

RAC

Syllabus S.No.	Specification of items	Quantity of DGET
1	Flaring tool set, single type for tube 4.7to 16 mm OD	5 Sets
2	Swaging tool, punch type, set of size, for tube 4.7 to16 mm OD.	2 Sets
3	Swaging tool, screw type, with adapter set of size for tube 4.7 to 16 mm OD.	2 Sets
4	Bending spring external type, for copper tube 3 to 6 mm. Dia	2 Sets
5	Pipe cutter miniature for copper tube 3 to 16 mm. Dia	5 Nos.
6	Pipe cutter with built-in reamer and space cutter, for copper tube 3 to 32 mm.	4 Nos.
7	Pinch off tool, for copper tube 6 to 18 mm.dia	4 Nos.
8	Ratchet spanner of 6.4 mm. sq. reversible	4 Nos.
9	Capillary plug gauge	2 Nos.
10	Pinch off pliers/crimping pliers tool 6-18 mm.dia	2 Nos.
11	Piercing pliers 6-18 mm. & piercing valves both with access fittings	4Nos.each
12	Spanner, double ended 4.7 mm to 16 mm.	3 sets
13	Spanner, double ended 19 mm to 31.8 mm.	1 set
14	Ring spanner, off set 4.7 mm to 16 mm.	3 Sets
15	Ring spanner, off set 19 mm to 31.8 mm.	1 set
16	Box spanner size 6.4 to 10 mm.	2 sets
17	Wrench adjustable length 150 mm.	4 Nos
18	Wrench adjustable length 200 mm.	4 Nos.
19	Wrench adjustable length 225 mm.	2 Nos.
20	Pipe wrench size 150 mm.	2 Nos.
21	Pipe wrench size 250 mm.	2 Nos.
22	Torque wrench 300 mm. 12.7 mm. square drive right and left hand	1 set
23	Valve key –T, handle – 4.7 & 6.4 mm. sq.	4 sets
24	Socket set, ratchet, reversible 12.7 mm. square drive with extension, 4.7 to 31.2 mm.	2 sets
25	Socket set, ratchet, reversible, 1/2 square drive with extension, 3/16 to 11/4 BSW & SR	1 Set
26	Pressure gauge, diameter 63 mm. with recalibration set screw, scale 0 to 35 kg/sq.cm.	6 Nos.
27	Compound gauge, diameter 63 mm. with recalibration set screw, scale vacuum 76 mm. pressure 15 kg/sq.cm.	6 Nos.
28	Serviceman thermometer in metal case(-30 to+30 Deg. C)	2 Nos.
29	Sling psychrometer mounted on aluminum back scale (-50 Deg. c. to +50 Deg. C).	2 Nos.
30	Gas leak detector for halogen gas	2 Nos.
31	Lapping plate 250x200 mm.	1 No.
32	Punch hole for cutting gasket, 4.7 to 16 mm. dia	2Nos.
33	Scissor, gasket cutting stainless steel, length 25 mm.	2 Nos.
34	L –Allen key set, size 1.5 to 6.4 mm.	2 sets

