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ABSTRACT

NCB's

Sl No.	NCB's	Total Amount in Rupees
1	NCB-PKG-01	19600000
2	NCB-PKG-02	18640300
3	NCB-PKG-03	21120000
4	NCB-PKG-04	22000000
5	NCB-PKG-05	18000000
6	NCB-PKG-06	21000000
7	NCB-PKG-07	20940000
8	NCB-PKG-08	21020000
9	NCB-PKG-09	21368000
10	NCB-PKG-10	14780000
11	NCB-PKG-11	9873000
12	NCB-PKG-12	19626300
13	NCB-PKG-13	18336600
	Total	246304200

Small Tools

Sl No.	National Shopping Tools & Equipments	Total Amount in Rupees
1	NS-PKG-01	2850164
2	NS-PKG-02	2254975
3	NS-PKG-03	2278241
4	NS-PKG-04	3135971
5	NS-PKG-05	2420165
6	NS-PKG-06	2972035
7	NS-PKG-07	2549295
8	NS-PKG-08	2967208
9	NS-PKG-09	2913700
10	NS-PKG-10	3899000
11	NS-PKG-11	3609600
12	NS-PKG-12	3780480
13	NS-PKG-13	3935260
14	NS-PKG-14	3311200
15	NS-PKG-15	3775620
16	NS-PKG-16	3860000
17	NS-PKG-17	3885280
18	NS-PKG-18	3881150
19	NS-PKG-19	3663406
20	NS-PKG-20	3350946
21	NS-PKG-21	3003440
22	NS-PKG-22	2650000
23	NS-PKG-23	3774000
24	NS-PKG-24	3852400

25	NS-PKG-25	3814225
26	NS-PKG-26	3706296
27	NS-PKG-27	3775490
28	NS-PKG-28	3934000
29	NS-PKG-29	3747690
30	NS-PKG-30	3818000
31	NS-PKG-31	3606245
32	NS-PKG-32	3780000
33	NS-PKG-33	3292000
34	NS-PKG-34	3821800
35	NS-PKG-35	3160493
36	NS-PKG-36	3075330
37	NS-PKG-37	3113108
38	NS-PKG-38	3121744
39	NS-PKG-39	2824910
40	NS-PKG-40	2868100
41	NS-PKG-41	2961410
42	NS-PKG-42	1651520
43	NS-PKG-43	3227770
44	NS-PKG-44	3984000
45	NS-PKG-45	4000000
	Total	141873667

Furnitures

Sl No.	National Shopping Furnitures	Total Amount in Rupees
1	NS-FUR-PKG-01	2139600
2	NS-FUR-PKG-02	2117470
3	NS-FUR-PKG-03	2042600
4	NS-FUR-PKG-04	2025435
5	NS-FUR-PKG-05	1567800
6	NS-FUR-PKG-06	1860000
7	NS-FUR-PKG-07	1281480
8	NS-FUR-PKG-08	2012590
9	NS-FUR-PKG-09	1856000
10	NS-FUR-PKG-10	1932800
11	NS-FUR-PKG-11	1173600
12	NS-FUR-PKG-12	1955200
13	NS-FUR-PKG-13	1859600
	Total	23824175
	Grand Total	412002042

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SECTION - VI TECHNICAL SPECIFICATION

Package-1: Procurement list of Milling Machineries for Production and Manufacturing & Fabrication Sectors

SL. No.	DGET SL. No.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET	Total Qty	Estimated Cost Per Unit	Total Estimated Cost	Consignee Govt I.T.I
1	64,72	Milling machine Horizontal table size □1100x225mm, longitudinal movement □450mm,cross traverse □180mm,vertical movement □275mm,spindle ISO40,spindle speeds □9, spindle speed max; □1200 rpm, spindle motor □2 hp,feed motor □1 hp, with swivel base bench vice 150mm, long arbours 16,22,27 and 32mm,machine lamp,coolant fittings,with instructional manual. ISO Approved	PMBT-05,FBT-03	P&M-04 Nos, FAB-08 Nos	12	420000	5040000	KGF-01, Belgaum-01, Holenarasipura-01, Kanakapura-01, BT Centre,B-22-02, Devraysamudra-02, Kooknur-02, Nanjangud-02
2	63,71	Milling machine universal table size □1100x225mm, longitudinal movement □450mm,cross traverse □180mm,vertical movement □275mm,spindle ISO40,spindle speeds □9, spindle speed max; □1200 rpm, spindle motor □2 hp,feed motor □1 hp, with swivel base bench vice 150mm, long arbours 16,22,27 and 32mm,machine lamp,coolant fittings,with instructional manual. ISO Approved	PMBT-05,FBT-03	P&M-04 Nos, FAB-08 Nos	12	420000	5040000	KGF-01, Belgaum-01, Holenarasipura-01, Kanakapura-01, BT Centre,B-22-02, Devraysamudra-02, Kooknur-02, Nanjangud-02
3	65	Milling machine vertical, table size □1100x225mm, longitudinal movement □450mm,cross traverse □180mm,vertical movement □275mm,spindle ISO40,spindle speeds □9, spindle speed max; □1200 rpm, spindle motor □2 hp,feed motor □1 hp, machine vice □150mm, collet adopters and collets (set of 5 nos.),rotary table □300mm with indexing attachment,,machine lamp,coolant fittings,with instructional manual. ISO Approved	PMBT-05,FBT-03	P&M-04 Nos, FAB-08 Nos	12	420000	5040000	KGF-01, Belgaum-01, Holenarasipura-01, Kanakapura-01, BT Centre,B-22-02, Devraysamudra-02, Kooknur-02, Nanjangud-02
4	62,84,77,80	Universal testing machine Max capacity(tonne) UT-10 t Analog type or equalient with standard accessories ISO Approved	FBT-05, FAT-01, 03,04	FAB-16 Nos	16	280000	4480000	BT Centre,B-22-04, Devraysamudra-04, Kooknur-04, Nanjangud-04
Total Rs. One Crore Ninty Six Lakhs Only							19600000	

SECTION - VI TECHNICAL SPECIFICATION

Package-2: Procurement list of General Machineries for Production and Manufacturing , Fabrication, Automobile & R.

SL. No.	DGET SL. No.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET	Total Qty	Estimated Cost Per Unit	Total Estimated Cost
1	88,94	Nibbing machine appox no of stroke per min □1500,maximum tool lift □15mm, motor □3 HP or equalient With IS standard	FBT-02, PMBT-02	P&M-04Nos, FAB-04Nos	8	570000	4560000
2	74,74,84	Radial drilling Machine with Tapping Attachment : Spcn.Drilling Cap. In Steel □25 mm , Tapping Cap.in steel □M12 , Morse Taper in Spindle MT3, Spindle Travels □140 mm (App), No. of spindle speeds □6 (App), Spindle Speed upto □2600 rpm (App) , working area □240x180x180mm,with spindle drive motor 1hp,up and down movement motor □1hp, □3ph,with chuck coolant fittings, □150mm drilling vice with instructional manual. ISO approved.	FBT-01,PMBT-01, ABT-01	P&M-04Nos, FAB-04Nos, Auto-01 No.	9	372000	3348000
3	56	Surface grinding machine with hydraulically operated longitudinal traverse reciprocating movement with wheel dia □180mm(or near) longitudinal table traverse □200mm (or near) fitted with adjustable traverse stop, magnetic chuck □200mm x 100mm. With diamond dresser tool holder ,hydraulic pump unit,coolant pump fittings with instructional manual. ISO approved.	PMBT-04	P&M-04Nos	4	565000	2260000
4	90,84,81,67,90	Guillotine shearing machine foot operated(□1 mt x22 g capacity) 4mm Cutting capacity(appox) mild steel with (□2hp motor) HC shearing blade ,or equalient ISO approved.	ABT-02, PMBT-02,FBT-02 ,FAT-01,FAT-04	P&M-04Nos, FAB-12Nos, Auto-01 No.	17	116000	1972000
5	67,68,70,70	Power hacksaw hydrylic auto feed max cutting dia of □200mm motor capacity of □3 HP APPROX With IS standard	FBT-04, FAT-01,03,04	FAB-16Nos	16	106000	1696000

