.gop.pk, manager.cur@tevta.gop.pk

TRAINING OBJECTIVES

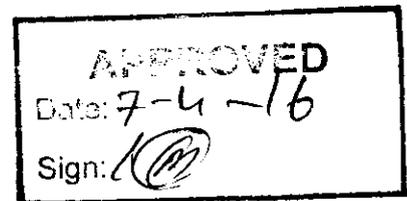
In order to reduce unemployment and poverty in the society, this curriculum is designed to train the illiterate and literate persons who are facing a lot of problem to do the work as Carpenter.

This training program will provide opportunity to those who want to equip themselves with such knowledge and skills which will be helpful for their employment within the period of 3 months instead of working as helper for years.

Further, this Curriculum is developed by considering the need of the area enabling the pass outs to meet the job market to reduce the shortage of Semi Skilled workers in the area.

CURRICULUM SALIENTS

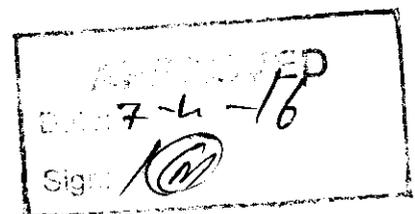
Entry Level	:	Primary
Duration of Course	:	3-Months
Total training hours.	:	400 Contact Hours
Training Methodology	:	Practical 80%
	:	Theory 20%
Medium of instructions	:	Urdu/English



SKILL PROFICIENCY DETAILS

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

1. Use the common wood working hand tools (measuring, sawing, planing, chiseling tools), and their maintenance.
2. Sharpen and set the hand saw.
3. Sharpen the hand planes & chisels.
4. Use and maintain the band saw, circular saw, jointer plane and drill press machine.
5. Identify local timber in common use and be able to distinguish good and defective timber.
6. Measure, cut and place / stack timber to the given size.
7. Use the screw, nails and other hardware.
8. Perform sawing and planing practice.
9. Construct and use of the following wooden joints:
 - End lap joint
 - Mortise and tennon joint / wedge mortise and tennon joint.
 - Mortise and tennon joint with rabbet and groove
 - Dado joint
 - Open pin joint
 - Lapped dovetail joint
10. Estimate and mark a door frame and door.
11. Mark and prepare a job to work on machine.
12. Prepare a simple stool / table.



KNOWLEDGE PROFICIENCY DETAILS

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

1. Follow the safety precautions applicable to wood working hand tools, equipment and machine tools.
2. Explain the common types of timber and their uses.
3. Describe common marking and measuring tools and their uses.
4. Describe the types of hand saws commonly used in wood working and procedure of saw sharpening & setting.
5. Describe wood working clamping devices.
6. Describe common types of screws, nails and hardware used in wood working.
7. Explain synthetics glues and its uses.
8. Explain common types of hand planes and their sharpening procedure and uses.
9. Explain common types of wood working joints, their preparation and application.
10. Explain common types of wood working machines.
11. Describe the estimation of wooden door and door frame.
12. Describe the estimation of wooden table / stool.

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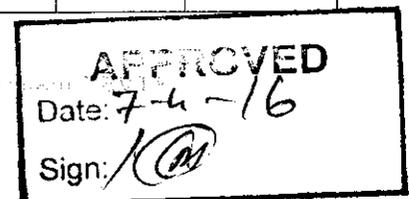
SCHEME OF STUDIES**House Carpenter
(3-Month Course)**

S. No	Main Topics	Theory Hours	Practical Hours	Total Hours
1.	Safety with wood working hand tools	4	8	12
2.	Fixing and holding devices	2	-	2
3.	Marking and layout tools	5	-	5
4.	Hand saws and practice	5	10	15
5.	Hand planes and practice	6	10	16
6.	Chisels and chiseling practice	5	5	10
7.	Wood working hammers	4	8	12
8.	Pincer and screw drivers	4	-	4
9.	Wood working files & filing practice	5	5	10
10.	Common wood and wooden defects	6	-	6
11.	Hardware used in wood work	5	-	5
12.	Drills and drilling practice	5	5	10
13.	Wood working machines and their practice (Band Saw, Circular Saw, Jointer Plane, Drill press M/L)	12	26	38
14.	Sawing practice	-	15	15
15.	Planing practice	-	15	15
16.	Common wooden joints (End lap joint, Mortise & Tenon joint, Mortise & Tenon joint with groove & rabbet, Dado joint, Laped Dove Tail joint.)	-	85	85
17.	Preparing door	-	40	40
18.	Preparing Table and Kitchen Cabinet	-	40	40
19.	I.T Fundamentals	4	16	20
20.	Functional English	15	25	40
Total		87	313	400