35	T –Allen key set, size 5/32 & 1/8	2 sets
36	Screw driver, plastic handle, 6 mm. tip length 100,150mm.	5 each
37	Screw driver, plastic handle, 10 mm. tip length 200.250mm.	5 each
38	Philips screw driver- complete set in leather case	2 sets
39	Screw driver, plastic handle,3 mm. tip length 100 and 150mm. insulated	2 sets
40	Pliers combination insulated, length 200 mm.	4 Nos.
41	Pliers long nose, length 200mm.	2 Nos.
42	Pliers flat nose, length 150mm.	2 Nos.
43	Hammer ball peen 450 gms.	2 Nos.
44	Hammer ball peen 220 gms.	2 Nos.
45	Hammer nylon 300 gms.	2 Nos.
46	Tape, measuring 10 m graduation in mm.	1 No.
47	Tape, measuring 2 m graduation in mm.	2 Nos.
48	Chisel flat length 150 mm.	2 Nos.
49	Hack-saw tubular metal frame adjustable	4 Nos.
50	Centre punch length 100 mm.	4 Nos.
51	Oil can pressure type – 1 liter	2 Nos.
52	File, flat medium double cut, length 200 mm.	4 Nos.
53	File, half round medium, double cut length 200 mm	4 Nos.
54	File, half round, fine double cut, length 150 mm.	4 Nos.
55	File, round, fine, double cut, length 150 mm.	4 Nos.
56	File flat, fine double cut, length 150 mm.	4 Nos.
57	File square, fine double cut, length 150 mm.	4 Nos.
58	Soldering Iron exchangeable copper tip 65 watts.	5 Nos.
59	Pipe bending tool, lever type with degree indicator, for tube OD 6.4 to 16 mm.	2 Sets
60	Puller 3 legged, with flexible arm 120 mm.	1 No.
61	Puller 2 legged, with flexible arm 300 mm.	1 No.
62	Hand blower portable complete 1/10 HP motor & other attachments.	1 No.
63	Snipper sheet metal straight nose 200 mm.	1 No.
64	Vernier Caliper length 250 mm.	1 No.
65	Micrometer, outside measurement 0-25 mm.	2 Nos.
66	Vernier height gauge 250 mm.	1 No.
67	Bench vice 75 mm. jaw	2 Nos.
68	Bench vice 120 mm. jaw	2 Nos.
69	Electrical drill portable with chuck and key, capacity 6.4 mm.	2 Nos.

70	Pillar drilling machine 200 to 2500 rpm. capacity 20 mm.	1 No.
71	Pedestal grinder, double ended wheel dia 200 mm. 3000 rpm.	1 No.
72	Oxy- Acetylene welding set complete with cylinders regulators welding torches with difference nozzles	1 set complete
73	Gas cylinder truck two wheel type	1 No.
74	Line tester 500 volt. Heavy duty	4 Nos.
75	Tong-tester 0-10-30 amps. 0-500 volts (Clamp on Multimeter)	4 Nos.
76	Voltmeter AC/DC portable, precision grade teak wood case, leather belt, 0 to 5 amp.	5 Nos.
77	Ammeter AC/DC portable, precision grade teak wood case, leather belt, 0 to 30 amp.	5 Nos.
78	Megger- 1000 Volt.	1 No.
79	Variac input 230 volt output 400 volt. amp. portable complete with meters and controls.	1 No.
80	Wattmeter, multi range up to 1 KW	1 No.
81	Wattmeter, multi range up to 5 KW	1 No.
82	Multimeter – Analog type Technical Specifications : DC Voltage range:0.1, 0.5, 2.5, 10, 50, 250, 1000V Accuracy at FSD:4% Sensitivity :20Kohm / V DC Current range:50microA(at 0.1VDC position),2.5~25mA, 0.25A Accuracy at FSD:+3% Volt drop :250mV AC Voltage range:10, 50, 250, 1000V Accuracy at FSD:5% Sensitivity :9Kohm / V Decibel meter:-10 ~ +50dB, 0dB = 1mw/600 Resistance range:X1~0.2ohm up to 2Kohm, Mid scale at 20ohm :X10~2ohm up to 20Kohm, Mid scale at 200ohm :X1K~200ohm up to 2Mohm, Mid scale at 20Kohm :X1K~2Kohm up to 20Mohm, Mid scale at 200Kohm ICEO (leakage current test) : 150microA, 15mA, 150mA hFE (DC amplification) : 0-1000 Power requirement:Battery AA, 1.5V x 2nos. &9V (Included) Weight : 300g Approx. Standard Accessories : Probes, Batteries, Instruction manual	3 Nos.
83	Multimeter – Digital type Technical Specifications: <ul style="list-style-type: none"> DC Voltage range:200mV, 2V, 20V, 200V, 1000V 	3 Nos.

