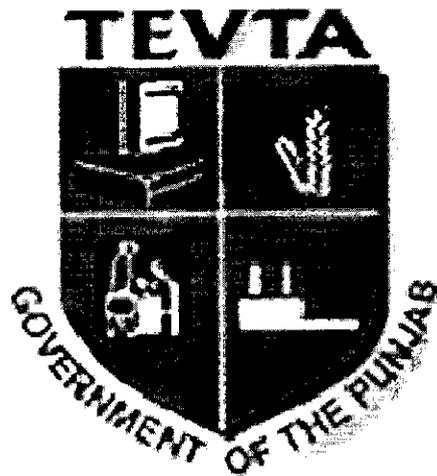
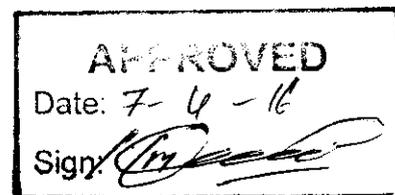


GOVERNMENT OF THE PUNJAB  
TECHNICAL EDUCATION & VOCATIONAL  
TRAINING AUTHORITY



CURRICULUM FOR  
MOTOR CYCLE MECHANIC

(6 – Months Course)  
Revised April 2016



CURRICULUM SECTION  
ACADEMICS DEPARTMENT  
96-H, GULBERG-II, LAHORE  
Ph # 042-99263055-9, 99263064  
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**TRAINING OBJECTIVES: -**

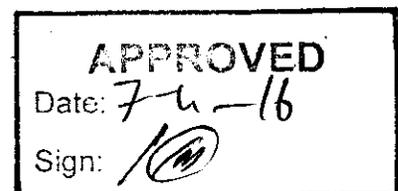
Motorcycle is a popular vehicle in urban as well as rural area throughout the country and plays a vital role in provision of transportation facilities to the community

This curriculum is developed keeping in view the requirement of the market demand by more focusing on practical alongwith necessarily required theoretical knowledge in order to produce semi skill workers who can carry out minor repairing of both 2 and 4 stroke motorcycles

This curriculum covers the most important topics of safety precautions, workshop tools, introduction of engine, special tools, comparison of two & four stroke motor cycle engines, fuel system, lubrication system, cooling system, starting system, suspension system, charging system, tuning, over hauling ,fault finding and their remedies along with Functional English & Information Technology.

**CURRICULUM SALIENTS**

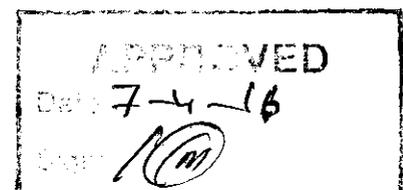
Name of the course	Motor Cycle Mechanic
Entry Level	Middle
Duration of Course	6 – Months 800 Contact Hours
Training Methodology	Practical 80% Theory 20%
Medium of Instruction	Urdu / English



**SKILL PROFICIENCY DETAILS**

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

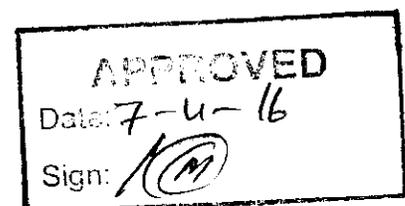
1. Use & handle workshop tools, equipments efficiently and observe safety measures.
2. Remove, dismantle, inspect, refit and reinstall engine parts i.e. came shaft and cylinder block etc.
3. Set the valve timing of 4- stroke motorcycle.
4. Service oil pump of motorcycle (2 stroke & 4 stroke)
5. Set the ignition timing (CB Point adjustment) and check with ignition timing light.
6. Remove, inspect and refit clutch plates and make adjustment.
7. Remove, inspect and refit transmission system of the bike.
8. Remove, inspect and refit brake shoes / disk pads
9. Remove, inspect & refit front & rear shock absorbers.
10. Tune up the motor cycle (2-stroke & 4-stroke).
11. Perform simple service of electrical components as battery and bulb replacement etc.