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DETAIL OF COURSE CONTENTS**House Carpenter
(3-Month Course)**

S.No	Detail Of Topics	Theory Hours	Practical Hours
1.	Safety with wood working hand tools 1.1. Introduction to safety precaution for wood working tools & equipments 1.2. Fire Fighting exercise	4	8
2.	Fixing & holding devices 2.1. Introduction to 2.2. Work bench 2.3. Steel bar clamp 2.4. C-clamp	2	-
3.	Marking and laying out tools 3.1. Introduction and use of: 3.1.1. Steel rule 3.1.2. Steel tape 3.1.3. Try square 3.1.4. Sliding T-Bevel 3.1.5. Marking gauge 3.1.6. Mortise gauge 3.1.7. Spirit level	5	-
4.	Hand Saws and practice 4.1. Introduction & uses of : 4.1.1. Rip saw 4.1.2. Cross cut saw 4.1.3. Key hole saw 4.1.4. Coping saw 4.1.5. Sharpening & setting of Saws 4.1.6. Sawing practice	5	- 4 6
5.	Hand Planes and practice 5.1. Introduction and uses of: 5.1.1. Jack plane 5.1.2. Smoothing plane	6	



	5.1.3. Universal plane 5.1.4. Adjustment and sharpening of Planes 5.1.5. Planning practice		4 6
6.	Chisels and Chiseling Practice 6.1. Introduction and uses of: 6.1.1. Socket chisel 6.1.2. Mortise chisel 6.1.3. Sharpening of Chisels and Chiseling practice	5	5
7.	Wood working hammers 7.1. Introduction and uses of: 7.1.1. Claw hammer 7.1.2. Mallet 7.1.3. Cross peen hammer	4	8
8.	Pincer & screw drivers 8.1. Introduction and uses of: 8.1.1. Pincer 8.1.2. Screw drivers 8.1.3. Combination pliers 8.1.4. Side cutter pliers	4	-
9.	Wood working files and filing practice 9.1. Introduction and uses of: 9.1.1. Flat file 9.1.2. Half round file 9.1.3. Triangular file 9.1.4. Rasp file 9.1.5. Filing practice	5	5
10.	Common woods and wooden defects 10.1. Introduction and uses of: 10.1.1. Deodar wood 10.1.2. Kail wood 10.1.3. Partal wood 10.1.4. Sheshum wood 10.1.5. Distinguish between good and	6	-

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	defective timber 10.1.6. Living and dead knots		
11.	Hardware used in wood work 11.1. Introduction and use of: 11.1.1. Nails 11.1.2. Rules for driving nails 11.1.3. Screws 11.1.4. Rules for driving screws 11.1.5. Hinges and their fitting practice 11.1.6. Locks and their fitting practice 11.1.7. Handles and their fitting practice	5	-
12.	Drills and drilling practice 12.1. Introduction and uses of: 12.1.1. Twist bit 12.1.2. Auger bit 12.1.3. Bradawl 12.1.4. Maintenance and sharpening of a drill 12.1.5. Drilling practice	5	5
13.	Wood Working Machines 13.1. Machine and their Practice 13.1.1. Band Saw 13.1.2. Main Parts. 13.1.3. Working Operation. 13.1.4. Straight Sawing. 13.1.5. Straight free hand sawing. 13.1.6. Safety Rules. 13.1.7. Sharpening and setting of band saw blades 13.1.8. Circular saw machine 13.1.9. Main Parts. 13.1.10. Working Operation. 13.1.11. Making rabbet and groove on circular saw machine 13.1.12. Tenon cutting	12	26

	16.3.3. Cutting 16.3.4. Mortising 16.3.5. Tenon 16.3.6. Wedging 16.3.7. Assembly 16.4. Mortise and tenon joint with groove and rabbet 16.4.1. Planing 16.4.2. Marking 16.4.3. Cutting 16.4.4. Mortising 16.4.5. Tenon cutting 16.4.6. Grooving 16.4.7. Rebating 16.4.8. Assembly 16.5. Dado joint 16.5.1. Planing 16.5.2. Marking 16.5.3. Grooving 16.5.4. Assembly 16.6. Lapped dovetail joint 16.6.1. Planing 16.6.2. Marking 16.6.3. Cutting dovetail 16.6.4. Chiseling 16.6.5. Assembly 16.7. Open pin joint 16.7.1. Planing 16.7.2. Marking 16.7.3. Cutting 16.7.4. Drilling 16.7.5. Assembly	-	16
		-	08
		-	10
		-	10
17.	Preparing door 17.1. Preparing door frame 17.1.1. Estimation	-	20

