

COVER

Loy Loy

SYLLABUS FOR (TRADE NAME)

:- TWO ~~WHEELER~~ AND FOUR
WHEELER MECHANIC

UNDER CODE OF REGULATIONS FOR
INDUSTRIAL SCHOOL

AS APPROVED BY

DEPARTMENT OF EMPLOYMENT AND
TRAINING, CHEPAUK,
CHENNAI - 600 005.

LIST OF COMMITTEE MEMBERS
FOR THE TRADE OF TWO ~~WHEELER~~ AND FOUR

WHEELER MECHANIC

1. Member and Experts ...
1. **Mr. S.SUBBAIYA, ME., MBA.,**
R.J.D. COIMBATORE
 2. **Mr. K.KADIRVELU. BE., MBA.,**
DD / PRL
GOVT ITI SALEM.
 3. **Mr. RAJENDRAN BE., T.O**
GOVT ITI SALEM.
 4. **Mr. M.RAVICHANDRAN BE., ATO.,**
GOVT ITI SALEM.
 5. **Mr. E.B. SAMRAJ D.M.E.,**
PRINCIPAL ST. THERSA'S I.TI,
SALEM.
 6. **Mr. J.KESAVAN D.M.E,**
I.T.O.S.S.P L.T.I. SALEM.

COURSE DETAILS

Name of Trade	: TWO &FOUR WHEELER MECHANIC
Qualification	: VIII Pass
Age	: 14-40 Years
Duration	: 1 Year
Number of Trainees	: 20
Number of Practical hours	: 32 hrs. per week
Number of Theory Hours	: 8 hrs. per week
Number of Workshop Calculation hours	: 2 hrs. per week.
Number of Engineering Drawing hours	: 2 hrs. per week
Space Required	
Workshop	: 400 sq.feet
ClassRoom	: 200 sq. feet
Power Required in KW	: 2 k.w.

TWO WHEELER AND FOUR WHEELER MECHANIC

BREAK UP OF 52 WEEKS OF TRAINING

1. INTRODUCTION	1
2. GARAGE TOOLS AND EQUIPMENTS	1
3. TRANSMISSION SYSTEM	8
4. SUSPENSION, FRONT AXLE AND STEERING	4
5. BRAKE WORK	4
6. ENGINE WORK (PETROL ENGINE)	7
7. ELECTRICAL & ELECTRONICS	6
8. ENGINE WORK (DIESEL ENGINE)	6
9. COOLING SYSTEM	1
10. LUBRICATION SYSTEM	1
11. FUEL SYSTEM	2
12. FUEL SYSTEM (MPFI AND SENSOR)	1
13. AIR CONDITIONING & VEHICLE POLLUTIONS	1
14. TROUBLE SHOOTING	6
15. INDUSTRIAL VISIT	1
16. REVISION	1
17. EXAMINATION	1

TOTAL = 52

Week No	Practical 1	Theory 2	Engg. Drawing 3	W/S Cal & Science 4
1.		Introduction – History of automobile – Importance of safety precautions – use of fire extinguishers – first aid.	Introduction to Engg. Drawing and blue print reading. Free hand sketching of straight lines – Rectangles, squares and circles.	Introduction of science and calculation to the Trade skill and fundamental arithmetical operations additions, subtraction, multiplication division of whole numbers.
2.	Knowing the Garage tools and Equipments and Identifying the Fasteners.	General description of motor vehicles – major assemblies their locations and functions different locking methods and devices used in vehicle.	- do -	Common Fractions – additions subtraction in fractions.
3	<u>Suspension and Steering</u> Removing wheels from the vehicle – Dismantling tyres and tubes – checking And repairing punctures in Tubes – cleaning and lubrication of wheel bearing – Adjusting the wheel bearings.	Description of wheels and tyres ply rating – types of rims – types of shock absorbers – types of Leaf springs.	Lettering Numbers and alphabets.	Properties of Ferrous metals- cast-iron – wrought iron – plain and high carbon steel – high speed Steel and alloy steel etc and there use.
4	Inspect and over haul front and rear suspension – coil springs – torsion bars.	Description of front axle – types of steering knuckles – Arrangement of steering linkages – types of springs – leaf spring maintenance.	Free hand sketching with dimension & proportionate sketching of circles, rectangles, squares, parallelograms.	Properties of Non – Ferrous metals copper zinc, lead, tin, brass aluminium, bronze, solder & bearing metals and