**KNOWLEDGE PROFICIENCY DETAILS**

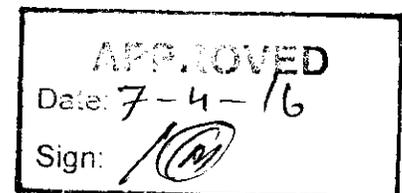
On successful completion of this course, the trainee should be able to:

1. Describe purpose and use of the common hand tools / measuring tools.
2. Describe working and construction of the internal combustion engine.
3. Compare the four stroke and two stroke engines of motor bike / scooter.
4. Explain purpose, construction and operation of the fuel system of motor cycle
5. Describe the Ignition system parts (C.B point type & CDI system).
6. Describe the lubrication System.
7. Describe the cooling system (Air Cooling)
8. Describe purpose, construction and working of clutch, transmission and final drive.
9. Describe mechanical & Hydraulic Brake System.
10. Narrate the suspension System / Shock absorbers.
11. Describe purpose, construction and working of Starting system.
12. Explain fundamentals of Electricity.
13. Explain construction and working of electrical components used in motor cycles.



**SCHEME OF STUDIES**  
**Motor cycle Mechanic**  
**(6 – Month Course)**

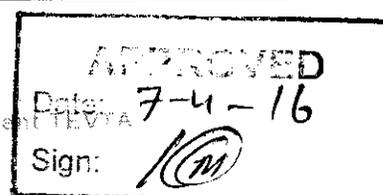
S. No.	Main Topics	Theory Hours	Practical Hours	Total Hours
1	Basics of Motor Cycle Trade	20	154	174
2	Engine and Engine Systems	76	90	166
3	Power Train and Chassis System	32	154	186
4	Electrical System	08	30	38
5	Repair and Maintenance	-	116	116
6	I.T Fundamentals	8	32	40
7	Functional English	16	64	80
<b>TOTAL</b>		<b>160</b>	<b>640</b>	<b>800</b>



**DETAIL OF COURSE CONTENTS**  
**Motor Cycle Mechanic**  
**(6 – Month Course)**

S. No	Detail of Topics	Theory	Practical
<b>1.</b>	<b>Basics of Motor Cycle Trade</b>		
1.1	Auto workshop safety precaution / safety riding	-	10
1.2	Introduction of workshop tools & their uses	4	
	1.2.1 Fitting tools & their uses	-	8
	1.2.2 Measuring tools & measuring exercise	-	10
	1.2.3 Marking tools & their uses	-	6
	1.2.4 Cutting tools & cutting exercise	-	10
	1.2.5 Filing exercise	-	14
	1.2.6 Drilling exercise	-	8
	1.2.7 Threading exercise	-	6
	1.2.8 Extraction exercise	-	4
	1.2.9 Introduction to fasteners, sealants & seals		4
1.3	History of motor cycle (4 stroke and 2 stroke engines)	6	-
1.4	Introduction of internal combustion engine	4	-
1.5	Introduction of workshop equipment / special tools and their uses	6	
	1.5.1 Use of magnet puller	-	6
	1.5.2 Use of timing Gun	-	4
	1.5.3 Use of digital tachometer	-	4
	1.5.4 Use of dial indicator tester	-	4
	1.5.5 Use of multi meter	-	6
	1.5.6 Use of tachometer	-	6
	1.5.7 Use of timing gear removing puller and refitting tools	-	4
	1.5.8 Use of magnet base plate	-	6
	1.5.9 Use of valve compressor etc.	-	4
1.6	Introduction of main motor cycle parts with the help of parts catalogue, consultation of service manuals / data books		
	1.6.1 Catalogue study / data books	-	10
	1.6.2 Body parts removal / refitting		10