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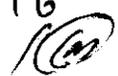
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	17.1.2. Sawing 17.1.3. Planing 17.1.4. Marking 17.1.5. Mortising 17.1.6. Tenon cutting 17.1.7. Rebating 17.1.8. Assembly 17.2. Preparing door/ Flush door 2 ½ x 6" 17.2.1. Estimation 17.2.2. Sawing 17.2.3. Planing 17.2.4. Marking 17.2.5. Mortising 17.2.6. Tenon cutting 17.2.7. Grooving 17.2.8. Doweling 17.2.9. Assembly	-	20
18.	Preparing a small table / small kitchen Cabinet 18.1. Estimation 18.1.1. Sawing 18.1.2. Planing 18.1.3. Marking 18.1.4. Mortising 18.1.5. Tenon cutting 18.1.6. Gluing 18.1.7. Assembly	-	40
Total		68	272

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Date: 7-16-16

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LIST OF PRACTICALSU

1. Sharpening and Setting of Saws
2. Sawing Practice
 - a. Along the Grains Ripping
 - b. Cross the Grains
 - c. Sizing
 - d. Miter Box Cutting
3. Adjustment and Sharping Plaine
4. Planning the jobs
5. Sharpening the Chisel and practice
6. Use of Claw hammer, cross pen hammer and mallet
7. Filing Practice
8. Drilling Practice with anger bit, bradawl and twist bit
9. Sawing practice on band saw, sharpening and setting band saw blades
10. Practice on circular saw and jointer plane
11. Practice on drilling machine
12. Make mortise and Canon Joint
13. Make dado joint and open pin joint
14. Make Dove tail joint
15. Preparing door frame
16. Preparing small table
17. Assembly of joints with Glue

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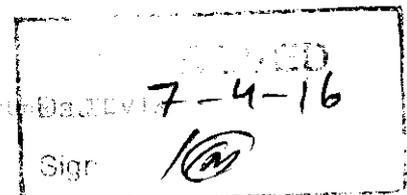
SCHEME OF STUDIES
I.T Fundamentals

S.No	Main Topics	Theory Hours	Practical Hours	Total Hours
1.	Introduction to Computers	1	4	5
2.	Typing - Microsoft Word	2	6	8
3.	Internet & Electronic Mail	1	6	7
Total		04	16	20

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DETAIL OF COURSE CONTENTS
I.T Fundamentals

S. No	Detail of Topics	Theory Hours	Practical Hours
1	<p>Introduction to Computers</p> <p>1.1 What is a computer- Definition, functions and general features?</p> <p>1.2 What is Hardware – 1.2.1 Computer parts and units 1.2.1.1 Input Unit - Keyboard, Mouse etc. 1.2.1.2 Central Processing Unit 1.2.1.3 Output Unit</p> <p>1.3 What is Software – 1.3.1 Electronic Parts of a Pc it is 1.3.1.1 Software and Its types 1.3.1.2 System Software, Application Software</p> <p>1.4 Working with windows Operating System 1.4.1 How does windows desktops work?</p> <p>1.5 What are the Icons, Shortcuts and other graphic, 1.5.1 How to see computer contents on different drives etc</p>	1	4
2	<p>Typing and Word processing (MS Word)</p> <p>2.1 Proper way of typing correct and speedy - getting familiar with the keys</p> <p>2.2 Where to type in computer? How to save a file? How to get it back? Where to find your saved work?</p> <p>2.3 How to get it printed?</p>	2	6
3	<p>Emailing and Internet Surfing</p> <p>3.1 How to go to Internet, what is required for an internet connection etc.</p> <p>3.2 How to use email? How to search on web? Etc</p> <p>3.3 How to make new email account, login and logout an email account etc.?</p>	1	6
Total		04	16



