


Name of Supplier / Firm :						
#	Description of Tool/Equipment	Specifications	Quantity in each set Nos.	Brand / Manufacturer name	Price Per Unit[i]	Total Amount Per Set INR[iii]
1	2	3	4	5	6	8
1	Portable Gas Charging Station - Evacuation and Charging (E&C) with weighing scale	a) 2-stage rotary vane high vacuum pump b) 4-way gas manifold, hose pipes - 3 of 1/4" and 1 of 3/8" or 1/2" c) Direct Drive motor-pump (Light in weight & easy to carry) d) High ultimate Vacuum (10 micron in double stage) e) 2880 RPM Motor with thermal protector f) Intake: 1/4" and 3/8" Male flare g) Air displacement: 100/120 lpm h) 1/3 hp motor i) Oil-mist filter with connection 1/2" for refrigerant venting hose j) 1.2 meter long, with metal handle at end of hose fits tight, areas and traps all the gas, k) Full flow valve, with standard gasket and valve opener. l) Hoses rated for 870 psi (60 bar) working pressure, operating temperature range -30° C to +80°C. m) Set supplied with 10 spare gaskets and 3 spare valve core depressors n) 1 meter long, rated for 870 psi (60 bar) working pressure. Operating temperature range -30° to +80°C. o) 3/8" Vacuum port for use with larger hose to cut evacuation time (other fittings 1/4") p) Large, easy-to-read 80/100 mm steel case red and blue q) 1% accuracy (Class 1) gauges r) Front access for easy field recalibration s) Double "O" ring piston for reliability and long service life t) Exclusive 100 mesh filter in-line on all flare fittings helps keep out particulate material and extend the life of the seats u) Contoured easy-grip handles for positive control; color-coded for identification v) Sight glass to easily view refrigerant movement and condition during charging and recovery. Weighing scale specifications	2			

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1	2	3	4	5	6	7	8
		w) Platform type (225 x 300 mm) x) 20-25 kg capacity, y) Least count/readability/accuracy 1 or 2 g only, CE certified For HCFC-22, R410A/407c, R-290 a) Recovery capabilities: Vapor 15 g, liquid 1.5ltrs, push/pull 5ltrs per minute b) Refrigerant compatibility: R-22, R-134a, R-407C, R-410A and blends. c) Low pressure, shut-off sensor d) Standard, suction and discharge pressure gauges e) Standard, upgraded higher suction and discharge pressure gauges f) Standard, upgraded single higher pressure switch g) Standard external circuit breaker h) Standard warranty i) Standard Certified to ARI standard: ARI 740-98					
2	Refrigerant Recovery Unit	a) Moisture and oil removal from recovered refrigerant b) Tool to be used in combination with a recovery unit c) 4 Way manifold gauge d) Large capacity oil separator e) Oil drain valve f) Filter-drier g) Refrigerant sight glass with moisture indicator h) Rugged carrying case, Weight about 5,5 kg	2				
3	Refrigerant Recycling Unit	a) 8 kg capacity separate for R-22, HFC-410A/407C, b) Meeting European packing instructions ADR P200, c) Manufacturing standard TPED EN13322-1, d) Test pressure of 42 bar (600psi)	2				
4	Refrigerant Recovery cylinder	a) (R-22, R-410A, R-407C) Flexible probe with sensitivity: HFC (R-410A) 1.7g/yr. HCFC (R-22) 0.9 g/yr. b) Warm up time: 20 seconds or less c) Calibration: Automatic d) Response time: Instantaneous,	2				
5	Refrigerant Leak Detector		1				






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1	2	3	Nos.				
		e) Operating temperature range: -15° to 50°C, Humidity: 0 to 95% RH non-condensing, Approvals: CE marked, EN 14624, EC 1516/2007 and DIN 378	4	5	6	7	8
6	Combustible Gas Detector (R290)	a) Ultra-sensitive, b) Long life sensor detects less than 15 ppm methane and better than 12 ppm for propane. Probe length: 450mm c) Sensor life: about 500 hours, d) Operating temperature range: 0° to 43°C.	1				
7	Set of Tracer Gas Leak Detector	a) For the use with tracer gas mixture of 95% N2 and 5% H2, b) For leaks finding < 1gr/a c) Conformity with EN35422, EN14624, Complete set with tracer gas detector, pressure regulator, manifold gauge, 2 Litre gas cylinder, service hose and plastic case	1				
8	Mini hand held refrigerant identifier for HCFC / R-22	a) Fast and accurate refrigerant analysis to verify the presence and quality of HCFC, R-22 in RAC systems or storage cylinder b) Simple to use unit providing step-by-step indication of the gas sampling process Accuracy: Pass/Fail – 95% pure R22 c) Power requirements: 9 Volt battery d) Approvals: UL and CE e) Interface: Membrane type with visual indicators and function keys, f) Calibration method: Electric internal pump, Operation temperature: 10°C to 45°C, Unit provided with ABS housing and moulded rubber sleeve in rugged carrying case	1				
9	Core Removal Tool:	a) Valve core removal without refrigerant losses b) Brass tool with ball-valve and with magnetic tip, One 1/4" male flare SAE connection and One female 1/4" SAE connection, c) One 5/16" male flare SAE connection and One female 5/16" SAE connection	2 sets of 1/4" and one set of 5/16"				