	1.6.3 Engine parts & their uses.	-	10
<b>2. Engine and Engine Systems</b>			
<b>2.1</b>	<b>Working of 4 Stroke Motor cycle engine</b>		
	2.1.1 Working of 4-stroke motorcycle engine.	8	
	2.1.2 Working of two stroke engine	8	
<b>2.2</b>	<b>Comparison of 2-Stroke and 4-Stroke engine</b>	12	-
<b>2.3</b>	<b>Fuel system (Purpose, construction and operation)</b>	12	-
<b>2.4</b>	<b>Fuel System</b>		
	2.4.1 Service of fuel filter.	-	4
	2.4.2 Carburetor purpose and types / service	-	4
	2.4.3 Fuel level adjustment in carburetor	-	4
	2.4.4 Setting of air fuel ratio w.r.t speed	-	4
	2.4.4.1 Manually		
	2.4.4.2 With exhaust gas analyzer		
	2.4.5 Air, fuel mixture adjustment	-	2
	2.4.6 Needle adjustment (selection of needle groove)	-	2
	2.4.7 Changing / replacement of needle / jet	-	2
	2.4.8 Throttle fitting	-	2
	2.4.9 Measurement of jet size.	-	4
<b>2.5</b>	<b>2.5.1 Ignition system (Magneto and CDI type)</b>	16	-
	<b>2.5.2 Purpose, construction and operation</b>		
<b>2.6</b>	<b>Ignition System</b>		
	2.6.1 C. B point adjustment	-	4
	2.6.2 Checking of magneto ignition system	-	4
	2.6.3 Testing of coil ignition system parts	-	6
	2.6.4 Study Spark plug and service	-	6
	2.6.5 Checking of C.D.I system	-	6
	2.6.6 Checking of pulser coil resistance and CDI unit	-	6
	2.6.7 Checking of ignition coil	-	2
	2.6.8 Checking of condenser.	-	2
<b>2.7</b>	<b>Lubrication system and Emission control system (Purpose, construction and operation)</b>	12	-



<b>2.8</b>	<b>Lubrication system</b>		
	2.8.1 Service of oil pump	-	4
	2.8.2 Oil changing procedure	-	2
	2.8.3 Checking & cleaning of oil strainer / fitter	-	4
	2.8.4 Oil passages cleaning	-	4
	2.8.5 Introduction of engine oil with grade	-	4
	2.8.6 Checking of oil level	-	2
	2.8.7 Inspection of oil seal/replacement.	-	2
	2.8.8 Inspection of Emission control (Euro-II)system	-	4
<b>2.9</b>	<b>Cooling system &amp; main parts of system</b> (Purpose, construction and operation)	8	-
<b>3. Power Train and Chassis System</b>			
<b>3.1</b>	<b>Transmission &amp; clutch</b> ( Purpose, construction and operation )	8	-
<b>3.2</b>	<b>Working of clutch mechanism</b>		
	3.2.1 Adjustment of clutch free play	-	6
	3.2.2 Changing of clutch plates	-	6
	3.2.3 Checking of pressure plate.	-	6
	3.2.4 Inspection / checking of spring (free length)	-	6
	3.2.5 Service clutch cable / wire	-	4
<b>3.3</b>	<b>Working of Transmission / Final Drive</b>		
	3.3.1 Removing of transmission	-	12
	3.3.2 Inspection of gears/ washers	-	8
	3.3.3 Refitting & reassembling of transmission	-	10
	3.3.4 Replacement of chain and sprockets set	-	10
<b>3.4</b>	<b>Starting system</b> (Purpose, construction and operation)		
	3.4.1 Kick and spindle replacement.	-	16
	3.4.2 Self starter system	-	10
<b>3.5</b>	<b>Brake system</b> (Principal, Purpose, construction and operation )	12	-
<b>3.6</b>	<b>Brake System</b>		
	3.6.1 Checking of brake mechanism	-	4