				their uses.
5	Inspect and adjusting steering linkages replacing of worn out parts – wheel alignment.	Description of different types of steering boxes – special features – power steering trouble shooting.	Reading of simple blue print – sketching of solids such as cubes, cylinders.	Brief description of manufacturing process of, steel copper and aluminium
6	Inspect and adjusting of steering boxes and adjustment of toe in, camber angles. Checking kingpin and caster angle with gauges.	Description of steering Geometry caster, camber, Toe – in & Toe out – purpose and effect of these angles.	- do-	- do-
7	<u>Transmission work</u> Adjusting clutch pedal play – removing gearbox and clutch assembly from a two-wheeler – and assembling of all parts after clear inspection.	Layout of Transmission system two wheeler and four-wheeler. Description of single plate clutch and multiplate clutch advantages of different types of clutch actuation mechanism.	Free hand sketching of nuts Bolts and studs with dimensions from samples.	Common Fractions – Multiplication, division and simplification.
8	Dismantling of single plate clutch – cleaning and inspection Assembling of pressure plate – adjusting the fingers – Testing.	Clutch linings – types – clutch plate construction – Precautions while relining a clutch plate common troubles and remedies.	Free hand sketches of rivets, screws, washers from samples.	Fractions and decimals conversions – Fraction to decimal and vice versa.
9	Dismantling and assembling of constant mesh Gear box	Purpose of Gearbox – Description and types of Gearbox – constant mesh Gearbox details.	Sketching of views of solid bodies such as square hollow cylinders rings – cones.	Systems of units British, metric and S.I Units for length, mass area, volume, capacity and time.
10	Dismantling, cleaning and assembling of gear shift mechanism – changing oil in gearbox.	Lubrication of Gear box description of synchromesh gear box	Free hand sketches of bolts & nuts with dimensions from samples.	Conversions between British and metric systems.
11	Removing open type propeller shaft from	Description of propeller shaft and universal joints	Free hands sketches of keys screw threads with	Square root – square and square root of

	vehicle removing universal joints cleaning and inspection.	and its maintenance.	dimensions from samples.	whole number and decimal.
12	Removing rear axle assembly from vehicle – Dismantling Cleaning, Inspecting parts removing tail pinion and bearings.	Description and different types of rear axles – advantages of each type – lubrication of rear axles	Explanation of simple orthographic projection free hand sketching of 4 stroke – 2 stroke cycles.	Square root – shop-problem
13	Checking the tooth contact in crow & pinion – Assembling the rear axle and fitting the rear axle.	Description and functions of differential – tooth contact, backlash and pre loading adjustments – common troubles.	Explanation of simple orthographic projection in 3 rd angle.	Heat and Temperature effects of heat, Thermometric scales such as Celsius, Fahrenheit and Kelvin – temperature measuring instruments.
14	Adjusting the chain tensioner – lubrication chain & sprocket – changing of chain links roller – and correcting the shaft drive.	Description about two wheeler transmission system shaft drive and chain drive	View of simple hollow & solid bodies with dimensions	Conversion between the above scales of temperature.
15	Adjusting brake pedal play checking brake binding. Dismantling wheel brake assembly – adjusting brake shoes for proper clearance.	Brakes – principle and operation arrangement of brakes in two-wheeler and four wheelers, Description of hand brake mechanical brake – layout.	Simple isometric view of objects such square rectangles and cubes.	Units of heat – caloric B. TH.U.C.H.U specific heat, latent heat, heat loss and gain simple problems.
16	Dismantling wheel brake assembly – Removing and cleaning of drums – Inspecting wheel cylinders. Fitting new cups and brake hose pipes adjusting 4 wheel brakes.	Description about Hydraulic brake system layout of hydraulic brake system functions and working of master cylinder.	Views of solid & hollow bodies cut sections plane	Percentage – changing percent to decimal and Fraction and vice versa problems on percentages related to the trade.
17	Removing master	Description about wheel	Practice on blue print	Percentage –