	<ul style="list-style-type: none"> • Accuracy :+(0.5% + 3 Digit) • DC Current range: 20microA, 2mA, 200mA, 20A • Accuracy:+(1.5% + 3 Digit) • AC Voltage range: 2V, 20V, 200V , 750V • Accuracy:+ (0.8% + 5 Digit) • AC Current range:2mA, 200mA, 20A • Accuracy:+(1.5% + 3 Digit) • Resistance range:200ohm, 2Kohm, 20Kohm, 200Kohm, 2Mohm, 20Mohm • Accuracy :+ (0.8% + 3 Digit) • Capacitance range:20nF, 200nF, 20microF, 200microF • Accuracy :+ (2.5% + 20 Digit) • Temperature:- 40OC ~ 1000OC • Accuracy :+ (0.8% + 4 Digit) • Input impedance:10Mohm • Sampling Rate:3s • AC Frequency Response:40 ~ 400Hz • Power requirement:Battery 9V (Included) <p>Standard Accessories : Probes, Batteries, Instruction manual</p>	
84	<p>Tachometer digital, multi range 0 to 3000 rpm. Portable, small size in leather case.</p> <p>Technical Specification :</p> <p>Measuring range :Photo/Laser : 5-99,999 RPM :Contact : 5-19,999 RPM, 0.05-999.9m/min (0.2-6,560ft/min)</p> <p>Measuring distance:Photo/Laser : max.2.0 meters</p> <p>Measuring angle:Photo/Laser : 600 :Contact : 1200</p> <p>Resolution :0.1 RPM (< 1000 RPM), 1.0RPM (>1000 RPM)</p> <p>Accuracy : ±0.05% +1 digit</p> <p>Laser output : <1mW, Class II</p> <p>Sampling time: 1 secretary. (over 6 RPM)</p>	1 No.
85	<p>Transistor tester AC voltage test</p> <p>Technical Specifications :</p> <p>Breakdown Voltage V(BR)</p> <p>Measuring range:1000V, Display 0~1000 Resolution 1V :200V, Display 0~199.9 Resolution 0.1V</p> <p>Operating condition:Breakdown current less then 1mA</p> <p style="text-align: center;">Collector Emitter Saturation Voltage Drop VCE(sat)</p> <p>Measuring range:2A (IC), Display 0~6.00, Resolution 0.01</p> <p>Operating condition:IC approx 2000mA :Ibapprox 200mA</p>	1 No.

	<p>Measuring range:800mA (IC), Display 0~6.00, Resolution 0.01 Operating condition:IC approx 800mA :lbapprox 80mA</p> <p>Measuring range:100mA (IC), Display 0~6.00, Resolution 0.01 Operating condition : IC approx 100mA : lbapprox 10mA</p> <p>Measuring range:10mA (IC), Display 0~6.00, Resolution 0.01 Operating condition:IC approx 10mA :lbapprox 1mA</p> <p>hFE DC Current Measuring range : 10mA (IB), Display 0~199.9, Resolution 0.1 Operating condition:IC approx 10mA Measuring range : 1mA (IC), Display 0~1999, Resolution 1 Operating condition:lbapprox 1mA Measuring range : 10microA (IC), Display 0~1999, Resolution 1 Operating condition:lbapprox 0.01mA</p> <p>Reverse Leakage Current Measuring range : 2000microA, Display 0~1999 Resolution 1micro Operating condition:Testing voltage approx 27V</p> <p>78 & 79 Voltage Regulation Measuring range : 78XX / 79XX, Display 0~24 Resolution 0.1V Operating condition: Testing voltage approx 27V Weight : 500gm Approx. Dimensions (mm) : 150(L) x 100(B) x 65(H)</p> <p>Standard Accessories : Probes, Batteries, Instruction manual</p>	
86	<p>R.L.C. Bridge Technical Specifications : R: 0.0001ohm - 99.99 Mohm , C : 0.01 pF -19999microF, L :0.01 microH - 9999H D: 0.0001 - 9.999, Q: 0.01 - 9999 Measuring parameters : L-Q , C-D , R-Q Test frequency : 100 Hz , 1 kHz , 10 kHz Level : 0.3Vrms Accuracy : 0.25% Display range : R, 0.0001ohm -99.99 Mohm : C, 0.01 pF -19999 microF : L, 0.01microH -9999 H</p>	1 No.