6	89	Spinning lathe, Swing □22" appox motor □3 HP, with standard tools & accessories, or equal	FBT-02, PMBT-02	P&M-04Nos, FAB-04Nos	8	150000	1200000
7	102,102,96	Hand press brake capacity (□0.8mm)	ABT-02, PMBT-02, FBT-02	P&M-04Nos, FAB-04Nos, Auto-01 No.	9	122500	1102500
8	96,90	Seaming machine seaming dia upto □200mm ,sheet thickness □0.46mm motor □3 HP	PMBT-02, FBT-02	P&M-04Nos, FAB-04Nos	8	86000	688000
9	103	Beading machine (with crimping rollers) any standard make	PMBT-02	P&M-04Nos	4	151725	606900
10	100	Bending machine with □380mm throat clearance (with clamp rollers)	FBT-02	FAB-04Nos	4	151725	606900
11	82,88	Slip roll former □1.6mmx1000mm	FBT-02, PMBT-02, RACBT-01	P&M-04Nos, FAB-04Nos, RAC-02 NoS.	10	60000	600000
Total Rs. One Crore Eighty Six Lakhs Forty Thousand Three Hundred Only							18640300

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TOTAL

NCB-F	168577500
CNC	22000000
H&P	21600000
PLC	35800000
RAC	11520000
AUTO	8735250
	268232750

AC Sectors

Consignee Govt I.T.I
KGF-01, Belgaum-01, Holenarasipura-01, Kanakapura-01, BT Centre,B-22-01, Devraysamudra-01, Kooknur-01, Nanjangud-01
KGF-01, Belgaum-01, Holenarasipura-01, Kanakapura-01, BT Centre,B-22-01, Devraysamudra-01, Kooknur-01, Nanjangud-01, Honnavaara-01
KGF-01, Belgaum-01, Kanakapura-01, Holenarasipura-01
KGF-01, Belgaum-01, Holenarasipura-01, Kanakapura-01, BT Centre,B-22-03, Devraysamudra-03, Kooknur-03, Nanjangud-03, Honnavaara-01
BT Centre,B-22-01, Devraysamudra-01, Kooknur-01, Nanjangud-01

KGF-01, Belgaum-01, Holenarasipura-01, Kanakapura-01, BT Centre,B-22-01, Devraysamudra-01, Kooknur-01, Nanjangud-01
KGF-01, Belgaum-01, Holenarasipura-01, Kanakapura-01, BT Centre,B-22-01, Devraysamudra-01, Kooknur-01, Nanjangud-01, Honnavaara-01
KGF-01, Belgaum-01, Holenarasipura-01, Kanakapura-01, BT Centre,B-22-01, Devraysamudra-01, Kooknur-01, Nanjangud-01
KGF-01, Belgaum-01, Kanakapura-01, Holenarasipura-01
KGF-01, Belgaum-01, Kanakapura-01, Holenarasipura-01
KGF-01, Belgaum-01, Holenarasipura-01, Kanakapura-01, BT Centre,B-22-01, Devraysamudra-01, Kooknur-01, Nanjangud-01, Bidar- 01, Karwar-01

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NCB-03

SECTION - VI TECHNICAL SPECIFICATION

Package-3: Procurement list of Lathe Machines for Production and Manufacturing & Fabrication Sectors

SL. No.	DGET SL. No.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET	Total Qty	Estimated Cost Per Unit	Total Estimated Cost	Consignee Govt I.T.I
1	54,91,87,89,69	Lathe all geared ,gap bed,height of centre □150mm,ABC □1500mm,with 3jaw and 4 jaw chucks,live and dead centres,coolant pump with fittings,face plate,driving plate,fixed and travel steadies,splash gaurd,4 way tool post,taper turning attachment,machine lamp with instructional manual, with set of 4 nos tool holders.	PMBT-04,FAT-01,03,04, FBT-03	P&M-16Nos, FAB-28Nos	44	480000	21120000	KGF-04, Belgaum-04, Holenarasipura-04, Kanakapura-04, BT Centre,B-22-07, Devraysamudra-07, Kooknur-07, Nanjangud-07
Total Rs. Two Crore Eleven Lakhs Twenty Thousand Only							21120000	

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SECTION - VI TECHNICAL SPECIFICATION

Package-4: Procurement list of CNC Machines for Production and Manufacturing Sector

SL. NO.	DGET SL. NO.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET	Estimated Cost Per Unit	Total Estimated Cost	Consignee Govt I.T.I
		<p>CNC 2 axes Turning centre with FanucOi-Male tc/Siemens Sinumerik 802D CNCsystem & with required cutting tools and Tooling package installation & Commissioning (Capacity intermediate Production Machines) with following Specifications: CAPACITY Maximum turning diameter (Chucking) ≤200mm; Maximun turning length ≤400mm, MAIN SPINDLE, Speed range : ≤3000 r.p.m ; Spindle nose : A2-5, Chuck size : ≤200mm; Spindle motor power : ≤5.5 kW cont., <u>AXES SLIDES</u>, X Axis stroke : ≤140mm; Z Axix stroke : ≤400mm Feed rate :1-5000 mm/minute; Rapid traverse rate X & Z : ≤10 meters/minute, <u>TAIL STOCK</u> Quill diameter/stroke : ≤70/100 mm; Taper in quill : MT 3, <u>TURRET</u> No.of stations : ≤8; Maximum borig bar dia: ≤32 mm, Tool cross section : ≤20x20 mm, With all other salient feautres like LM/ Hardened Guide ways, Accuracies as per JIS standards, Isolation transformer & Voltage Stabiliser. Slant bed Along with CNC Turning Training Simulation software - Keller make, 1. PC windows based system for Vocational Training in CNC Technology for theory and practice, 2. Compatible to Fanuc/Siemens</p>					KGF-01, Belgaum-01,

1	1	3. Simulation Software on CD with on-site licence for Turning applications, 4. Turning Module - 8 Licences Cutting tool and tooling package : 1. Turning tool holder (roughing tool) - 01 no 2. Turning inserts for the above tool holder – 10 nos 3. Turning tool holder (finishing tool) - 01 no 4. Turning inserts for the above tool holder – 10 nos 5. Under cutting tool holder - 01 no 6. under cutting inserts for the above tool holder – 10 no 7. Threading tool holder LH & RH – 02 nos 8. Threading tool inserts for the above tool holder – 20 no 9. Boring tool holder Dia 12 mm , 16 mm , 20 mm , 32 mm – each 01 no 10. Boring tool inserts for the above tool holder – 10 nos each 11. Internal threading tool holder LH & RH – 02 nos 12. Threading inserts for the above tool holder – 10 nos 13. Drill chuck with arbor 0-12mm – 01 no TAIL STOCK – Suitable Revolving center to be supplied Simulation PC – Suitable Locked type PC Stand ISO approved.	PMAT-01	4Nos.	2650000	10600000	Kanakapura-01, Holenarasipura-01
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3	2	<p>CNC 3 axes Vertical machining centre Fanuc Oi-Mate /Siemens Sinumerik 802D CNC system & with required cutting tools and Tooling package Installation & Commissioning hydraulic vice, maintenance kit, SPECIFICATIONS AS FOLLOWS; TABLE SIZE Clamping surface : □600x400mm, WORKING RANGE: Longitudinal table travel X-Axis :□400 mm; Y Axis : □400 mm; Z Axis : □400 mm SPINDLE Type and nose taper : BT-40 ; Power :□3.75 kW cont ; Speed : RPM : □60-4000 AUTOMATIC TOOL CHANGER Tools capacity :□12 ; Max tool dia/length : □80/200 mm, Feed rate : □1-6,000 mm/minute ; Rapid traverse : □20/20/20 meters/min, CONTROL SYSTEM CNC system : Fanuc Oi Mate/Siemens 802D ; ACCURACY (as per JIS Standards) Along with CNC Milling Training Simulation software - Keller make, 1. PC windows based system for Vocational Training in CNC Technology for theory and practice, 2. Compatible to Fanuc/Siemens, 3. Simulation Software on CD with on-site licence for Milling applications, 4. Milling Module - 8 Licences</p>	PMAT-01	4Nos.	2850000	11400000	KGF-01, Belgaum-01, Kanakapura-01, Holenarasipura-01	
	<p>Cutting tool and tooling package :</p> <p>1. Plain Milling cutter with key Dia 80 mm with arbor – 01 no</p> <p>2. Suitable inserts for the above cutter– 10 nos</p> <p>3. Milling adaptor with C Spanner 25 ERSR - 02 no</p> <p>4. Milling adaptor with C Spanner 32 ERSR - 02 no</p> <p>5. Milling collets 25 ERBR-7 of different Sizes 4, 6,8,10,12,14 , 16 - 01 no each</p> <p>6. Milling collet 32 ERBR -7 of different size 18,20,22 – 01 no each</p> <p>7. Carbide end mill cutters 4,6,8,10,12,14,16,18,20,22 mm – 02 nos each</p> <p>8. Hydraulic vice with maintenance kit 100mm size – 01 no</p> <p>9. Simulation PC – Suitable Locked type PC Stand</p>							
Total Rs.Two Crore Twenty Lakhs Only							22000000	