	<p>cylinder dismantling cleaning and Inspection of parts assembling and testing</p>	<p>cylinder Bleeding of hydraulic brake type of brake linings</p>	<p>reading</p>	<p>changing percent to Decimal and Fraction and vice versa problems on percentages related the trade.</p>
18	<p>Bleeding of hydraulic brake system checking the brake lines- removing old lining and fitting new lining on the brake shoe – adjusting & testing of brake.</p>	<p>Relining the brake shoes precaution to be observed properties of brake fluid and its types.</p>	<p>Further practice in blue printing reading</p>	<p>Definition of speed velocity Acceleration mass weight.</p>
19	<p><u>Engine work</u> Dismantling an unserviceable two wheeler moped engine cleaning and studying of parts measuring of cylinder bore crank pins main journals pistons – studying of valve operating mechanism practice in the use of correct tools & right procedure.</p>	<p>Engine fundamentals and principles two stroke and four stroke engines working principle Difference between 2 stroke and 4 stroke cycle engine</p>	<p>Free hand sketching of engine mountings templates & fixing brackets and stands</p>	<p>Newton's Laws of motion definition of forces units of force in M.K.S system and S.I units of force.</p>
20	<p>Practice in dismantling of scooter and motor cycle engine decarbonizing – removing piston and connecting rod – changing of New piston rings – checking of bearings testing &</p>	<p>Constructional Details of Engine parts- Description of valve operating mechanism functions of valve spring Guide – Tappets valve seats- Decarbonizing procedure.</p>	<p>Free hand sketching of valve, valve spring, valve assembly with Dimension</p>	<p>Ratio – simple problems in Rations</p>

	Assembling the engine.			
21	Dismantling a car Engine – cleaning and studying of parts Dismantling the cylinder head Decarbonising removing the valves cleaning and reassembling	Description and function of cylinder block head liners –function of piston Piston rings – pins types -	Free hand sketching of piston Gudgeon pin rings and connecting Rod with dimensions from samples	Proportion direct and inverse proportion – shop Problems
22	Removing piston and connecting rod assembly engine from engine dismantling cleaning choking clearances installing rings and piston pins – removing crankshaft from the engine.	Description and function of connecting rod – materials used main Bering shells – locking methods of piston pins crank shaft descriptions	Free hand sketching of crank shaft and flywheels with dimensions from samples	Calculations of cylinder wear, ovality and taper and problem on compression ratio.
23	Removing connecting rod assembly cleaning, checking bearing clearances measuring wear in crank pins and main journals in crankshaft.	Firing order of the engine – crankshaft balancing description of flywheel details about crank case & oil sump	Free hand sketching of cylinder block and cylinder head	- do-
24	Removing valve timing cover checking and correct setting of valve timing replacing timing chains – checking cam shaft	Valve timing gears timing marks timing chains – change tensioners value tappet clearance adjustments	Free hand sketching of bearings with dimension from sample	Geometry – properties of angles triangles and circles
25	Assembling crankshaft main bearing connecting rods and piston assembly in the engine	Crank case ventilations functions of vibration dumber cylinder reboring retails cylinder head and	Free hand sketching of cylinder liners with dimensions from sample	-do-