LIST OF PRACTICALS
I.T Fundamentals

S. No.	Name of Practical
1.	Turn On/Off and setting of power supply
2.	Accessing The Desktop
3.	Using of Icons and Shortcuts
4.	Setting / customizing the desktop
5.	Viewing the contents of computer – Directory
6.	Copying, Deleting and Moving Files in a folder
7.	Working with different Applications
8.	Opening MS Word for typing
9.	First lesson of Typing A S D F
10.	Second Lesson of typing J K L ;
11.	Third Lesson U I O P
12.	Fourth Lesson R E W Q
13.	Fifth Lesson N M , .
14.	Sixth Lesson V C X Z
15.	Seventh Lesson All letter using R index Finger
16.	Eighth Lesson All letter using L index Finger
17.	Formatting in MS Word Bold, Italic etc.
18.	Using Internet
19.	Opening Email, making new account
20.	Sending Receiving Emails

SCHEME OF STUDIES
Functional English

S.No	Main Topics	Theory Hours	Practical Hours	Total Hours
1.	Introduction of English Sentence Structure	2	3	5
2.	Use of present indefinite tense	2	3	5
3.	Use of 'is' 'are' 'am' questions and negatives	2	3	5
4.	Ask questions	2	3	5
5.	Express daily routines	2	3	5
6.	Know how to address people	1	2	3
7.	Provide written feedback	1	2	3
8.	Dialogues	1	2	3
9.	Understand vocabulary	1	2	3
10.	Application/C.V.	1	2	3
Total		15	25	40

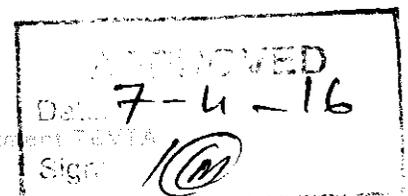
DETAIL OF COURSE CONTENTS
Functional English

S. No	Detail of Topics	Theory Hours	Practical Hours
1	Introduction of English sentence structure	2	3
2	Use of present indefinite tense with exercises	2	3
3	Use of 'is' 'are' 'am' questions and negatives	2	3
4	4.1 Ask questions 4.1.1 At work place 4.1.2 In the market 4.1.3 In classroom	2	3
5	5.1 Express daily routines 5.1.1 Before going to college 5.1.2 Dealing with colleagues 5.1.3 Going to market	2	3
6	6.1 Know how to address people 6.1.1 In Meetings 6.1.2 In class	1	2
7	7.1 Provide written feedback 7.1.1 After visiting the market 7.1.2 On some official task	1	2
8	8.1 Dialogues 8.1.1 With colleague 8.1.2 Teacher/student 8.1.3 Employer/employee 8.1.4 Booking on railway station	1	2
9	Understand vocabulary	1	2
10	Application / C.V.	1	2
Total		15	25

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LIST OF PRACTICALS
Functional English

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

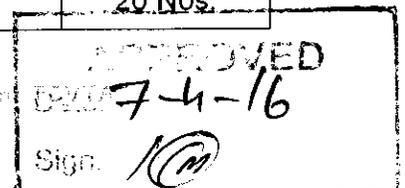


LIST OF MACHINERY / EQUIPMENT / TOOLS

(For a class of 25 students)

Name of Trade	House Carpenter
Duration of Course	3-Months

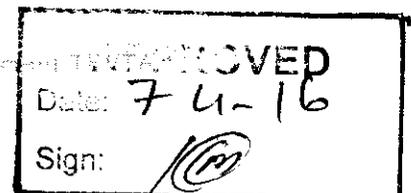
Sr. No.	Equipment / Tools	Quantity
1.	Jack plane 18"	20 Nos.
2.	Smoothing Plane	20 Nos.
3.	Rabbit Plane	20 Nos.
4.	Cross Cut Saw 14"	20 Nos.
5.	Rip Saw 16"	20 Nos.
6.	Try Square 8"	20 Nos.
7.	Screw Driver 8"	20 Nos.
8.	Screw Driver 4"	20 Nos.
9.	Claw Hammer	20 Nos.
10.	Pincer	20 Nos.
11.	Nail Punch	20 Nos.
12.	Saw Set Plier	05 Nos.
13.	Firmer Chisel 12, 20, 25 mm	20 Nos. each
14.	Mortise Chisel 6 mm, 10 mm	20 Nos. each
15.	Divider 8"	10 Nos.
16.	Sliding T-Bevel	10 Nos.
17.	Miter Square	20 Nos.
18.	Mallet	20 Nos.
19.	Rasp cut Half Round File 10"	10 Nos.
20.	Rasp cut Half Round 8"	10 Nos.
21.	Triangular File 6"	20 Nos.
22.	Mortise Gauge	20 Nos.
23.	Marking Gauge	20 Nos.
24.	Oil Stone 8"	20 Nos.