	: D, 0.0001 - 9.999 : Q, 0.01 - 9999 Sampling rate : 5 times/sec. Equivalent circuit : Series, Parallel Test Mode : Auto, Hold Calibration : Open circuit, Short circuit and Zeroing Test Ports 5 terminals Display mode : Direct readout Power requirement : 220 VAC +10% , 50 Hz Weight : 3.0Kg Approx. Dimensions (mm) : 360(L) x 340(B) x 120(H) Standard Accessories : Power cable, Instruction manual	
87	Stop watch	1 No.
88	Hand grinder small	1 No.
89	Filler, gauge 0.05 mm. -1 mm.	1 Set
90	Wire gauge metric and Whitworth	1 Set
91	Refrigerant cylinder capacity 2.5 Kg.	2 Nos.
92	Refrigerant cylinder capacity 20 Kg.	2 Nos.
93	Refrigerant cylinder capacity 05 Kg.	2 Nos.
94	Evacuating & refrigerant charging station comprising Rotary two stage vacuum pump and motor (with gas ballast & anti suck back) Manifold with gauges & valves and capable of pulling vacuum up to 50 microns of Hg and with provision of connecting to a micro level vacuum Gauge. Graduated charging cylinder with provisions for temperature correction and all necessary isolating valves Evacuating & charging station as above but fitted with weighing scale (up to 2 kg. in lieu of (b) above and with accuracy of +/- 1gram, for charging hydrocarbons.	1 Set.
95	Dial thermometer remote control, armored capillary dial 75 mm.-50 Deg. C to + 50 Deg. C.	1No.
96	Two stage rotary vacuum pump of capacity approx 60-100 L/min., capable of evacuating to 50 microns of Hg and fitted with gas ballast, anti suck back valve and single phase motor.	1 No.
97	Anemometer (Vane type)	1 No.
98	Air compressor, two stage for oil-less dry air, with rust proof tank assembly. Heater and control max. Pressure. 10 kg/sq. cm cap. 45 liter, Motor 1 HP	1 No.
99	Scraper, triangular blade removable 60 mm.	2 Nos.
100	Descaling pump set with stainless steel impeller and housing complete with motor 1 HP and accessories.	1 No.

101	Spray outfit, 'V' twin, with motor ½ HP. delivery up to 120 liter free air pressure up to 3 Kg/sq.cm. with spray gun and fitting.	1 No.
102	Pressure testing tank with lighting arrangement, pressure gauge (0 to 35 kg/sq.cm.) double stage	1 No.
103	Heating kit with infra red bulb (200 watt capacity)	1 set
104	Refrigerator, compression type 165 litter /170 litter capacity	2 nos
105	Refrigerator compression type 300 litters double door, double compressor system	2 nos
106	Deep freezer 165 liter -18 C, 1/4 HP	1 no
107	Window Air Conditioner capacity 3000 Kcal/Hr	2 Nos
108	Window Air Conditioner capacity 4500 Kcal/Hr	2 nos
109	Split Air Conditioner capacity 4500 Kcal/Hr	2 nos
110	Split Air Conditioner capacity 4500 Kcal/Hr inverter control energy saver	2 nos
111	Split Air Conditioner capacity 6000 Kcal/Hr (Ductable)	2 nos
112	Bottle Cooler 110 liters, 1/6Hp	1 no
113	Water Cooler Instantaneous Type	2 nos
114	Water cooler Storage Type 30 litter storage Capacity	2 nos
115	Ice Candy Unit complete with stainless steel tank, Mould Box, Thermocole insulated sun mica body, agitator compressor, motor etc. Temperature and Pressure gauges, motor and pipe fittings etc. 3000 Kcal/Hr or working trainer model/simulator.	1 no
116	Prefab PUF insulated panel for cold room 6X4.5X8 cft. Maintaining temperature 0 C to +5 C. Condensing unit complete with semi sealed compressor duly mounted on base plate and charged R-22 gas. Evaporating unit complete with expansion valve and other accessories. Electrical control panel complete with digital temperature and pressure indicators and other electrical controls. Fabrication ,erection, Insulation completed by supplier.	1 complete set.
117	Air conditioning Plant, Direct system with Air cooled condenser, complete with all controls including humidity control etc. capacity 15000 Kcal/hr or working trainer model/simulator. Alternatively, a packaged Air-conditioner of similar capacity.	1 no
118	Air conditioning plant, Indirect system with Water cooled condenser, chiller, cooling tower, complete with all controls including humidity control etc. capacity 15000 KCal /hr or working trainer model/ simulator.	1 no