	fitting cylinder head and testing the engine for smooth running.	valve reconditioning details		
26	<u>Electrical Work</u> Practice in joining wires & soldering – measuring of current voltage testing battery with hydrometer cell tester cleaning & topping up of lead Acid battery charging of battery.	Insulators conductors Ohm's Law and its application Primary & secondary cells lead Acid battery descriptions care while handling battery	Free hand sketching of 4 stroke valve timing and two stroke port timing diagrams	Shop problems on force work done energy and power
27	Trace the light circuit test bulbs align head lamps find out short and open circuit in the wiring Replacing fuses testing	Description of Light circuits Description and functions of each – Fuses and its importance different sensors and their uses	Free hand sketching of electrical symbol and drawing of simple electrical circuits.	Explanation of horse power brake horse power brake horse power and I.H.P.
28	Check and replace of ignition coil and distributor assembly and Checking Ignition timing and spark plug.	(Description of Ignition) System and Function. Distributors Sparkplugs magneto ingression – coil Transistorized ignition system.	Free hand sketching of Magneto ignition circuit	Applied problems in horsepower. Calculation. Of speed reactions in 4 speed Gear box.
29	Checking instruments & Gauges on dashboard. Removing electric point, Testing wires -- Assembling and adjusting the horn fed correct sound.	Different Gears 4 Meters used in automobiles – function of Horn – wiper motor – dynamo / alternates.	Free hard sketching of spark plug.	Ratio and proportions. Simple problems. Gear rations in Gearbox and rear axles.
30	Removing and rectifying Dynamo / Alternator in a vehicle precautions while connecting battery in	Description of charging circuit difference bet dynamo and alternator Regulator unit – function	Free hand sketching of charging system.	-do-

	alternator circuit General Maintenance adjusting fan belt Tension.	of starter motor.		
31	Removing starter motor – over hauling and testing of starter motor – drive mechanism	Description of starter motor circuit – constructions details of starter motor – solenoid switch Kick starter mechanism	Free hard sketching of solenoid switch circuit.	Algebraic symbols and Fundamentals – Addition subtraction problems.
32	<u>Diesel Engine</u> Dismantling a stationary diesel engine – Removing	Description of diesel engines four stroke and two stroke engine.	Free hand sketching of fuel feed pump.	Algebraic symbols and Fundamentals – multiplication and Division Problems.
33	Cylinder head, piston & Connecting rod – clearing decarbornizing – checking piston clearance dismantling valve assembly checking and reconditioning valves – Assembling Engine parts and starting the Engine.	Materials used for Diesel Engine parts – combustion chambers types, advantages and disadvantages, valve operating mechanism. Scavenging types of scavenging. Injection timing.	Free hard sketching of Mechanical Governor	Algebra –simple Equation Problems.
34	Bleeding Fuel lines for Air locks – repairing fuel leaks in pipelines cleaning of Air Filters in Diesel Engine.	Description about fuel filters air filter checking exhaust smoke-by-smoke tester – knowing of Exhaust Gas Analyzer – Engine tune up procedure.	Free hand sketching of combustion chamber of Different types.	Meaning of stress. Strain Modules of Elasticity ultimate strength examples.
35	Cleaning and servicing of primary and secondary fuel filters removing feed pump – dismantling clearing. Assembling	Types of fuel injection system fuel feed pumps – F.I. Pumps. Description. Operation Trouble and remedies.	Free hard sketches of Different types of Nozzles.	Lever – Types of levers with their examples. Problems related to levers as applicable to motor

	Refitting and Testing.			vehicles.
36	Dismantling an unserviceable fuel injection pump cleaning inspecting and studying parts and reassembling.	Need for governors – Types Description about injector NOZZ les – Types, Description and testing of injectors.	Free hand sketching of fuel supply systems.	Electricity and its effects of state – AC & DC differences.
37	Testing injectors removing dismantling cleaning inspecting replacing defective parts reassembling and testing.	Description about Rotary fuel injection pump reasons for black, white and blue smoke in exhaust	Practice on blue print reading of an engine	Magnets Natural and artificial types calculation based on ohm's Law.
38	Trouble shooting in cooling system correcting water leaks checking radiator water pump thermostat defective packing checking the pins in the air cooling system – reverse flushing system	Need and Description of cooling system – types of cooling system advantages and comparison of Air & water-cooling system troubles and remedies.	Free hand sketching of cooling system	Meaning of friction examples of useful and wasteful friction in vehicle co- efficient of friction simple problems of friction.
39	Trouble shooting in Lubrication system correcting oil leaks checking oil pump Oil filters	Necessity of and details about lubrication system – lubricant properties – types and function Of oil filters – oil pump – troubles and remedies	Free hand sketching of lubrication system	Properties of matter molecules and atoms definition of mass, unit of force weight of a today.
40	Simple repairs in fuel feed system over handling of petrol pump, fuel filters	Description of fuel feed system, layout types and working of petrol fuel pump filter function of corrobator.	Free hand sketches of fuel filter	Mensuration areas – square, Rectangle Equilateral Triangle isosceles Right angles scalene triangle problem.
41	Serving carburetor two-wheeler and four wheeler types studying the	Types of carburetors special features advantages – different	Free hand sketches of A.C. Mechanical fuel pump.	- do -