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SECTION - VI TECHNICAL SPECIFICATION

Package-5: Procurement list of Hydraulic & Pneumatic Trainer Kits for Production and Manufacturing Sector

SL. NO.	DGE T SL. NO.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET	Estimated Cost Per Unit	TOTAL Estimated Cost	Consignee Govt I.T.I
1	8	<p>Hydraulic Trainer kit</p> <p>1. Trolley with frame (profile plate) – No of wheels 04 ,two fixed & two swivel type ,load mounting capacity : □ 500kgs</p> <p>2. Hydraulic power pack – operating pressure □ 40 bar ,Flow rate □ 5LPM ,tank capacity □ 50 liters , Suitable pump & electric motor coupled with bell housing and mounted externally over the tank with vibro mounts , Safety relief valve with variable setting, accessories like Drain plug, suction strainer Return line filter ,valve mounting sub plates , hydraulic fittings , required quantity (min 8 nos) of hydraulic hoses of suitable length with end fittings and quick couplings , transparent hoses on return lines and leakage lines, Detailed instruction manual</p> <p>3. pressure gauge (glycerin filled) 04 nos of suitable range to measure the pressure at various points (pressure line , return line reduced pressure line , suction line)</p> <p>4. one way Flow control valve – 01 no</p> <p>5. Shut off valve – 01 no</p> <p>6. Non return valve – 01 nos</p> <p>7. Pressure relief valve piloted – 01 no</p> <p>8. Sequence valve -01 no</p> <p>9. pressure reducing valve – 01 no</p> <p>10. 2 way flow control valve – 01 no</p> <p>11. Single acting cylinder – spring return type – bore 20 mm rod dia 12 mm , stroke 200 mm</p> <p>12. Double acting cylinder bore 20 mm rod dia 12 mm ,stroke – 200mm</p> <p>13. Diaphragm Accumulator with shutoff block</p> <p>14. 4/2 way hand lever valve – 01 no</p> <p>15. 4/3 way hand lever valve – 0 no</p> <p>16. Tee connectors – 10 nos</p> <p>17. operation and maintenance manual – 02 hard copies and one soft copy</p> <p>18. Work Book - 01 No.</p> <p>19. Video - 1 No.</p> <p>20. Magnetic Symbols- 1 Set.</p> <p>21. Transparencies - 01 Set</p> <p>22. Text Book Basic - 01 No.</p> <p>23. Work Book Basic - 01 No.</p> <p>ISO APPROVED</p>	PMBT-06	8 set	2300000	9200000	KGF-02, Belgaum-02, Kanakapura-02, Holenarasipura-02

2	7	<u>Pneumatic Trainer kit -</u> 1. work station - 01 no 2. profile plate with stand – with 04 wheels two fixed & two swivel type ,load mounting capacity : 500kgs 3. Air compressor – Displacement 5 cfm , working pressure – 7 bar with 1 hp 1440 electric motor 3phase with 0-10 bar pressure gauge and shutoff valve with suitable hose and end connector 4. Filter regulator and lubricator unit with pressure gauge 10 bar – 01 no 5. 2/2 way panel mounted DC Valve NC assy ,1/4” BSP – 01 no 6. 3/2 way panel mounted DC Valve NC assy ,1/4” BSP – 01 no 7. 5/2 way panel mounted DC Valve NC assy ,1/4” BSP – 01 no 8. 5/3 way panel mounted DC Valve NC assey ,1/4” BSP – 01 no 9. Quick Exhaust valve assy – 02 no 10. 3/2 way roller lever vale NC assy – 02 no 11. 5/2 way pilot actuated valve – 01 no 12. 3/2 way pilot actuated valve – 01 no 13. 5/2 way detent valve – 01 no 14. Shuttle valve – 02 no 15. Two pressure valve – 02 nos 16. flow control valve – 02 nos 17. 2/2 way push button actuation DC Valve NC assy ,1/4” BSP – 01 no 18. 3/2 way push button actuation DC Valve NC assy ,1/4” BSP – 01 no	PMBT-06	8 set	1100000	8800000	KGF-02, Belgaum-02, Kanakapura-02, Holenarasipura-02	
		24. Video - 1 No. 25. Magnetic Symbols- 1 Set. 26. Transparencies - 01 Set 27. Text Book Basic - 01 No. 28. Work Book Basic - 01 No. <u>ISO APPROVED</u>						
Total Rs. One Crore Eighty Lakhs Only							18000000	

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SECTION - VI TECHNICAL SPECIFICATION

Package-6: Procurement list of Electro Hydraulic & Pneumatic Trainer kit with PLC System for Production and Manu

SL. NO.	DGET SL. NO.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET	Estimated Cost Per Unit
		<p>Electro-Hydraulic trainer kit (Non Transparent)</p> <p>Electro Hydraulic Trainer Kit: The Electro Hydraulic Training Kit shall be capable of being used to demonstrate the design, construction and application of Electro Hydraulic components and circuits. The kit should be designed to satisfy the following objectives:</p> <ul style="list-style-type: none"> • Design and function of a Electro Hydraulic System – Basic • Design and Function of Valves • Symbols in accordance to ISO 1219 • Basic Electro Hydraulic Circuit Diagrams on practical applications • To provide a modern trainer with blended learning components which allows improved student performance in practical situations • To empower students to design their own circuits using state of the art software based tools <p>The components shall be capable of being mounted on an appropriate profile plate with grooves for secure and flexible positioning so that the components can be clamped firmly, quickly & safely through quick fix adapters. This should ensure flexibility in conducting experiments through varies exercises. All Hydraulic connections shall be with self-closing, quick connector, safety clamping and quick plug in locking Industrial components shall be used in the kit so that the students get hands on practical training in using Industrial components. The kit shall be modular and upgradeable so that future investments to higher levels of training are reduced. The operating pressures in general shall be as given below unless otherwise specified against individual item: 1. Operation Pressure P : 6 MPa (60 Bar) 2. Max. Permissible pressure Pmax : 12 Mpa (120 Bar) The kit shall contain components as per the attached list.</p>			

1. Profile Plate

All of the components fit securely and safely onto the profile plate.

Both sides have s have grooves and, if required, both sides can be used.

The grooves are compatible with the profile system. Side caps are included.

Grid dimensions _____ 50 mm

Size _____ 1100 x 700 mm

All of the components can be flexibly positioned and securely mounted in the profile slot using T-slot nuts.

Components can be mounted on the profile plate with millimeter accuracy.

The extensive profile plate permits systematic arrangement of the components in accordance with the circuit diagram, for example, to make the transfer of information from the drawing to the actual system as easy as possible for the participants.

The profile plate should be mounted on a mobile Aluminum workstation with wooden lockable storage cabinets. It should have facility to mount the PC, UPS and LCD monitor.