119	Condensing unit with open type compressor air cooled condenser controls etc. capacity 3000 kcal/hr.	1 no
120	Condensing unit with open type compressor evaporative condenser controls etc. capacity 3000 Kcal/hr.	1no
121	Reciprocating compressor with provision of capacity control etc. for demonstration, capacity 9000 Kcal/hr.	1 no
122	Micron vacuum gauge capable of reading up to 20 microns	2 no.
123	Sensor Thermometer (digital)	2 nos
124	Fin Straightener/fin comb	4 nos
125	HC refrigerant cylinders / disposable containers	2 nos
126	134a refrigerant cylinders	2 nos
127	Recovery unit for 134a refrigerants with recovery cylinder.	1 no
128	Recovery unit for CFC refrigerants with recovery cylinder	1 no
129	Reverse cycle AC/Heat pump 3000 Kcal/hr or 4500 kcal/hr	1no
130	Refrigerator 170 liter using 134a refrigerant	2 nos
131	No Frost refrigerator 300 liter capacity using HC refrigerant	2 nos
132	Automatic Ice cube m/c capacity 5 Kg/hr.	1no
133	Fire extinguisher powder type	2 nos
134	Dry Nitrogen gas cylinder with drier unit and 2 stage pressure regulator	1 no
135	Two way manifold with gauges	1 no
136	Four way manifold with gauges	1 no
137	Small car A/C kit with driving arrangements	1 no
138	Components of Car A/C systems . Wobble plate compressor with mounting brackets, serpentine evaporator, parallel flow condenser hoses, tubes, receiver, expansion valve, electrical components and siring harness.	1 no each.
139	Small capacity shell and tube condenser	1 no
140	Fan Coil unit with water valves(2 & 3 way)	1 no
141	Shell and tube DX chillers (small)	1 no
142	Circulating water pump(small)	1 no
143	Schraeder valve core removal tool	1 no
144	Pitot tube & inclined tube manometer	1 no
145	Hermetic compressors(1/6hp)	2 nos

146	Hermetic compressors(1/2hp)	1 no
147	Semi-hermetic compressor(1/2hp)	1 no
148	Rotary compressor 1 TR	2 nos
149	Quick couplers, process tube adapters for 1/4", 3/8" tubes	2 pairs for each tube.
150	VRV/VRF package unit with 2 indoor(casset) units 2.5 tTR each and 05 TR capacity out door unit complete with air cooled condenser . accessories & controls	01 unit complete

FURNITURE,ACCESSORIES AND AUDIO VISUAL AIDS FOR TRADE THEORY AND TRADE PRACTICAL

1	Almirahs, 195 X 90 X 49 cm	4 no
2	Lockers of eight compartments	2nos
3	White board portable	1 no
4	Desktop table and two revolving chairs.	1 set.
5	Work bench 1000X600X800 mm. high.	2 nos.
6	Over head projector	01no
7	LCD projector	01no.
8	Computer(Latest version) complete with UPS & other accessories	01 no.
9	Photo copy machine	01no.
10	Laser printer	01no.
11	Scanner	01no.
12	Interactive Board	01no.
13	Internet connectivity	01 no.
14	Computer Table	01 no.
15	Computer Chair	01no.