	various circuits.	adjustment and their purpose.		
42	Servicing the MPFI injection system studying of various advantages over carburetor system	Description of MPFI system advantage and comparison bet MPFI & carburetor use of sensor control units	Free hand sketching of flasher flasher light circuit with symbols	Mensuration volume and weight of simple solid bodies likes cube square prism rectangular prism cone cylinder hollow cylinder shop problem
43	Studying the air conditioning system tuning engine with respect to air condition and measurement of HC, CD, CO ₂ , O ₂ diesel smoke measurement,	Introduction to air conditioning system in motor vehicle compatibility of air.	Free hand sketching of lighting circuit of vehicle with electrical symbol	- do -
44	Troubles shooting in the clutch and gear box system troubles remedies correcting all running repairs.	Common trouble and remedies in the transmission system	Free hand sketching of complete writing of vehicle	- do -
45	Trouble shooting in the Propeller shaft differential rear axles Lubricating Correcting all running repairs.	Common Troubles and remedies In propeller shaft & universal joint differential rear axles Lubrication procedure	Free hand sketching of starter Motor circuit	Finding the capacity liter Of square Rectangle Hexagon cone and cylinder shapes
46	Trouble shooting in the Engine. Engine tune up procedure step by step method	Engine tune up procedure checking and testing the Engine for smooth running	Free hand sketching of components from assemblies	- do -

47	Removing inlet and exhaust manifold cleaning carbon and checking warp age and crack cleaning silencer and tailpipe and refitting	Description about inlet and exhaust manifold and silencer box type of silencer catalytic converter its function and its advantages.	Sketching of screw jacks Grease Gun and oil spray Guns	Calculating of area volume and weight of hollow and solid bodies
48	Trouble tracing in electrical Wiring of the vehicle checking All the lighting and wiring lines tracing fault in electronic Ignition system	Color code for wiring in the Motor vehicles principle of Electronic ignition system micro processor based contact less ignition system	- do -	Revision of ratio and proportion applied problems related to trade
49	Trouble shooting in the suspension shock absorber servicing changing the bushes front fork changing of oil	Description of shock absorber Types and servicing of all shock absorbers and replacing of bushes.	Free hand sketching of Different traffic signals	Revision of calculation of fuel average, gear ratio.
50	<u>Company visit</u> Visit to local two-wheeler and four wheeler workshop and service station.		- do -	- do -
51	Revision		Revision	Revision
52	Examination		- do -	- do -

ACHIEVEMENTS

TRAINEES SHOULD BE ABLE TO :

- 1) Familiar with Garage tools and equipments, safety precautions
- 2) Dismantling and assembling of transmission systems
- 3) Dismantling and assembling of Engine components
- 4) Repair operations like decarbonizing, fitting of piston rings, piston pins & Bearings, measurement of cylinder, piston & bearing journals
- 5) Servicing of suspension system
- 6) Tracing troubles and rectifying them in electrical system
- 7) Trouble shooting in brake, cooling, lubrication and fuel systems
- 8) Know about all latest developments.

INDUSTRIAL SCHOOLS**TRADE SYLLABUS – REVISED**

Name of the Trade	: TWO WHEELER AND FOUR WHEELER MECHANIC
SPACE REQUIRED	:
(1) Workshop/Lab	: 450 sq. ft.
(2) Class Room	: 200 sq. ft.
Trade Theory	: No change
Trade Practical	: No change
Engineering Drawing	: No Change
Workshop calculation	: No Change