2. Hydraulic Power Pack- 1 No

The power pack is of the external gear pump type with a single pump. The motor with the hydraulic power pack is AC, single phase, 230 V, 0.65 W power rating, frequency 50 Hz, actuation is manual via ON/OFF switch, the deliv

3. Double-acting cylinder – 2 Nos

Double-acting cylinder is with control cam and two barbed fittings

Piston diameter _____ 16 mm

[

Piston rod diameter _____ 10 mm, with M8 thread

Stroke _____ 200 mm

Operating pressure p _____ 6 MPa (60 bar)

Max. permissible pressure p_{max} _____ 12 MPa (120 bar)

4. 4/2-way hand lever valve- 2 Nos

Operating pressure p _____ 6 MPa (60 bar)

Max. permissible pressure p_{max} _____ 12 MPa (120 bar)

Actuation _____ Manual

Operating pressure p _____ 6 Mpa (60 bar)
 Max. permissible pressure Pmax _____ 12 Mpa (120 bar)
 Actuation _____ Manual

6. Pressure relief valve - 1 No
 The valve is capable of being used as a pressure relief valve if port T is connected to the tank and as a pressure sequence valve if port T is connected to another power component, such as a cylinder.

Operating pressure p _____ 6 MPa (60 bar)
 Max. permissible pressure pmax _____ 12 MPa (120 bar)
 Adjustment _____ Manual
 Actuation _____ Hydraulic

7. One way flow control valve - 2 Nos
 Nominal Flow rate _____ 9 l/min
 Operating pressure _____ 6 MPa (60 bar)
 Max permissible pressure _____ 12 MPa (120 bar)
 Actuation _____ Manual

8. Non-return valves - 2 Nos
 Operating pressure p _____ 6 MPa (60 bar)
 Max. permissible pressure pmax _____ 12 MPa (120 bar)
 Actuation _____ Hydraulic
 Opening pressure of one valve _____ 0.1 MPa (1bar)
 Opening pressure of other valve _____ 0.5 MPa (5 bar)

9. Standard hoses with quick connectors
 The high-pressure hose is made of three layers. The innermost layer is of Synthetic rubber, followed by a wire mesh. The arrangement is such that only when the hoses are unpressurized, coupling and decoupling is possible.

Nominal size _____ 6 mm
 Operating pressure p _____ 6 MPa (60 bar)
 Max. permissible pressure pmax _____ 12 MPa (120 bar)
 Temperature range _____ -40 – +125 °C
 Bending radius, minimal _____ 100 mm
 Hose length _____ 600 mm
 Hose length _____ 1000 mm
 Hose length _____ 1500 mm

PMAT-03

8 sets

1250000

The appropriate no. of hoses/hose lengths as per the above specifications are quoted.

10. Tee Connector:

Branch Tee with three connections (1 socket, 2 nipples). The branch tee can be inserted at any point to create a branch.

Operating pressure : 6 MPa (60 bar)

Max. permissible pressure Pmax : _____ 12 MPa (120 bar)

11. Hydraulic distributor plate: - 1 No

The hydraulic distributor plate accommodates 5 P or T outlets. The distributor plate is also equipped with a pressure gauge. The distributor plate is firmly mounted on the profile plate.

Measurement range _____ 0-10 MPa (0-100 bar)

Accuracy _____ 1.6% of full-scale value

Operating pressure, static _____ ¾ of full-scale value

Operating pressure, dynamic _____ 2/3 of full-scale value

Actuation _____ Hydraulic

12. Hydraulic Oil (HLP 22):

This is to DIN 51524 standards. This shall be supplied in a 20 litre can.

13. Drip Tray:

The drip tray being supplied shall be made of steel.

14. Profile plate frame for inclined profile plate mount:

2 per profile plate to be supplied & shall be with mounting parts.

15. Mounting Profile:

Required when the weight is to be mounted directly on the hydraulic cylinder. Scope of delivery includes connector

Profile dimensions _____ 32 x 32 x 816 mm

16. 2 way Flow Control valve - 2 Nos

Operating pressure p _____ 6 MPa (60 bar)

Max. permissible pressure pmax _____ 12 MPa (120 bar)

Adjustment _____ Manual

Actuation _____ Hydraulic

17. Shut-off valve - 2 Nos

Shut-off valve is with two ports. The valve is capable of being inserted at any point to enable shutoff of flow.

Operating pressure p _____ 6 MPa (60 bar)

Max. permissible pressure p_{max} _____ 12 MPa (120 bar)

Actuation _____ Manual

18. Weight - 1 No

The weight is for loading of the cylinder and can simulate a driving or tractive load.

The weight is capable of being used vertically with a double-acting cylinder. A cover for safety is included in the scope of supply. All the necessary accessories for using the weight with the cylinder should be supplied.

Mass _____ 9 kg

Dimensions, L x W x H _____ 150 x 100 x 80 mm

19. Pressure gauge - 1 No

The pressure gauge is protected by a glycerin filling against pressure peaks, condensed water and the ingress of water during cleaning.

Measurement range _____ 0 – 10 MPa (0 – 100 bar)

Accuracy _____ 1.6 % of full-scale value

Operating pressure, static _____ 3/4 of full-scale value

Operating pressure, dynamic _____ 2/3 of full-scale value

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Power rating 6,5 W
 Operating pressure p 6 MPa (60 bar)
 Max. permissible pressure p_{max} 12 MPa (120 bar)
 Actuation Electrical
 23. 4/3-way solenoid valve
 Power rating _____ 6, 5 W
 Operating pressure p _____ 6 MPa (60 bar)
 Max. permissible pressure p_{max} _____ 12 MPa (120 bar)
 Actuation _____ Electrical
 24. 24 V DC regulated power supply for the above kit - 1 No
 Input voltage _____ 230/115 V AC (47 – 63 Hz)
 Output voltage _____ 24 V DC, short-circuit-proof
 Output current _____ Maximum 4.5 A
 Connection cable _____ 1.3 m
 Dimensions _____ 115 x 155 x 200 mm
 I/O Box - 2 Nos
 Inputs 3 safety sockets each for 8 three-wire sensors
 Outputs 2 safety sockets each for 8 actuators
 Interfaces _____ 4 mm safety sockets for 24 V DC, SysLink connector
 I/O status display via LEDs
 25. Relay - 2 Nos
 The device has three relays with terminals and two buses for power supply.
 Contact set _____ 4 changeover switches
 Contact load _____ Maximum 5 A
 Cut-off load _____ Maximum 90 W
 Pick-up time _____ 10 ms
 Drop-off time _____ 8 ms
 26. Indicator unit and distributor, electrical - 2 Nos
 The device contains an acoustic indicator and four lamps with terminals and three buses for power supply. Through
 Power consumption acoustic indicator _____ 0.04 W
 Power consumption indicator lamps _____ 1.2 W

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Frequency acoustic indicator_____ 420 Hz

27. Limit switch, electrical, left actuated - 4 Nos

The electrical limit switch comprises of a mechanically operated micro switch.

When the roller lever is pressed by the control cam of a cylinder, the micro switch is actuated. The circuit is capable of being closed or opened via the contacts.

The micro switch is capable of being wired as a normally open, normally closed or changeover contact.

Contact load _____ Maximum 5 A

Switching frequency_____ Maximum 200 Hz

Reproducible accuracy_____ 0.2 mm

Switch travel_____ 2.7 mm

Actuator force_____ 5 N

28. Limit switch, electrical, right actuated - 2 Nos

The electrical limit switch comprises of a mechanically operated micro switch.

When the roller lever is pressed by the control cam of a cylinder, the micro switch is actuated. The circuit is capable of being closed or opened via the contacts. The micro switch is capable of being wired as a normally open, normally closed or changeover contact.