25.	Steel Tap 3 Meter	10 Nos.
26.	Round File 8"	10 Nos.
27.	Drill 1mm to 6 mm (6 pieces set)	20 Nos. each
28.	Bar Clamp 6 feet	10 Nos.
29.	Spoke shave plane	05 Nos.
30.	Oil cane (plastic made)	10 Nos.
31.	Cross Peen Hammer 200g	20 Nos.
32.	Band Saw Machine 18 Inch with different width blades	1 No.
33.	Jointer Planer Machine 15 Inch with set of standard accessories	1 No.
34.	Circular Saw Machine (Table Size: 3' x 3' x 1/2) Blade Size: - 12 Inch Max.	1 No.
35.	Drill Press Machine 4 feet column with table vice	1 No.
36.	Steel rule 12"	20 Nos.
37.	C clamp 18"	10 Nos.
38.	C clamp 24"	02 Nos.
39.	Pedestal grinder with grinder wheel (3/8" th x 1" Ø x 10" Ø)	01 No.
40.	Students steel cabinets (for hand Tools)	20 Nos.
41.	Universal plane with set of blades	02 Nos.
42.	Key hole saw	05 Nos.
43.	Spirit level	05 Nos.
44.	Coping saw	05 Nos.
45.	Combination Set	02 Nos.
46.	Combination Plier	05 Nos.
47.	Portable Electric Jig Saw M/C ½ HP 220 V, with set of saw blades and standard accessories	01 Nos.
48.	Side cutter Plier	10 No.
49.	Auger bits of different sizes 2.5mm, 3mm, 4mm 4.5mm, 5mm, 6mm (Set of 06 Pieces)	03 Nos.

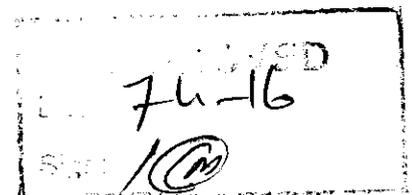
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50.	Miter Box Saw with swivel Base	02 Nos.
51.	Miter box saw with swivel Base (for 45° Miter cutting)	02 Nos.
52.	Wood working vices 10"	20 Nos.
53.	Hand Drill M/L 0.75 H.P with 12mm Drill cluck	02 No.
54.	Ratchet Brace	02 Nos.
55.	Back Saw 14"	10 Nos.
56.	Wooden Adze (Side)	10 Nos.
Furniture		
1.	Instructor Table	01 Nos.
2.	Instructor Chair	02 Nos.
3.	Wooden working bench	10 Nos.
4.	White Board 8" x 4 "	01 Nos.
5.	Steel Almarah of 4 shelves 7" x 4" x 2"	01 Nos.
6.	Wooden Stool	20 Nos.



COMPUTER LAB

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



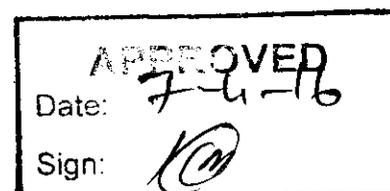
LIST OF CONSUMABLE MATERIAL

Name of Trade	House Carpenter
Duration of Course	3-Months

S.No	Consumable Material	Quantity
1.	Sheshum Wook	50 ft
2.	Kail wood for door & frame	200 ft
3.	Deodaaar wood for wooden joints	50 ft
4.	Glue 5 Kg	6 Nos.
5.	Nails 1", 1.5", 2", 3" (2 Kg each)	8 Kg
6.	Screw ¾", 1", 1½", 2" (2 Packets each)	12 packets
7.	Veneer Board (4" x 8' x ¾")	10 Nos.
8.	Miscellaneous	-
9.	Lubricating oil / grease	10 Ltr.
10.	Kerosene Oil	10 Ltr.
11.	Over all / apron for trainee	25 Nos.
12.	Safety shoes for trainee	25 Nos.
13.	Fire fighting safety equipment (fire extinguishers, safety car plays etc.)	1 Set

Functional English

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



I.T Fundamentals

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

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EMPLOYABILITY OF PASS OUTS

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

1. To work in specific field like kitchen, doors and cabinets making etc.
2. To work in the field of interior decoration like paneling and ceiling