List of Tools & Equipments

For The Trade of TWO ~~WHEELER~~ AND FOUR WHEELER MACHNIC

FOR A BATCH OF 20 TRAINEES

TOOL KIT

<u>SL.NO.</u>	<u>DESCRIPTION</u>	<u>QUANTITY REVISED</u>
1	HAMMER BALL PEIN 0.75 KG	5
2	STEEL RULE 15 CM ENGLISH AND METRIC	5
3	SCREW DRIVER 20 CMx9MM BLADE	5
4	SCREW DRIVER 20CMx9MM BLADE	5
5	SPANNER D.E, SET OF 12 PIECES (10MM-32MM)	5
6	PLIER COMBINATION 15CM	5
7	HAND FILE 20 CM SECOND CUT	5
8	FEELER GAUGE 20 BLADES (METRIC)	5
9	RING SPANNER SET OF 12 PIECES (10MM-32MM)	5
10	STTEL TOOL BOX WITH LOCK AND KEY (FOLDING TYPE) SIZE 400x 200x150 MM	5
11	ALLEN KEY SET OF 12 PIECES (2MM-14MM)	2
12	CIRCLIP PLIER 9 EXT.& INT.) 150 MM AND 200 (TWO EACH)	2
13	PHILIPS SCREW DRIVER TYPE SET OF 5 PIECES (100MM-300MM)	2

TOOLS MEASURING INSTRUMENTS AND GENERAL SHOP OUTFIT

<u>SL.NO.</u>	<u>DESCRIPTION</u>	<u>QUANTITY REVISED</u>
1.	RULE STEEL 300MM	1
2.	CHISEL CROSS CUT 200MM x6MM	1
3.	HAMMER BALL PEEN 0,5KG	2
4.	HAMMER COPPER 1KG WITH HANDLE	1
5.	ENGINEERING SQUARE 15CM BLADE	2
6.	SCRIBER 15CM	2
7.	SURFACE PLATE 60x60CM	1
8.	HACKSAW FRAME FOR 30CM BLADE	4
9.	PUNCH HOLLOW, 6,7,8,9,10,5 AND 12MM SET	1 SET
10.	PUNCH FIGURE SET 3MM	1 SET
11.	HAND VICE 37MM	2
12.	SCREW DRIVER, ELECTRICIAN TYPE 15CM SIZE	2
13.	FILE FLAT 25CM SECOND CUT	2
14.	FLIE FLAT 20 CM SMOOTH	2
15.	FILE TRIANGULAR 15CM SECOND CUT	2
16.	FILE, HALF ROUND 20CM SECOND CUT	2
17.	FILE SQUARE 20CM SECOND CUT	2
18.	TWIST DRILL, METRIC 3 MM TO 12(1MM STEP)	1SET
19.	TAPS AND DIES COMPLETE SET IN BOX B.A.BSW, BSW, BSG AMERICAN AND METRIC WITH HANDLES	1SET
20.	SCRAPER FLAT 25CM	1
21.	SCRAPER TRIANGULAR 25CM	1
22.	SCRAPER HALF ROUND 25CM	1
23.	SETS OF MORSE SOCKET MT 0-1,1-2,AND 2-3	1
24.	VERNIER CALIPER SET 250 OR 200M INSIDE, OUTSIDE AND DEPTH	1
25.	SAFETY GOGGLES	2 PAIRS
26.	MALLET (WOODEN)	1
27.	BLOW LAMP 0.5 LITRE	1
28.	SOLDERING IRON 120 WATTS	2
29.	SOLDERING IRON COPPER 255 GMS (FIRE HEATED) 150MM AND 200MM	2
30.	PLIERS NOSE (ROUND AND STRAIGHT) 150MM AND 200MM	2 EACH
31.	SNIP STRIGHT 250MM	1