Contact load _____ Maximum 5 A

Switching frequency_____ Maximum 200 Hz

Reproducible accuracy_____ 0.2 mm

Switch travel_____ 2.7 mm

29. Signal Input, electrical: - 1 No

The device shall contain a release – delay and a pickup-delay time relay. Both relays are infinitely variable, using

Contact set_____ 2 makes, 2 breaks

Contact load_____ Maximum 5 A

Cut-off load_____ Maximum 100 W

Delay_____ 0.5 – 10 s adjustable

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30. Set of Cables:

Color	Quantity	Length (mm)
Red	1	1500
Red	3	1000
Red	21	500
Red	26	300
Red	10	50
Red	1	1500
Red	3	1000
Red	12	500
Red	11	300
Red	10	50

31. Plug in adapters:

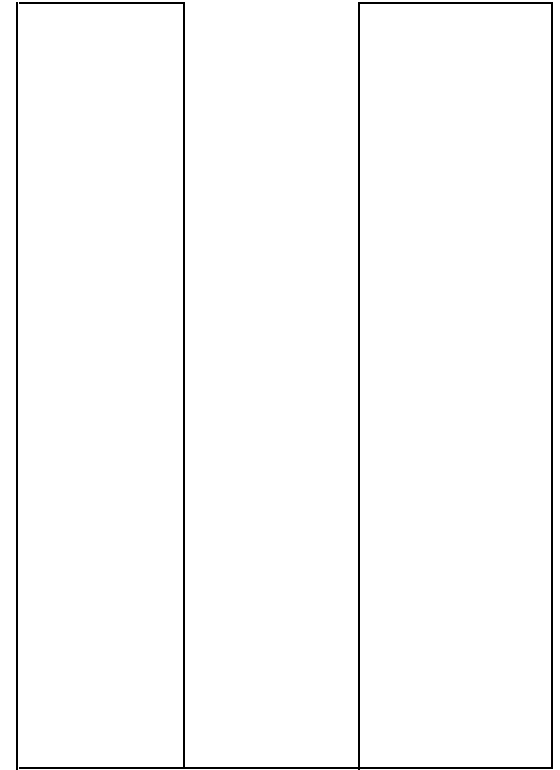
For mounting of components with plug-in foot on the aluminum profile plate

32. Pressure Relief Unit:

The pressure relief unit allows you to remove hydraulic clamping pressures without great expenditure of force.

30. Set of Cables:

Color	Quantity	Length (mm)
Red	1	1500
Red	3	1000
Red	21	500
Red	26	300



Red	10	50
Red	1	1500
Red	3	1000
Red	12	500
Red	11	300
Red	10	50

31. Plug in adapters:

For mounting of components with plug-in foot on the aluminum profile plate

32. Pressure Relief Unit:

The pressure relief unit allows you to remove hydraulic clamping pressures without great expenditure of force.

The Above Electro Hydraulic Trainer kit should be interfaced with suitable PLC System along with Software. The PLC System should consists of the following min. Specification. Specifications :-

The kit is mounted on powder coated trainer kit with suitable arrangement for input and output switches & LEO's & Pot for

PLC system :-

a) PLC System for experimentation with load power supply, including installation wiring of modules

b) CPU 313-DP ;

c) MMC-64KB Back-up Battery ; d) Communication cable for programming e) Battery Backup for CPU f) Manual for PLC

g) Software, Starter, Off line package with hard lock activation, h) Bus connector ;

i) Front connector

j) Power supply- I/P 230V AC ; O/P 24 VDC /2 Amp; k) Front connector ;

l) PC - Adapter.

with license software m) Necessary slot fillers for empty slots. n) 4 to 20MA/0-1-V power supply with digital

Electro - Pneumatic Trainer kit (Non Transparent)

Features : -

The Electro Pneumatic Training Kit (Basic Level) shall be capable of being used to demonstrate the design, construction and application of Electro Pneumatic components and circuits. This kit shall upgrade from the Basic level kit.

The kit should be designed to satisfy the following objectives:

- Design and function of a Electro Pneumatic system – Basic
- Function and identification of Electro-pneumatic components and their symbols
- Direct and indirect manual controls, stroke dependant controls, time dependant with time delay valves and pressure dependant controls with pressure sequence valves.
- Logic AND / OR function to start signals
- Application and fault findings of Electro Pneumatic controls
- Functional diagrams
- Systematic design of Electro Pneumatic Sequence Controls
- Methods for the drafting of circuit diagrams for Electro Pneumatic controls
- Pneumatic Power Section – Electric Control Section
- To provide a modern trainer with components which allows improved student performance in practical situations
- To empower students to design their own circuits..

The components shall be capable of being mounted on an appropriate profile plate with grooves for secure and flexible. This should ensure flexibility in conducting experiments through various exercises.

Pneumatic Plug in type flexible connectors should be safe & airtight, usage for multiple applications. These should be Multifunctional electro – connectors for 4 mm laboratory plugs and jack plugs

Industrial components shall be used in the kit so that the students get hands on practical training in using Industrial

The kit shall be modular and upgradeable

The kit shall contain components as per the attached list.

1. Profile Plates & Stand:

The anodized aluminum profile plate or power coated profile plate is the basis for training. All of the components fit securely and safely onto the profile plate. with any safe fixing arrangement

Grid dimensions 50 mm

Size _____ 1100 x 700 mm approx.

All of the components can be flexibly positioned and securely mounted in the profile slot using T-slot nuts or Quick-Fix. Components can be mounted on the profile plate with any suitable fixing arrangement

2. Shuttle valve (OR) assy.: - 1 No

The shuttle valve is switched through to the output by applying compressed air to one of the inputs (OR function).

Design type is OR gate (shuttle valve)

Pressure range _____ (1 – 10 bar)

3. Dual-pressure valve (AND): - 1 No

The dual-pressure valve is switched through to the output by applying compressed air to both of the inputs (AND function).

Design type is AND gate (dual-pressure valve)

Pressure range _____ (1 – 10 bar)

4. One-way flow control valve assy.: - 2 Nos

The one-way flow control valve is a combination of flow control valve and a non-return valve. The cross-section of

Design type is Combined flow control valve

Pressure range _____ (0.5 – 10 bar)

5. Pressure sequence valve assy.: - 2 Nos

The pressure of the control signal can be set by means of the pressure setting screw (variable).

Design type is Poppet valve with return spring

Operating pressure range _____ (1.8 – 8 bar)

Control pressure range _____ (1 – 8 bar)

6. Single-acting cylinder assy.: - 2 Nos

Design type is Piston cylinder

Operating pressure _____ 10 bar

Stroke length _____ Maximum 100 mm

7. Double-acting cylinder assy.: - 2 Nos

Design _____ Piston cylinder

Operating pressure _____ (10 bar)

Stroke length _____ Maximum 100 mm

8. Manifold assy.: - 1 No

Manifold with six (2 x 3) self-closing non-return valves or the connections with gate valve A common manifold for plastic tubing allows supply of compressed air to the control via six Individual ports (for plastic tubing PUN 4 x 0.75).

9. Filter regulator with gauge assy. - 1 No

Filter control valve with pressure gauge, start-up valve, quick push-pull connectors and quick couplings, mounted on a swivel support.

The filter with water separator removes dirt, pipe sinter, rust and condensed water.

The pressure control valve regulates the supply air pressure to the set operating pressure and compensates pressure fluctuations. The filter bowl has a condensate drain valve.

The start-up valve/shutoff valve ventilates and vents the entire control. The 3/2 way valve is actuated by a rotary b

Design Sintered filter

Nominal flow rate 750 l/min

Input pressure Maximum (16 bar)

Output pressure Maximum (12 bar)

Grade of filtration 40 µm approx.

Connector G 1/8, / PU 6

PMAT-03

8 sets

1250000

10. Relay, three fold: - 4 Nos

The device has three relays with terminals and two buses for power supply.

Contact set 4 change – over switches

Contact load maximum 5 A

11. Signal Input, electrical: -4 Nos

The device contains an illuminated pushbutton switch (control switch) and two illuminated pushbuttons (momentary contact switches) with terminals and two buses for power supply.

Contact set 2 makes, 2 breaks

Contact load Maximum 1 A

12. Indicator unit & distributor, electrical: - 2 Nos

The device contains an acoustic indicator and four lamps with terminals and three buses for power supply.

Through-contact socket pairs per lamp allow the element to also be used as a distributor.

13. Proximity Switch, electronic with attachment: - 3 Nos

The proximity switch consists of a sensor, the mounting kit and the cable. This proximity switch gives a signal when it detects a magnetic field. The status is indicated by an LED.

Switching voltage 10 – 30 VDC

Switching current Maximum 200 mA

Switching power 6 W approx.

