

LIST OF TOOLS AND EQUIPMENT			
Mechanic Auto Electrical & Electronics (for Batch of 20 Candidates)			
S. No.	Name of the Tools & Equipment	Specification	Quantity
A. TRAINEES TOOL KIT			
1.	Allen Key set of 12 pieces	2mm to 14mm	5+1 nos.
2.	Back probe tools		5+1 nos.
3.	Caliper inside	15 cm Spring	5+1 nos.
4.	Calipers outside	15 cm spring	5+1 nos.
5.	Center Punch	10 mm. Dia. x 100 mm.	5+1 nos.
6.	Dividers	15 cm Spring	5+1 nos.
7.	Electrician Screw Driver	250mm	5+1 nos.
8.	Hammer ball peen	0.5 kg with handle	5+1 nos.
9.	Hands file	20 cm. Second cut flat	5+1 nos.
10.	Logic probe		5+1 nos.
11.	Pliers combination	20 cm.	5+1 nos.
12.	Screw driver	20cm.X 9mm. Blade	5+1 nos.
13.	Screw driver	30 cm. X 9 mm. Blade	5+1 nos.
14.	Scriber	15 cm	5+1 nos.
15.	Spanner D.E. set of 12 pieces	6mm to 32mm	5+1 nos.
16.	Spanner, ring set of 12 metric sizes	6 to 32 mm.	5+1 nos.
17.	Spanners socket with speed handle, T-bar, ratchet and universal	upto 32 mm set of 28 pieces with box	5+1 nos.
18.	Steel rule 30 cm inch and metric		5+1 nos.
19.	Steel tool box with lock and key (folding type)	400x200x150 mm	5+1 nos.
20.	Test light		5+1 nos.
21.	Wire cutter and stripper		5+1 nos.
B. TOOLS, INSTRUMENTS AND GENERAL SHOP OUTFIT			
25.	AC alternator slip ring puller		1 no.
26.	Adjustable spanner	pipe wrench 350 mm	2 nos.

27.	Air blow gun with standard accessories		1 no.
28.	Air impact wrench with standard accessories		4 nos.
29.	Air ratchet with standard accessories		4 nos.
30.	Allen Key set of 12 pieces	2mm to 14mm	2 nos.
31.	Ammeter	300A/ 60A DC with external shunt	4 nos.
32.	Angle plate adjustable	250x150x175	1 no.
33.	Angle plate size	200x100x200mm	2 nos.
34.	Anti theft device		2 nos.
35.	Auto Electrical test bench		1 no.
36.	Battery -charger		2 nos.
37.	Battery terminal cleaner tool		2 nos.
38.	Battery tester		1 no.
39.	Belt Tensioner gauge		1 no.
40.	Blow Lamp	1 litre	2 nos.
41.	Caliper inside	15 cm Spring	4 nos.
42.	Calipers outside	15 cm spring	4 nos.
43.	Car Jet washer		1 no.
44.	Car stereo		1 no.
45.	Chisel	10 cm flat	4 nos.
46.	Chisels cross cut	200 mm X 6mm	4 nos.
47.	Circlip pliers Expanding and contracting type	15cm and 20cm each	2 nos.
48.	Clamps C	100mm	2 nos.
49.	Clamps C	150mm	2 nos.
50.	Clamps C	200mm	2 nos.
51.	Cleaning tray	45x30 cm.	4 nos.
52.	Copper bit soldering iron	0.25 Kg	4 nos.
53.	DC Ohmmeter	0 to 300 Ohms, mid scales at 20 Ohms	4 nos.
54.	Depth micrometer	0-25mm	4 nos.
55.	Dial gauge type 1 Gr. A (complete with clamping devices and stand)		4 nos.
56.	Distributor -Duel advance type, reluctance type		1 each
57.	Dividers	15 cm Spring	4 nos.
58.	Drift Punch Copper	15 Cm	4 nos.
59.	Drill point angle gauge		1 no.