32.	SPANERS DOUBLE ENDED SET OF 12 METRIC SIZE 6 TO 32 MM	1 SET
33.	DOUBLE OPEN ENDED IGNITION SPANNER SET OF 5 (0 TO 9MM)	4 SET
34.	SPANERS ADJUSTABLE 20CM	1 SET
35.	SPANNER FOR SPARKING PLUG 14MM	1 SET
36.	SPANNER SOCKET ST (6-32MM SOCKETS) COMPLETE SET	2
37.	DOUBLE OPEN ENDED TAPPER SPANNER	1 SET
38.	SPARY GUN-KEROSINE	1
39.	PRESSURE GREASE GUN	1
40.	CHAIN PULLEY BLOCK-3 TON CAPACITY	1
41.	TRAY CLEANING 45 x30 CM	8
42.	DRILLING MACHINE (BENCH) 12MM DIA	1
43.	OIL CAN 0.5 LITRE	1
44.	LIFTER, VALVE SPRING	1
45.	VALVE SEAT CUTTING TOOL COMPLETE WITH GUIDES AND PILOT BAR (ALL ANGLIES) IN A BOX	1 SET
46.	EXTRACTOR, STUD EZY OUT TYPE	1
47.	COMPRESSION GAUGE TO READ 17.6 KG/SQ.CM	1
48.	VACCUM GAUGE 0 TO 75CM	1
49.	STONE, CARBORANDUM 15 x53.75-ROUGH AND SMOOTH	2
50.	CYLINDER DIAL GAUGE	1 SET
51.	TORQUE WRENCH (0 TO 67.5 KG.METER)	1
52.	WORK BENCH 240x120x75 CM WITH 4 VICES 12.5 CM JAW	2
53.	LOCKER WITH 10 DRAWERS (STANDARD) SIZE	2
54.	METAL RACK 180x150x45 CM	1
55.	FUEL PUMP OLD FOR PRACTICE	2
56.	DISTRIBUTOR OLD FOR PRACTICE	2
57.	CORBURETOR (TWO DIFFERENT TYPES)	2 EACH
58.	WATER PUMP AND OIL PUMP	2 EACH
59.	STEEL ALMIRAH 180x90x50 CM	1
60.	BLACK BOARD 180x90 CM	1
61.	FIRE EXTINGUISHER	2
62.	FIRE BUCKETS WITH STAND	4
63.	JACK, HYDRAULIC HI-LIFT TYPES (TROLLEY TYPES)	2
64.	TASTER SPARKING PLUG "NEON" TYPE	1
65.	COMPRESSOR AIR PISTON TYPE (VEHICULAR) (OLD)	1
66.	WHEEL ALIGNMENT GAUGE (TOE IN GAUGE)	1
67.	BRAKE ASSEMBLY MASTER CYLINDER, WHEEL CYLINDER AND SERVO (OLD)	1

68.	STEERING ASSMBLY-POER STEERING	1
69.	PULLER SET STEERING WHEEL UNIVERSAL	1 SET
70.	PULLER SET UNIVERSAL BEARINGS AND BUSHES	1 SET
71.	LIFTING JACK, SCREW	4
72.	HOT PATCH CLAMP	2
73.	PISTON RING COMPRESSOR	2
74.	VALVE KEY INSERTER	1
75.	PISTON RING EXPANDER	1
76.	HIGH RATE DISCHARGE TESTER	1
77.	A.V.O. METER	1
78.	GENERAL PURPOSE PULLER	1 SET
79.	GROWELER	1
80.	BATTERY CHARGER	1
81.	TIMING LIGHT	1
82.	HYDROMETER	1
83.	CONTINUITY METER	1
84.	PERTOL NOZZLE	2 SETS

GENERAL MACHINERY

<u>SL.NO.</u>	<u>DESCRIPTION</u>	<u>QUANTITY REVISED</u>
1	GRINDER WITH TWO 7" WHEELS WITH TWIST DRILL GRINDING ATTACHMENT	1
2	MOTOR CAR IN RUNNING CONDITION (PETROL)	1
3	PETROL ENGINE RUNNING CONDITION MPFI TYPE	1
4	PETROL ENGINE RUNNING CONDITION (CARBURATOR TYPE)	1
5	DIESEL ENGINE RUNNING CONDITION (VECHICLE TYPE)	1
6	A) PETROL ENGINE 2 STROCK- (SCOOTER, MOTOR CYCLE, MOPED) B) PETROL ENGINE 4 STROCK (MOTOR CYCLE)	1 each
7	TWO WHEELER (RUNNING CONDITION) (TWO STROCK FOUR STROCK)	1