	3.6.2	Checking of Disc brake	-	4
	3.6.3	Brake shoe replacement	-	6
	3.6.4	Brake adjustment	-	4
	3.6.5	Replacement of rubber pads	-	6
	3.6.6	Replacement of wheel bearing.	-	6
<b>3.7</b>	<b>Suspension System</b> ( Purpose, construction and operation)		12	-
<b>3.8</b>	<b>Suspension System (Front / Rear)</b>		-	
	3.8.1	Inspection of front fork suspension (shock absorber)		10
	3.8.2	Maintenance / service of front shock absorber		10
	3.8.3	Replacement of handle ball & cap.		10
<b>4. Electrical System</b>				
<b>4.1</b>	<b>Battery (Purpose, function and construction)</b>			
	4.1.1	Checking (electrolyte level / gravity)	04	6
	4.1.2	Charging		6
	4.1.3	Preparation of electrolyte.		6
<b>4.2</b>	<b>Charging system (purpose, construction and working)</b>			
	4.2.1	Inspection of charging system	04	6
	4.2.2	Replacing voltage regulator		6
<b>5. Repair and Maintenance</b>				
<b>5.1</b>	<b>Motor Cycle Tuning</b>		-	14
<b>5.2</b>	<b>Top Over Hauling</b>			
	5.2.1	Inspection of valve timing gears/ sprocket and their setting	-	34
<b>5.3</b>	<b>Complete engine overhauling procedure</b>		-	34
	5.3.1	Use of compression gauge		
	5.3.2	Find causes of poor compression pressure		
	5.3.3	Removing engine		
	5.3.4	Dismantle the engine		
	5.3.5	Check / inspect parts by referring service manual		

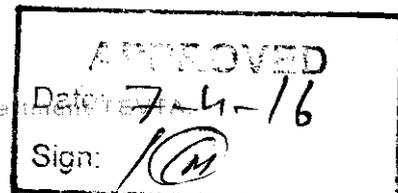
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	5.3.6 Assemble the engine 5.3.7 Refitting		
<b>5.4</b>	<b>Trouble shooting (engine systems and other systems)</b>	-	34
	<b>Total</b>	<b>136</b>	<b>544</b>

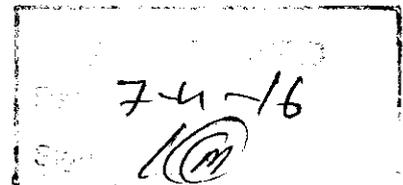
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**LIST OF PRACTICALS**

S.No.	Practical's
1.	Introduction to personal protective equipment (PPE), workshop layout, and fire extinguisher.
2.	Safety Precautions.
3.	Use of fitting tools.
4.	Measuring exercises with steel rule, Vernier caliper and micrometer.
5.	Use of marking and cutting tools.
6.	Cutting exercise.
7.	Filing exercise.
8.	Drilling exercise.
9.	Threading exercise.
10.	Extracting exercise.
11.	Introduction to fasteners.
12.	Use of magnet puller.
13.	Use of timing light.
14.	Use of tachometers.
15.	Use of dial indicator.
16.	Use of multi meter.
17.	Use of pullers.
18.	Use of valve compressor.
19.	Use of service manuals.
20.	Identify motor cycle parts.
21.	Identify engine parts.
22.	Service of fuel filter.
23.	Service of carburetor.
24.	Settings float level.
25.	Setting air fuel mixture.
26.	Replacing accelerator cable.
27.	Replacing C.B point.
28.	Testing ignition coil.

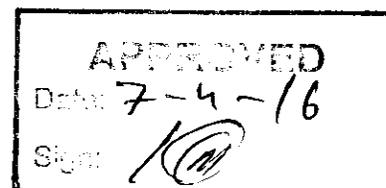


29.	Test CDI system.
30.	Check condenser.
31.	Service oil pump.
32.	Change oil and filter.
33.	Replacing clutch cable.
34.	Adjusting clutch lever free play.
35.	Replacing clutch plates.
36.	Service of transmission.
37.	Service final drive.
38.	Service kick starting system.
39.	Replacing self starter.
40.	Replacing brake shoes front and rear.
41.	Replace disc pads.
42.	Replacing wheel bearing.
43.	Replace rear shock absorbers.
44.	Service front shock absorbers.
45.	Replacing handle bearings.
46.	Service battery.
47.	Replacing voltage regulator.
48.	Motor cycle tune up.
49.	Top over hauling.
50.	General over hauling.