60.	Drill twist	1.5 mm to 15 mm (various sizes) by 0.5 mm	4 nos.
61.	Electric Soldering Iron 230 V 25 watts	230 V 60 watts	2 each
62.	Electric testing screw driver		4 nos.
63.	Electrical horn (different types)		1 each
64.	Engineer's square	15 cm. Blade	4 nos.
65.	Executive Auto Electrical tool kit		1 no.
66.	Feeler gauge 20 blades (metric)		1 no.
67.	File flat	20 cm bastard	4 nos.
68.	File, half round	20 cm second cut	4 nos.
69.	File, Square	20 cm second cut	4 nos.
70.	File, Square	30 cm round	4 nos.
71.	File, triangular	15 cm second cut	4 nos.
72.	Files assorted sizes and types including safe edge file (20 Nos)		2 set
73.	Flat File	25 cm second cut	4 nos.
74.	Flat File	35 cm bastard	4 nos.
75.	Glow plug tester		2 nos.
76.	Granite surface plate	1600 x 1000 with stand and cover	1 no.
77.	Grease Gun		1 no.
78.	Growler		4 nos.
79.	Hacksaw frame adjustable	20-30 cm	10 nos.
80.	Hammer Ball Peen	0.75 Kg	2 nos.
81.	Hammer Chipping 0	.25 Kg	2 nos.
82.	Hammer copper	1 Kg with handle	2 nos.
83.	Hammer Mallet		2 nos.
84.	Hammer Plastic		2 nos.
85.	Hand operated crimping tool (i) for crimping up to 4mm and (ii) for crimping up to 10mm		2 nos.
86.	Hand reamers adjustable	10.5 to 11.25 mm, 11.25 to 12.75 mm, 12.75 to 14.25 mm and 14.25 to 15.75 mm	2sets
87.	Hand Shear Universal	250mm	2 nos.
88.	Hand vice -	37 mm	2 nos.
89.	High rate discharge tester (cell tester)		1 no.
90.	Holders, lamp teakwood boards, plug sockets, solders, flux wires and cables batteries round consumable blocks and other consumables as required		As required
91.	Hollow Punch set of seven pieces 6mm to 15mm		2 sets each

92.	Insulated Screw driver	20 cm x 9mm blade	4 nos.
93.	Insulated Screw driver	30 cm x 9mm blade	4 nos.
94.	Left cut snips	250mm	4 nos.
95.	Lifting jack screw type	3 ton, 5ton & 20 Ton capacity	1 each
96.	Magneto spanner set with 8 spanners		1 set
97.	Magnifying glass	75mm	2 nos.
98.	Marking out table	90X60X90 cm.	1 no.
99.	Multimeter digital		5 nos.
100.	Multi-point fuel injection pump		1 no.
101.	Oil can	0.5/0.25 liter capacity	2 nos.
102.	Oil Stone	15 cm x 5 cm x 2.5 cm	1 no.
103.	Oscilloscope	20MHz	2 nos.
104.	Outside micrometer	0 to 25 mm	4 nos.
105.	Outside micrometer	25 to 50 mm	4 nos.
106.	Outside micrometer	50 to 75 mm	1 no.
107.	Outside micrometer	75 to 100 mm to 300 mm 100 mm	1 no.
108.	Philips Screw Driver set of 5 pieces		2 sets
109.	Pliers combination	20 cm.	2 nos.
110.	Pliers flat nose	15 cm	2 nos.
111.	Pliers round nose	15 cm	2 nos.
112.	Pliers side cutting	15 cm	2 nos.
113.	Portable electric drill Machine		1 no.
114.	Portable headlight aiming kit		1 no.
115.	Prick Punch	15 cm	4 nos.
116.	Punch Letter 4mm (Number)		2 set
117.	Scriber	15 cm	2 nos.
118.	Scriber with scribing black universal		2 nos.
119.	Set of stock and dies - Metric		2 sets
120.	Soldering Copper Hatchet type	500gms	5 nos.
121.	Spanner Clyburn	15 cm	1 no.
122.	Spanner D.E. set of 12 pieces	6mm to 32mm	4 nos.
123.	Spanner T. flocks for screwing up and up-screwing inaccessible positions		2 nos.
124.	Spanner, adjustable	15cm.	2 nos.
125.	Spanner, ring set of 12 metric sizes	6 to 32 mm.	2 nos.
126.	Spanners socket with speed handle, T-bar, ratchet and universal upto 32 mm set of 28 pieces with box		2 nos.
127.	Spark lighter		2 nos.
128.	Spark plug spanner	14mm x 18mm x Size	2 nos.
129.	Steel measuring tape	10 meter in a case	2 nos.
130.	Steel rule	15 cm inch and metric	2 nos.