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1	2	3	Nos.		INR	7	8
		d) Tool equipped with ball-valve	4	5	6		
10	Refrigerant Transfer Hose Brass Adapter,	a) For HFC R-410 A appliances to be connected with regular 1/4" hoses, b) Dimension: 1/4" SAE x 5/16" SAE	2				
11	Capillary Tube Cutter		2				
12	Tube Cutter	a) with roller trackers (1/8 to 3/4" OD)	3				
13	Reamer	a) Inner-outer	4				
14	Burr Remover	b) Inner-outer	4				
		a) for 1/4", b) for 3/8", c) for 1/2" 10 mm dia, and wall thickness of 1.2 mm tubes, d) for 1/2" 12 mm dia, and wall thickness of 1.2 mm tubes, e) for 1/2" 16 mm dia and wall thickness of 1.2 mm tubes, f) Steel die with graduations from 0° to 180° for bends at any angle bends.	1 each				
15	Tube Bender (lever-mechanical type)						
16	45° Flaring and Swaging Tool	a) Swaging Punch - Universal designed bar will hold all inch and metric size tubing 1/8"(3mm) up to 5/8" (16 mm) and b) Swage tool for 1.2 mm wall thickness for 1/4", 3/8", 1/2", 3/4" dia tubes	4 sets				
17	Torque Wrench	a) Consisting of torque wrench (torque 10 to 75 Nm), insert able open-ended wrench in the sizes of 17, 19, 22, 24, 26, 27 and 29 mm resp, Material in vanadium steel, chrome finish.	1				
18	Hose pipes with crocodile clips for N2 and O2 gas and LPG	a) IS brand and IS:447 complied for O2, N2 and LPG	1 each of 5 mtr length				
19	Vent hose	a) (Yellow/Blue 1/2"Dia with suitable port) 25 meter long a) Multi-function 400 A - AC current, b) Voltage 600 AC, c) Voltage 600 DC, d) Resistance 20MOhm, e) Capacity tester 0-50 µF,	2				
20	Digital Clamp Meter		2				



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			Nos.						
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		f) LCD, +/-1.8% + 0.6 A g) AC Current Accuracy, Includes Test Leads, Carrying Case, Battery and Spare battery)							
21	Digital Thermometer	a) (-25 to +100C with 0.1 or 1° accuracy, LCD display 16 mm)	2						
22	Line Tester (500 V, 150-200mm long)		2						
23	dB Meter or Noise Tester		1						
24	Piercing pliers/wrench/valves		2						
25	Pinch Off Pliers / Self Locking Pliers up to 3/8" OD		1						
	Screw driver set		2 sets						
26	(- and + tip of 6 mm width) 200-250-300 mm long								
27	Adjustable spanner set (150mm)		2						
28	Insulated combination pliers (200 mm)		2						
29	Insulated nose pliers (200 mm)		2						
30	Monkey pliers (100 mm open jaw)		2						
31	Allen key Set	Sizes 2,5 / 3 / 4 / 5 / 6 / 8 and 10	1						
	Ratchet wrench / Service valve wrench								
32	with Sockets 1/4", 3/16", 5/16" sq. and 9/16" x 1/2" Hexagonal		2						

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			Nos.				Per Set	INR[iii]	
1	2	3	4	5	6	7	8		
33	Flat Rough File (25 mm width, 200 mm long)		1						
34	Round File (150 mm long)		1						
35	Wire Stripping Tool and connectors set for crimping insulated, non - insulated and coax plug connectors		2						
36	Hacksaw kit with wing nut (Blade with frame size 300 mm)		1						
37	Hammer (400/500 g) with wooden handle		1						
38	Chisels (20mm)		1						
39	Circular Mirror - (50 mm ø)		2						
40	Tongs		2						
41	Gas lighter		2						
42	Spirit Level / Inclinator: 150 - 200 mm		1						
43	Measuring Tape (5 meter long 13 mm wide with steel, winding type)		2						
44	Paint Brush (50 and 25 mm wide)		1 each of 25 and 50 mm						
45	Fins Comb / Fin tool Fitting all sizes		1						
46	Knife (150 mm long)		2						
47	Light Weight Hand Electrical Air Blower		1						
48	Hand Drill Machine (6mm dia)		1						
49	Scrubber / Brass Wire Brush		2						



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			each set Nos.		Unit[i]	Amount	Amount
						INR	Per Set INR[iii]
1	2	3	4	5	6	7	8
50	Asbestos lined Heat Deflector		2				
51	LED Torch		2				
52	Protective goggles	a) according to EN 166	3				
53	Protective gloves	a) according to EN 374 - Kat.III	3				
<div></div> <div>Signature with company seal</div> <div>Date :</div>							