**SCHEME OF STUDIES****I.T. Fundamentals**

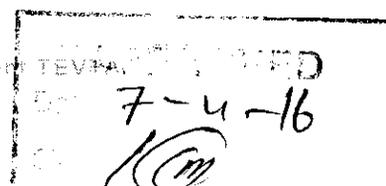
S.No	Main Topics	Theory Hours	Practical Hours	Total Hours
1.	Introduction to Computers	2	6	8
2.	Typing - Microsoft Word	4	14	18
3.	Internet & Electronic Mail	2	12	14
<b>Total</b>		<b>8</b>	<b>32</b>	<b>40</b>



## DETAIL OF COURSE CONTENTS

### I.T Fundamentals

S. No	Detail of Topics	Theory Hours	Practical Hours
<b>1</b>	<b>Introduction to Computers</b>	<b>2</b>	<b>6</b>
	1.1 What is a computer- Definition, functions and general features?		
	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		
	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 and its functions		
	1.4 Working with windows Operating System 1.4.1 How does windows desktops work? 1.4.2 Setting desktop, background and wall papers etc. 1.4.3 Viewing directories – List of files and folders different styles.		
	1.5 What are the Icons, Shortcuts and other graphic, 1.5.1 How to see computer contents on different drives etc.		
<b>2</b>	<b>Typing and Word processing (MS Word)</b>	<b>4</b>	<b>14</b>
	2.1 Proper way of typing correct and speedy - getting familiar with the keys		
	2.2 Where to type in computer? How to save a file? How to get it back? Where to find your saved work?		
	2.3 Formatting in MS Word Bold, Italic, page setup, setting shades and colors.		
	2.4 Working with saved work, opening and moving files.		
	2.5 How to get it printed?		
<b>3</b>	<b>Emailing and Internet Surfing</b>	<b>2</b>	<b>12</b>

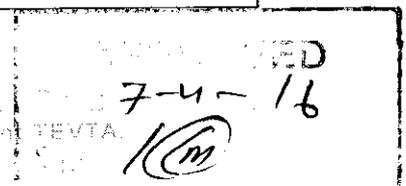


	3.1 How to go to Internet, what is required for an internet connection etc.		
	3.2 How to use email? How to search on web? Etc		
	3.3 How to make new email account, login and logout an email account etc.?		
	3.4 Downloading and uploading attachments etc.		
<b>Total</b>		<b>8</b>	<b>32</b>

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**LIST OF PRACTICALS**  
**I.T Fundamentals**

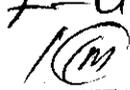
S. No.	Name of Practical
1.	Turn On/Off and setting of power supply
2.	Accessing The Desktop
3.	Using of Icons and Shortcuts
4.	Setting / customizing the desktop
5.	Viewing the contents of computer – Directory
6.	Setting the view of a folder
7.	Copying, Deleting and Moving Files in a folder
8.	Working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



**SCHEME OF STUDIES**

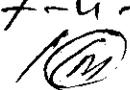
## Functional English

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
<b>Total</b>		<b>16</b>	<b>64</b>	<b>80</b>

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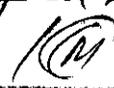
**DETAIL OF COURSE CONTENTS**  
Functional English

S. No	Detail of Topics	Theory Hours	Practical Hours
1	<b>Use of past indefinite tense</b> 1.1 Describing past events	2	6
2	<b>Use of 'was' 'were' ' questions and negatives</b>	2	6
3	<b>Explaining a situations/ analysis</b> 3.1 Making a plan 3.2 Visiting factory area 3.3 Giving justifications	2	6
4	<b>Communication in writing</b> 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	<b>Comprehension: practice sets</b>	2	6
6	<b>Job application/C.V.</b>	1	6
7	<b>Dialogues</b>	1	9
8	<b>Understand vocabulary</b>	1	3
9	<b>Writing complaints/ answers to complaints</b>	1	9
10	<b>Interviews</b>	2	7
<b>Total</b>		<b>16</b>	<b>64</b>