Switch accuracy ± 0.1 mm

14. 3/2 Solenoid valve, Single, with LED, NC: - 2 Nos

The status is indicated by an LED on the housing. The valve is equipped with a manual override. The electrical c

Pneumatic technical data :

Design type is spool valve, pilot controlled, with return spring

Pressure range 250 – 800 kPa (2.5 – 8 bar)

Electrical technical data :

Power consumption 1.5 W

	<p>15. 5/2 way single solenoid valve with LED - 2 Nos</p> <p>The status is indicated by an LED on the housing. The valve is equipped with a manual override. The electrical connections feature polarity – reversal protection for the LED and the suppressor circuit. with silencer and push pull connector</p> <p>Pneumatic technical data :</p> <p>Design type is spool valve, pilot controlled, with silencer and push pull connector</p> <p>Pressure range 250 – 800 kPa (2.5 – 8 bar)</p> <p>Electrical technical data :</p> <p>Power consumption 1.5 W</p> <p>16. 5/2 Solenoid valve, double, with LED: - 2 Nos</p> <p>The statuses are indicated by LEDs on the housings. The valve is equipped with two manual overrides. The electrical connections feature polarity – reversal protection for the LEDs and the suppressor circuits. with silencer and push pull connector</p> <p>Pneumatic technical data :</p> <p>Design spool valve, with pilot control</p> <p>Pressure range 150 – 800 kPa (1.5 – 8 bar)</p> <p>Electrical technical data :</p> <p>Power consumption 1.5 W</p> <p>17. Pneumatic – Electrical converter: - 1 No</p> <p>The pneumatic-electrical converter can fulfill 3 functions :</p> <p>Pressure switch, vacuum switch, and differential pressure switch.</p> <p>Pneumatic technical data :</p> <p>Design Pre stressed metal bellows initiator</p> <p>Pressure Ranges :</p> <p>Pressure switch, connector P1 25 - 800 kPa (0.25 - 8 bar)</p> <p>Vacuum switch, connector P2 -25 – -80 kPa (-0.2 – -0.8 bar)</p> <p>Differential pressure switch :</p> <p>Connectors P1....P2 -95 – 800 kPa (-0.95 – 8 bar)</p> <p>Hysteresis maximum 25 kPa (0.25 bar)</p> <p>Electrical technical data :</p> <p>Switching current 400 mA</p>			
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18. Limit Switch, left actuated: - 4 Nos

The electrical limit switch comprises a mechanically operated micro switch. When the roller lever is pressed, for example by the control cam of a cylinder, the micro switch is actuated. The circuit is closed or closed or opened via the contacts. The micro switch can be wired as a normally-open, normally closed, or changeover contact.

Contact load Maximum 5 A

Switching frequency Maximum 200 Hz

Reproducible accuracy 0.2 mm

Switch travel 2.7 mm

Actuator force 5 N

19. Limit Switch, right actuated: - 4 Nos

The electrical limit switch comprises a mechanically operated micro switch. When the roller lever is pressed, for example by the control cam of a cylinder, the micro switch is actuated. The circuit is closed or opened via the contacts. The micro switch can be wired as a normally—open, normally-closed or changeover contact.

Contact load Maximum 5 A

Switching frequency Maximum 200 Hz

Reproducible accuracy 0.2 mm

Switch travel 2.7 mm

Actuator force 5 N

20. Equipment Tray: - 1 No

Plastic tray with matching slot for placing of the components to be supplied with the electro pneumatic supplement

21. Power Supply Unit: - 1 No

Input voltage 230/115 V AC (47-63 Hz)

Output voltage 24 V AC, short-circuit-proof

Output current Maximum 4.5 A

Connection cable 3 m

22. Plug in adapter:

For mounting of components with plug-in foot on the aluminum profile plate. or powder coated plate

23. Set of moulded Cables:

Color	Quantity	Approx. min. Length (mm)
Red	5	1500
Red	5	1000
Red	25	500
Red	25	300
Red	10	50
Blue	5	1500
Blue	5	1000
Blue	10	500
Blue	10	300
Blue	10	50

24. Quick Push Pull connectors:

Sufficient shall be supplied for branching of the tubing for making of the circuitry.

25. Plastic tubing:

PUN 4 x 0.75

Exterior diameter _____ 4 mm

Interior diameter _____ 2.8 mm

Metallic silver _____ 25 m

Blue 25m

26. Connection component Set:

Spare sets of these connection components shall be supplied.

Note: The proper connection arrangement should be made for connections of valve to electrical signal by quick connection and release along with power supply input.

The Above Electro Pneumatic Trainer kit should be Interfaced with suitable PLC System along with Software. The PLC System should consists of the following min. Specification. Specifications :-

The kit is mounted on powder coated trainer kit with suitable arrangement for input and output switches & LEO's & Pot for

PLC system :-

a) PLC System for experimentation with load power supply, including installation wiring of modules

b) CPU 313-DP ;

c) MMC-64KB Back-up Battery ; d) Communication cable for programming e) Battery Backup for CPU f) Manual for PLC

g) Software, Starter, Off line package with hard lock activation, h) Bus connector ;

i) Front connector

j) Power supply- I/P 230V AC ; O/P 24 VDC /2 Amp;

k) DIN rail -482 mm;

k) Front connector ;

l) PC - Adapter.

with license software m) Necessary slot fillers for empty slots. n) 4 to 20MA/0-1-V power supply with digital indicator. Necessary pot + Digital Display for display output and input

WORKING MODEL OF HYDRAULIC PRESS

FEATURES:-

Operation: Foot switch for up-down operation with photo sensors for manual safety.

Upper and lower limit safety switches. Glycerin filled pressure gauge & gauge isolator calibrated in tons

Constructions: C-frame construction Anti rotation guide to top cylinder. Stress relieved structure with Epoxy paint.

Make of components : All hydraulic components of reputed make like Yoken / Polyhydron/ Atoss/Vickers

Motorised press of 10 ton

TECHNICAL SPECIFICATION

Capacity : 01 ton

Size of table (Length X depth) : 500 x 350 mm

Open height : 350 mm

Stroke : 300 mm

Gap : 500 mm

Operation Speed : Up- 140 min/sec

Down – 100 min/sec

Pressing – 15 min/sec

PMAT-03

4 sets

125000

		WORKING MODEL OF PNEUMATIC PRESS FEATURES:- Operation: Totally pneumatically controlled operated by two hand switches for safety. Fast and slow speed changeover. Construction: Four pillar structure with hardened and ground tie rods. Epoxy painted. Fitter, regulator and lubricator to be provide. Make of components: All pneumatic components of reputed makes like Festo/ SMC TECHNICAL SPECIFICATION - Day light Gap : 500 mm - Clear space between tie rods : 350 x 500 mm - Stroke of cylinder : 250 mm - Capacity : 1 ton	PMAT-03	4 sets	125000
Total Rupees Two Crore Ten Lakhs Only					

Draft approved by the commissioner)

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Manufacturing Sector

Total Estimated Cost	Consignee Govt I.T.I

10000000	KGF-2,BELGM-2, kanakapura-2, holenarsipura-2
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10000000	kgf-2,belgm-2, kanakapura-2, holenarsipura-2
----------	--

500000	KGf-1,BELGM-1, kanakapura-1, holenarsipura-1

500000	KGF-1,BELGM-1, kanakapura-1, holenarsipura-1
21000000	

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Employment & Training.