131.	Steel rule	30 cm inch and metric	2 nos.
132.	Straight edge gauge	2 ft.	1 no.
133.	Straight edge gauge	4 ft.	1 no.
134.	Stud extractor set of 3		2 sets
135.	Stud remover with socket handle		1 no.
136.	Surface gauge with dial test indicator plunger type i.e. 0.01 mm		2 nos.
137.	Tachometer (Counting type)		1 no.
138.	Taps and Dies complete sets (5 types)		1 set
139.	Taps and wrenches - Metric		2 sets
140.	Telescope gauge		4 nos.
141.	Temperature gauge	0-100 deg c	2 nos.
142.	Tester sparking plug 'NEON' Type		1 no.
143.	Thermostat		2 nos.
144.	Thread pitch gauge metric, BSW		1 no.
145.	Timing lighter		1 no.
146.	Universal puller for removing pulleys, bearings		1 no.
147.	V' Block	75 x 38 mm pair with Clamps	2 nos.
148.	Vrnier caliper	0-300 mm with least count 0.02mm	4 nos.
149.	Vice grip pliers		2 nos.
150.	Voltmeter	50V/DC	5 nos.
151.	Wire Gauge (metric)		5 nos.
152.	Work bench	250 x 120 x 60 cm with 4 vices 12cm Jaw	1 no.
153.	4 Point relays		2 nos.
154.	5 Point relays		2 nos.
C. GENERAL INSTALLATION/ MACHINERIES			
155.	Air bag simulator		1 no.
156.	Air conditioned MPFI vehicle with auto transmission and accessories		1 no.
157.	Air conditioning service Unit (Car)		1 no.
158.	Air conditioning trainer kit		1 no.
159.	Alternator assembly used for LMV		1 no.
160.	Arbor press hand operated 2 ton capacity		1 no.
161.	Cut section Model of Mock layout of a motor car -electrical system -working model		1 no.
162.	Demonstration board Ignition system, ignition coil		1 set

163.	Demonstration board of CRDI system working model		1 no.
164.	Demonstration board of MPFI system working model		1 no.
165.	Discrete Component Trainer / Basic Electronics Trainer		1 no.
166.	Drilling machine bench to drill up to 12mm dia along with accessories		1 no.
167.	Electronic engine control module		1 set
168.	Grinding machine (general purpose) D.E. pedestal with 300 mm dia		1 no.
169.	Memory keeper / Battery backups		1 no.
170.	Multi scan tool /ECU diagnostics kit		1 no.
171.	Petrol Engine(4-stroke) Motor Cycle/Scooter along with special tools and accessories		1 no.
172.	Starter motor axial type, pre-engagement type & Co-axial type		1each
173.	Trolley type portable air compressor single cylinder with 45 liters capacity Air		1 no.
174.	Ultrasonic Injection cleaning equipment		1 no.
175.	Wiper motor assembly		2 nos.
176.	Working Model of power windows		1 no.
177.	Desktop Computer	CPU: 32/64 Bit i3/i5/i7 or latest processor, Speed: 3 GHz or Higher. RAM:-4 GB DDR-III or Higher, Wi-Fi Enabled. Network Card: Integrated Gigabit Ethernet, with USB Mouse, USB Keyboard and Monitor (Min. 17 Inch. Licensed Operating System and Antivirus compatible with trade related software.	1+1
178.	Internet connection with all accessories		As required
179.	Laser printer		1 no.
180.	LCD projector/ LED /LCD TV (42")		1 no.
181.	Online UPS 2 KVA		As required
D. LIST OF CONSUMABLES:			
182.	Assortment of diodes / electronic components		As required
183.	Automatic Transmission oils		As required

184.	Backing Soda		As required
185.	Battery cleaner spray		As required
186.	Battery- SMF		As required
187.	Brake fluids		As required
188.	Chalk, Prussian blue.		As required
189.	Chemical compound for fasteners		As required
190.	Diesel		As required
191.	Different type gasket material		As required
192.	Different type of oil seal		As required
193.	Drill Twist (assorted)		As required
194.	Emery paper -	36-60 grit , 80-120	As required
195.	Fender cover		As required
196.	Gear oils		As required
197.	Hacksaw blade (consumable)		As required
198.	Hand rubber gloves tested for 5000 V		5 pair
199.	Holder, lamp teakwood boards, plug sockets, solders, flux wires and cables batteries round consumable blocks and other consumables as required		As required
200.	Hydrometer		8 nos.
201.	Jumper wires		As required
202.	Lapping abrasives		As required
203.	Leather Apron		5 nos.
204.	Petrol		As required
205.	Safety glasses		As required
206.	Steel wire Brush 50mmx150mm		5 nos.
E. WORKSHOP FURNITURE AND MATERIAL			
207.	Book shelf (glass panel)	6.5' x 3' x 1.5'	As required
208.	Computer Chair		1+1
209.	Computer Table		1+1
210.	Discussion Table	8' x 4' x 2.5'	2 nos.
211.	Fire Extinguishers, first- aid box		As required
212.	Instructional Material - NIMI Books/Ref.books		As required
213.	Multimedia DVD for Automotive application/subjects		As required
214.	Stools		21 nos.
215.	Storage Rack	6.5' x 3' x 1.5'	As required
216.	Storage shelf	6.5' x 3' x 1.5'	As required.
217.	Suitable class room furniture		As required
218.	Suitable Work Tables with vices		As required
219.	Tool Cabinet -	6.5' x 3' x 1.5'	2 nos.

220.	Trainees locker	6.5' x 3' x 1.5'	2 Nos. to accommodate 20
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Note: -

- 1. All the tools and equipment are to be procured as per BIS specification.*
- 2. Internet facility is desired to be provided in the class room.*