Date: 7-4-16  


**LIST OF PRACTICALS**  
**Functional English**

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

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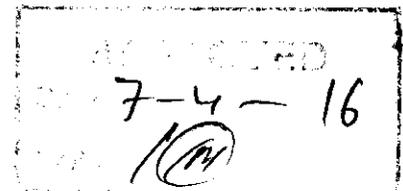
**LIST OF LABS**

**Motor Cycle Mechanic Lab**

- Motor cycle training workshop / lab

**I.T Fundamentals**

- Computer Lab

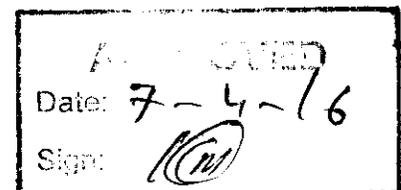


**IST OF TOOLS / EQUIPMENT**  
(For a Class of 25 Students)  
(6-Months Course)

<b>Name of Trade</b>	<b>Motor Cycle Mechanic</b>
<b>Duration of Course</b>	<b>06 – Months</b>

S. No	Name of Tools / Equipments	Quantity
1.	Tool box (trolley type)	12 Nos.
2.	Steel foot rule 12"	12 Nos.
3.	Vernier caliper 0 to 160 mm	12Nos.
4.	Feeler gauge	12 Nos.
5.	Screw driver flat tips size 3 mm	12 Nos.
6.	Screw drive flat size 7 mm	12 Nos.
7.	Screw drive flat tip size 4 mm No.1	12 Nos.
8.	Screw driver Philips No.2	12 Nos.
9.	Screw drive Phillips No.3	12 Nos.
10.	Screw drive Phillips	12 Nos.
11.	Stubby screw driver flat	12 Nos.
12.	Stubby screw driver Phillips	12 Nos.
13.	File flat 300 mm	12 Nos.
14.	File flat 200 mm	12 Nos.
15.	Round file 200 mm	12 Nos.
16.	Half rounder file 200 mm	12 Nos.
17.	Allen key set	12 Nos.
18.	Double open end spanner set 6 to 32 mm	12 Nos.
19.	Off set ring spanner set 6 to 32 mm	12 Nos.
20.	Open and ring spanner (combination) 6 to 22 mm	12 Nos.
21.	Screw wrench adjustable 6"	05 Nos.
22.	Screw wrench adjustable 10"	05Nos.
23.	Ball peen hammer 50 gram	12 Nos.
24.	Cross peen hammer 250 gram	12 Nos.
25.	Combination plier 6"	12 Nos.
26.	Nose plier 6"	12 Nos.
27.	Grip Plier 8"	12 Nos.
28.	Oil can	05Nos.
29.	Needle file set (set of 12 pieces)	12 Nos.
30.	File cleaning brush	12 Nos.
31.	Flat chisel	12 Nos.
32.	Rubber hammer	05 Nos.
33.	Plastic hammer	12 Nos.
34.	Hack saw frame 12"	12 Nos.
35.	Socket Set complete 6 to 32 mm (12 side)	05 Nos.
36.	Socket set complete 6 to 32 mm (6 side)	03 Nos.
37.	Dial indicator gauge range 50 to 150 mm	05 Nos.
38.	Micro meter 0 to 25 mm	05 Nos.
39.	Micro meter 25 to 50 mm	05 Nos.

40.	Tray G1 sheet 18"*24"	05 Nos.
41.	Timing Gun electronic 6 volt & 12 volt	05 Nos.
42.	Spark plug spanner for different motor cycle special Honda 70, 125, & Yamaha 100	12 Nos.
43.	Puller inside	04 Nos.
44.	Puller out side	04 Nos.
45.	Torque wrench different type	04 Nos.
46.	Bench vice (standard size)	12 Nos.
47.	Work bench	12 Nos.
48.	Lift / Ramp for motorcycle.	05 Nos.
49.	Air compressor	01 Nos.
50.	Spark plug cleaner & tester	01 Nos.
51.	Battery charger 6 to 12 volt	02 Nos.
52.	Air gun duster (pistal type )	04 Nos.
53.	Socket handle spanner (T-Type) 8,9,10,12,14 mm.	04 Nos.
54.	Impact screw driver set (hammering type )	02 Nos.
55.	Valve compressor	04 Nos.
56.	Drill set 5mm-14mm	02 sets.
57.	Drill machine	01 Nos.
58.	Taps and handle	01 set