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REFERENCE BOOKS

House Carpenter

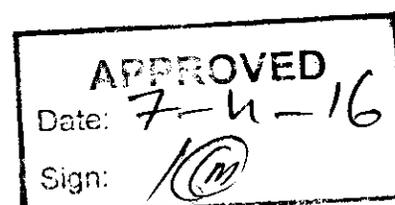
1. Principles Of Wood Technology By J.ULLRICH
2. Wood Workers Manual By ALLBERT JACKSON
3. Technical Drawing And Practical Course Wood Working Trades By DAVID DAY
4. Fun-E-Chobkari By MUHAMMAD SHAREEF ZIA

Functional English

1. High School English Grammar By Wren & Martin
2. Oxford English Grammar

I.T Fundamentals

1. Introduction to Computer by Peter Norton
2. 2007 Microsoft® Office System Step by Step by Joyce Cox, Steve Lambert and Curtis Frye
3. Internet and E-mail with Windows 7 by Studio Visual Steps



MINIMUM QUALIFICATION OF TEACHER / INSTRUCTOR

House Carpenter

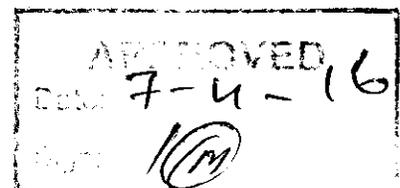
- Instructor with Two Years proficiency Certificate with 6 years related experience in relevant field.
- Carpenter / Shop Assistant Experienced carpenter, even illiterate

Functional English

- M.A. (English)

I.T Fundamentals

- DAE CIT/ BCS from HEC recognized university



LIST OF TRADE RELATED JARGON GENERAL VOCABULARY WORDS

Bradawl	سوا	Magnitude	مقدار
Capacitance	ظرفیت	Making	بنانا
Checking	جانچنا	Measurement	پیمانہ
Components	حصے	Multiplication	ضرب
Conductance	ایسا لیت	Parallel	متوازی
Conductivity	کرنٹ گزارنے کی صلاحیت	Percentage	فی صد
Conductor	موصل	Plier	پلاس
Connecting	جوڑنا	Power	طاقت
Consumer	صارف	Principle	اصول
Current	برقی رو	Protective Device	حفاظتی آلہ
Cutting	کاٹنا	Removing	ختم کرنا
Decimal	اعشاریہ	Resistance	مزاحمت
Diagram	شکل	Resistivity	مزاحمت کی صلاحیت
Energy	توانائی	Reversing	سمت تبدیل کرنا
Equipment	آلات	Scissor	قیچی
Faults	نقص	Screw Driver	پیچ کس
Files	ریتی	Semi-Conductor	نیم موصل
First Aid	ابتدائی طبی امداد	Series	سلسلہ وار
Fixing	لگانا	Soldering	ٹانکا لگانا
Hacksaw	لوہا کاٹنے والی آری	Specific Resistance	مزاحمت مخصوصہ
Hammer	ہتوڑا	Structure	ساخت
Handling	کنٹرول	Tools	اوزار
Identification	شناخت	Tracing	تلاش کرنا
Installation	لگانا	Tri square	گنیا
Insulation	حاجز تہ	Understanding	سمجھنا
Insulation Remover	حاجز تہ اتارنے والا آلہ	Vernier Caliper	ورنیر کیلیپر
Insulator	حاجز	Voltage	ووولٹیج
Magnet	مقناطیس	Work	کام

SPECIFIC VOCABULARY WORDS

Alternating Current	متغیر کرنٹ	Electric Iron	برقی استری
Assembling	جوڑنا	Flexible	لچکدار
Blender	بلینڈر	Heat Proof	حرارتی اثر سے پاک
Blinking	ٹٹمانا	Heating Element	حرارتی ایلیمنٹ
Ceiling Fan	چھت والہ پنکھا	House Hold Appliances	گھریلو آلات
Commutator	کاموٹیٹر	Juicer	جوس بنانے والی مشین
Construction	ساخت	Remedies	علاج
Diagnose	نشانہ دہی کرنا	Revolving System	گھومنے والا سسٹم
Direct Current	یکساں کرنٹ	Sandwich Maker	سینڈ وچ بنانے والی مشین
Dis Assembling	دوبارہ جوڑنا	Washing Machine	کپڑے دھونے والی مشین

7-4-16

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Curriculum Revision Committee

1.	Mr. Muhammad Younas Jamal, Sr. Instructor, GCT, Sahiwal	Convener
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APPROVED
Date: 7-4-16
Sign: 