SECTION - VI TECHNICAL SPECIFICATION

Package-7: Procurement list of Welding Machines for Fabrication Sector

SL. No.	DGET SL. No.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET	Total Qty	Estimated Cost Per Unit	Total Estimated Cost	Consignee Govt I.T.I
1	80,78,81	Submerged Arc welding machine - □600 Amps, □3 phase, cooling forced air with wire dia □2 to 5mm appox with hopper capacity appox 7 kgs ISO approved.	FAT-01,03,04, FBT-04	FAB-12Nos	12	75000	900000	BT Centre,B-22-03, Devraysamudra-03, Kooknur-03, Nanjangud-03
2	58,57,58,62, 65	Arc welding set Rectifier type □400 Amp. With all accessories. ISO Approved	FAT-01,03,04, FBT-04	FAB-36Nos	36	98000	3528000	BT Centre,B-22-06, Devraysamudra-06, Kooknur-06, Nanjangud-06
3	60,59,60	co2 welding machine complete set □400 amps with gas cooled goose necked torch □300A ISO Approved	FAT-01-04	FAB-24Nos	24	344,000	8256000	BT Centre,B-22-04, Devraysamudra-04, Kooknur-04, Nanjangud-04
4	58,59,59	TIG welding set complete □300 amps AC/DC with water cooled torch ISO Approved	FAT-03,04,01	FAB-24Nos	24	180000	4320000	BT Centre,B-22-04, Devraysamudra-04, Kooknur-04, Nanjangud-04
5	88,82,83	Air plasma cutting system with accessories & compressor □3 phase,air cooled ,to cut maximum thickness of □12mm ISO Approved	FAT-01-03	FAB-12Nos	12	328000	3936000	BT Centre,B-22-03, Devraysamudra-03, Kooknur-03, Nanjangud-03
Total Rs. Two Crore Nine Lakhs Forty Thousand Only							20940000	

NCB-08

SECTION - VI TECHNICAL SPECIFICATION

Package-8: Procurement list of General Machines for Fabrication Sectors

SL. No.	DGET SL. No.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET	Total Qty	Estimated Cost Per Unit	Total Estimated Cost	Consignee Govt I.T.I
1	76,88,83,86	Fume extractor ,□2000cfm/hr ,motor □1.5 hp , 3D arm movement about 12 meter length ISO Approved	FBT-4, FAT-01,03,04	FAB-64Nos	64	280000	17920000	BT Centre,B-22-16, Devraysamudra-16, Kooknur-16, Nanjangud-16
2	57	Powder coating equipment complete with drying oven for about 25 to 50 kgs materials ISO approved.	FBT-05	FAB-4Nos	4	500000	2000000	BT Centre,B-22-01, Devraysamudra-01, Kooknur-01, Nanjangud-01
3	78,75,78	Ultrasonic flaw detector ,frequency 0.5 -10 MHZ,Test range Of Min 0-10, Max of 0-10 M ISO approved.	FAT-01,03,04	FAB-12Nos	12	65000	780000	BT Centre,B-22-03, Devraysamudra-03, Kooknur-03, Nanjangud-03
4	81	Micro plasma welding machine - □25 amps • The machine is capable of welding metal sheet of capability from 10 microns to 3mm thickness ISO approved.	FAT-01	FAB-04Nos	4	80000	320000	BT Centre,B-22-01, Devraysamudra-01, Kooknur-01, Nanjangud-01
Total Rs. Two Crore Ten lakhs twenty thousand only							21020000	

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Employment & Training.**

SECTION - VI TECHNICAL SPECIFICATION

Package-9: Procurement list of General Welding Machines for Fabrication, Auto Mobile, RAC & Production & Manufacturing Sectors

SL. No.	DGET SL. No.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET	Total Qty	Estimated Cost Per Unit	Total Estimated Cost	Consignee Govt I.T.I
1	85,87,82,75	Fiber welding booth & welding screen □7 feet hight,breath □6x6 feet □5mm thickness ISO Approved	FAT-01,03,04, FBT-04	FAB-128Nos	128	158000	20224000	BT Centre,B-22-32, Devraysamudra-32, Kooknur-32, Nanjangud-32
2	104,12,149,139,131,91,85	Oxy - acetylene welding set complete with cylinders, regulators welding torches with difference nozzles : Accessories : 1) Oxygen cylinder(industrial)- 1no. 2) Accetylene cylinder(industrial)- 1no. 3) Double stage oxygen regulator - 1 no. 4) Double stage Acetylene regulator - 1 no. 5) Welding torch - 1 no. 6) Different Nozzles 7) Hoses & fittings 8) Gloves, goggles, Aprons etc., 9) Cylinder keys - 2nos 10) Trolley for moving ISO approved.	RACBT-I,4, RACAT-01,03,02, ABT-02,PMBT-02	P&M-08Nos, AUTO-02No, RAC-12 Nos.	22	52000	1144000	Honnavaara-02, KGF-02, Belgaum-02, Holenarasipura-02, Kanakapura-02, Bidar-06, Karwar-06
Total Rs. Two Crore Thirteen Lakhs Sixty Eight Thousand Only							21368000	

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SECTION-VI TECHNICAL SPECIFICATION

Package-10: Procurement list of Air Condition Equipments for RAC Sector							
Sl. No.	DGET Sl. No.	Names of the tools & Equipments	Module Code	QTY REQD AS PER DGET	Estimated Cost Per Unit	Total Estimated Cost	Consignee Govt I.T.I
1	93,138	Package A/C 7.5 ton cap. With sealed double compressor system, water cooled shell and tube condenser and forced draft cooling tower, thermostatic expansion valve control and liquid chilling(water cooled) Evaporator and 2 Nos Fan Coil units(FCU) for load distribution. Pumps required capacity for cooling tower & 2 FCU coil water supply. Complete with construction of pipe lines, Temp Controls, Humidity control, Accessories , Control pannel consist of all Electrical controls, Safety controls, Temperature indicator, Pressure gauges, Starters, Contractors, etc., with complete plant installation.	RACBT-VI, RACAT-02	4 Nos.	680000	2720000	Karwar -02 , Bidar-02
2	94,137	Package A/C 3 ton Air cooled type , Single or Multi compressor 3 ton capacity Air cooled condensor. Thermostatic Ex.Valve, Air Cooled Evaporator(Ductable unit) with 10" x 20", rectangle 25 feet length GI Duct Fabrication with insulation for air distribution. Duct along with supply out lets & Supply grill. Complete controls like Gauges, Thermostat, Humidistat, Electrical & Safety Controls	RACBT-VI RACAT-02	4 Nos.	300000	1200000	Karwar -02 , Bidar-02
3	70	Cold storage plant complete with all controls & accessories including cooling tower & water treatment plant. Cold Room (Tutor) Construction: Approximate outside dimensions about 2.15mtr length, 2 mtr breadth, 2.15mtr height. Inside volume about 5000 ltrs, chamber provided with 3" puf insulation all around with one door opening. Heater arrangement for door and light provision inside the chamber. Air cooling Evaporator coil and two nos of fans installed in the chamber for cooling. Shelves provision to be made for food storage temperature maintained about 2 to 4°C. Condensing Unit: Consist of 15000 K-cal/hr (5 ton) capacity, Open type compressor with fly wheel. Additional prime mover motor required capacity to drive compressor with pulley & belt drive. Water cooled shell and tube condenser with induced draft cooling tower construction. Pump and pipe lines arrangement for carrying water, provision of receiver for refrigerant storage . Expansion Valve : Thermostatic or Automatic Control Pannel : Consist of Thermostat, Humidistat, Pressurestat, Temp. Indicator, Electrical controls. Safety controls, scanner, starter, voltmeter, Ammeter & Other controls.	RACBT-V, RACT-03	4 Nos.	780000	3120000	Karwar -02 , Bidar-02
4	85,128	Air conditioning, direct & indirect water chiller. Complete with all controls including humidity control & electrical controls, 5 ton (15000 kcal/hr.) capacity. Open type compressor and Additional required capacity Motor to drive compressor. Fly wheel , pulley and belt arrangement with Air cooled condensing unit. Two Evaporator coils for two different rooms Direct and Indirect. One Evaporator cooled by Direct expansion of Refrigerant another Evaporator cooled by water. Separate tank type or shell and tube chiller construction for indirect cooling. Pump and pipe line arrangement for carrying water to indirect chiller. Control Panel : Consists of Complete with controls, Accessories pressure stat, thermostat , Humidistat, temperature indicator , scanner, Electrical control, safety control etc., with complete installation. OR with above specification 5 ton capacity package unit.	RACBT-VI RACAT-02	2 Nos.	800000	3200000	Karwar -01 , Bidar-01