**LIST OF EQUIPMENT / TRAINING MATERIAL FOR 25 TRAINEES****Motor Cycle Mechanic**

<b>Sr. No.</b>	<b>List of Items</b>	<b>Quantity</b>
1.	4 - Stroke Engine (Motor Cycle) i. Honda CD70 ii. Honda CG125 iii. Yamaha 100 CC iv. Suzuki 110 CC	02 Nos. 02 Nos. 02 Nos. 02 Nos.
2.	2 - Stroke Engine	01 Nos.
3.	Motor Cycle (Complete) (Honda, Yamaha, Suzuki, 4 Stroke)	01 Nos. (Each)
4.	Carburetor (Different types)	04 Nos.
5.	Clutch Assembly Complete (Different Types)	04 Nos.
6.	Hydraulic Brake System (Disc Brake)	02 Nos. (Complete System)
7.	Shock Absorbers (Rear / Front)	02 Sets
8.	CDI System (unit)	02 Nos.
9.	Battery (12V Motorcycle)	04 Nos.
10.	Ignition Coil 12v	04 Nos.
11.	Timing Chain	02 Nos.
12.	Chain Sprocket Set	02 Nos.
13.	Piston / Piston Ring Set	02 Set
14.	Catalogue / Data Books (Honda CD70, CG125, Yamaha 100 CC, Suzuki 110 CC)	01 No. Each

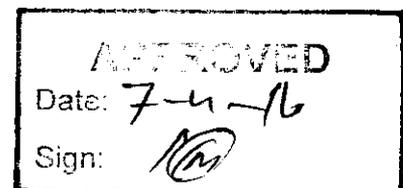
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**FURNITURE**

S. No	Name of Articles	Quantity
1.	Working bench	10 No's
2.	Wooden stool (for students)	25 No's
3.	Chair for teacher	01 No's
4.	White board (3 ½ x 5ft) with stand	01 No.
5.	Steel Almirah (4 x 7 ft)	04 No's
6.	Instructor table with 3 drawers	01 No.

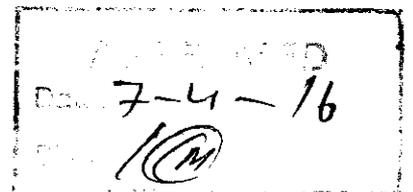
**SPECIAL EQUIPMENT**

1. HONDA Motorcycle Company tool display board CD 70 & CG 125. (1 Set)
2. YAMAHA Motorcycle Company tool display board. (1 Set)
3. SUZUKI Motorcycle Company tool board. (1 Set)



**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 MATERIALS****Motor Cycle Mechanic Course**

S. No.	List of Items	Quantity
1.	Flat bar 2" x 2" pieces	25 Nos.
2.	Nuts / bolts / studs / circlips / washers (for general use as per instructor demand.)	
3.	Shellac	02 Tubes
4.	Relevant gasket sets	02 Sets
5.	Petrol	01 Liter /trainee
6.	Kerosene oil	½ Liter / trainee
7.	Engine oil	04 Liter
8.	Grease multi purpose	450 gram
9.	Emery paper 0 No, 1 No	06 Nos. each
10.	Cotton waste	10 kg
11.	Carburetor for practice	04 Nos.
12.	Accelerator wires / clutch wires (as per requirement)	04 Nos. each
13.	Auto cable 03mm	20 meters
14.	Male and female thimbles	100 Nos. each
15.	Insulation tapes	04 Nos.
16.	C.D.I units	02 Nos.
17.	Oil pumps	04 Nos.
18.	Brake oil	01 bottle
19.	Voltage regulator	01 Nos.
20.	Battery 6 Volts	02 NO.

**APPROVED**  
 Date: 7-4-16  
 Sign: 

**Functional English**

S. No.	Item	Quantity
1.	Stationary	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

**APPROVED**  
Date: 7-4-16  
Sign: 

## **MINIMUM QUALIFICATION OF INSTRUCTOR**

### **Motor Cycle Mechanic**

- Diploma of Associate Engineer in Auto & Diesel Technology with three years experience in relevant field (especially in motorcycle repairing).

OR

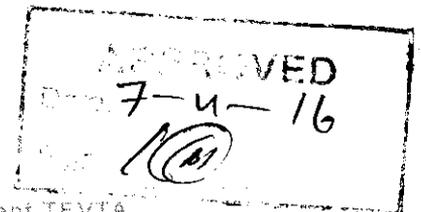
- Two-years certificate in Auto & Diesel Mechanic (G-II level) alongwith 6-years experience in relevant field.

### **Functional English**

- MA. (English)

### **I.T Fundamentals**

- DAE CIT/ BCS from HEC recognized university



## REFERENCE BOOKS

### Motor Cycle Mechanic

1. Trainee manual of Auto Mechanic course developed by PVTC, Lahore.
2. Motor cycle training manual developed by TEVTA.
3. Motor cycle trainee manual by Tahir Mahmood / Rashid Saqlain.

### Functional English

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

### I.T Fundamentals

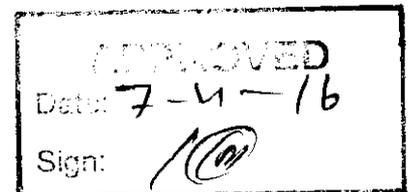
1. Introduction to Computer by Peter Norton
2. 2007 Microsoft® Office System Step by Step by Joyce Cox, Steve Lambert and Curtis Frye
3. Internet and E-mail with Windows 7 by Studio Visual Steps

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## EMPLOYABILITY OF PASS OUTS

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

1. Motor cycle repair shops.
2. Motor cycle sales shops.
3. Motor cycle assembly plants.
4. Small generator sets.



**List of Trade Related Jargon**  
**GENERAL VOCABULARY WORDS**

1. Safety precautions	حفاظتی تدابیر	1. Cooling system	نظام ٹھنڈک
2. Tools	اوزار	2. Viscosity	گاڑھا پن
3. Equipment	آلات	3. Rusting	زنگ آلودگی
4. First Aid	ابتدائی طبی امداد	4. Ignition switch	جابی سوئچ
5. Bleeding	خون بہنا	5. Muffler	سلسر
6. Fracture	ہڈی ٹوٹنا	6. Heat	حرارت
7. Measurement	پیمائش	7. Technical	تکنیکی
8. Tri Square	گنیا	8. Check up	معائنہ
9. Plier	پلاس	9. Conductor	موصل
10. Screw Driver	پیچ کس	10. Non conductor	غیر موصل
11. Divider	پرکار	11. Resistance	رکاوٹ
12. Files	ریتی	12. Parallel	متوازی
13. Hack saw	آری	13. Series	سلسلہ وار
14. Scissor	قینچی	14. Magnet	مقناطیس
15. Spanner	پانا	15. Tread	گڈی
16. Socket	گوٹی	16. Parking brake	ہینڈ بریک
17. Bench vice	بانک	17. Hood	بونٹ
18. Chain Hoist	چین کپی	18. Trunk	ٹگی
19. Length	لمبائی	19. Automobile	گاڑی
20. Volume	حجم	20. Fuel feed pump	لغتی پمپ
21. Mass	کیمیت	21. Glow plug	بیٹر
22. Work	کام	22. Lubrication system	نظام چکنائی
23. Power	طاقت	23. Elctricial System	برقی نظام
24. Energy	توانائی		
25. Kinetic energy	حرکی توانائی		
26. Friction	رگڑ		
27. Fuel	اینڈھن		
28. Combustion	اختراک		
29. Reciprocating	منقافی		

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**Curriculum Revision Committee**

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