5	68,141	<p>Ice Candy Unit : Ice candy unit complete with stainless steel tank, mould box, thermocol insulated sunmica body, agitator, compressor, motor ele. Temperature, pressure, refrigerant control gauges, motor, pipe fitting ele 3000kcal/hr.</p> <p>Candy Plant : Consists Stainless steel 3 compartments. one for brine solution other two for candy storage. Evaporator coil immerse type installed in brine chamber. Brine chamber temp about -10 °C to -18 °C other two chamber temperature maintained about -18 °C. Tank Size : 38"x54"x24" inner size 48"x64"x35" outer size approx. 3 doors stainless steel. Outer body sunmica/ss. Inner body GI/SS Non corrosive material. Brine salt or calcium chloride density 12000. Condensing Unit : 3000 k-cal/hr(01 Ton) capacity compressor and Air Cooled condenser with fan motor. Receiver, Valves fittings & other essential controls, thermostatic Exp Valve & Solenoid Valve control and mould box - 10 nos, made with food grade material preferably SS.</p> <p>Control Panel : Consists of Temp Indicator, Thermostat, Pressure Gauges, Scanner, Safety Controls, Contactors, Voltmeter & Ammeter, Starter, Indicators & Other Controls</p>	RACBT-V RACAT-03	4 Nos.	320000	1280000	Karwar -02 , Bidar-02
6	53,102,65,87,98	Recovery unit to Recover (collect) gas from CFC Appliances and HFC 134(a) Appliances. It consist of 1/6 HP or required capacity compressor. Condensor with fan (small size) Oil separator, Accumulator valve inlet and outlet for gas recovery, compound gauge & Pressure gauge with LP, HP cut out. Individual unit for CFC & HFC ISO approved	RACBT-VI,III,VI,V , RACAT-01	28 Nos.	85000	2380000	Karwar -14 , Bidar-14
7	45,33,28,46	Evacuating & charging station with double stage Vacuum pump, 1/2 HP Motor with Gas ballast & anti suck back valve. Charging station consist of Micron Vacuum Gauge, Compound & Pressure Gauge, Solenoid Valve & gas Charging, Suction & Discharge Valves & ports Vacuum pump capable of pulling vacuum upto 50 Microns of Hg. Evacuation & charging station along with Electronic weighing scale resisting 6 kg capacity with accuracy of +/-1(one) gram for charging hydro carbons & HFC 134(a) ISO approved.	RACBT-III-VI	16 No.	55000	880000	Karwar -08 , Bidar-08
Total Rs. One Crore Forty Seven Lakhs Eighty Thousand Only						14780000	

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**Joint Director(Trg)
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SECTION-VI TECHNICAL SPECIFICATION

Package-11: Procurement list of Automobile Equipments for Automobile Sector

SL. NO.	DGET SL. NO.	DESCRIPTION OF THE ITEMS	QTY REQD AS PER DGET PER ITI	Estimated Cost per Unit	Total Estimated Cost
1	11	<p>Electronic engine control module-with connecting accessories and manual-demonstrator : This demonstrator shall provide a complete commercial multi-point Fuel Injection system for demonstration. This includes all the individual components of the system presented on a moveable, steel frame panel with each component clearly identified. The system comprises of all the elements that control the air-fuel ratio and the ignition timing, together with the ECU and all the sensors associated with the control system. Monitoring of ECU fault codes is made by means of a diagnostic plug to assist troubleshooting of fault conditions. Ten switched faults must be provided to allow for realistic fault diagnosis to be performed. Variation of the engine speed is simulated so as to allow the measurement of parameters within the system that are speed dependent.</p> <p>The demonstrator must allow the instructor to demonstrate the following: _ Engine management system fundamentals _ The electronic control unit (ECU) _ Sensor circuits and components & Fault diagnosis _ Actuator circuits and components & Fault diagnosis , Equivalent to MT80 Engine Control Module with Engine</p>	2 No.	260000	520000
2	89	<p>Engine control sensors 8 types. Specification:- (1) ECU, (2) Absolute Pressure Sensor (3) Throttle Position Sensor (4) Intake Air Temperature Sensor (5) Lambda sensor (6) T.D.C. Sensor (7) Engine Coolant Temperature Sensor (8) Engine RPM sensor This demonstrator shall provide a complete commercial multi-point Fuel Injection system for demonstration. This includes all the individual components of the system presented on a moveable, steel frame panel with each component clearly identified. The system comprises of all the elements that control the air-fuel ratio and the ignition timing, together with the ECU and all the sensors associated with the control system. Monitoring of ECU fault codes is made by means of a diagnostic plug to assist troubleshooting of fault conditions. Ten switched faults must be provided to allow for realistic fault diagnosis to be performed. Variation of the engine speed is simulated so as to allow the measurement of parameters within the system that are speed dependent.</p> <p>The demonstrator must allow the instructor to demonstrate the following: _ Engine management system fundamentals, _ The electronic control unit (ECU) _ Sensor circuits and components & Fault diagnosis., _ Actuator circuits and components & Fault diagnosis., _ Intake air temperature / Pressurized fuel systems. Connected with 8 type sensors, Actuator circuits and components with 4 stroke 4 cylinder engine</p>	1 each	284750	284750
3	101	<p>Petrol engine 4 stroke (MARUTI/SIMILAR/4 cylinder) fitted with MPFI/carburetor fuel system for practice, up to 50 HP with manuals Specification:- MPFI four cylinder Petrol engine having cubic capacity of 1000 to 1800 cc developing about 60 to 120 BHP at 5000/6000 RPM water cooled and with multipoint fuel injection system complete with all required accessories like radiator with safe guard, fuel tank with stand, alternator, battery with stand, starter motor, cooling fan etc. Engine is mounted on M.S. sturdy frame having four wheels for easy shifting and a panel board fitted on a frame having warning instruments in cluster unit. Engine must start from panel board by ignition switch and it must be in a working condition with speed controlled from pannel board.Engine is with all necessary sensor like (1) ECU, (2) Absolute Pressure Sensor, (3) Throttle Position Sensor, (4) Intake Air Temperature Sensor, (5) Lambda sensor, (6) T.D.C. Sensor, (7) Engine Idling Acuator & (8) Piston Displacement : 1000 to 1800 CC - Maximum Output : 60 to 120 BHP, 5000 to 6000 RPM - Maximum torque : 7 to 15 NM at 4000 to 4500 RPM - Fuel Tank Capacity : 30 to 35 Liters - Fuel System : M.P.F.I System.</p>	1 Nos.	531250	531250

4	88	<p>Diesel engine 4 stroke for practice, up to 80 HP Type : Indian Make 4 Stroke Cycle water cooled Inline Diesel Engine. <u>Engine Valve Lay Out</u>: 4 Cylinder in line with two valve per Cylinder. <u>Arrangement of Cylinder</u> : In line, Piston Displacement : 1500 cc to 2000 cc, Max. Output (Bhp) : 50 to 75 Bhp at 4000 – 5000 RPM, Torque : 80 to 125 Nm at 2500 – 3100 RPM, Fuel Tank Capacity : 30 Ltr. to 40 Ltr, Fuel Injection : Rotary pump, Ignition : Indirect injection with Turbo Acrylic Sheet will be provided at the back side of the panel board for easy view of wiring. Diesel Engine complete with turbo assembly & all required accessories like radiator with safe guard, fuel tank with stand, alternator, battery with stand, starter motor, F.I. Pump, fuel filter, Cooling fan etc. With working condition. Engine will be mounted on M.S. Sturdy frame having four wheels for easy shifting and a panel board fitted on a frame .</p> <p>. Engine will be start from panel board by ignition switch and it will be in a running condition with speed controlled from panel board.</p>	1 Nos.	519000	519000
5	100	<p>Petrol Engine of latest model (CNG Engine) with workshop manuals Specification:- (MARUTHI/SIMILAR(4 CYLINDER) MPFI four cylinder Petrol engine having cubic capacity of 1000 to 1800 cc developing about 60 to 120 BHP at 5000/6000 RPM water cooled and with multipoint fuel injection system complete with all required accessories like radiator with safe guard, fuel tank with stand, alternator, battery with stand, starter motor, cooling fan etc. Engine is mounted on M.S. sturdy frame having four wheels for easy shifting and a panel board fitted on a frame having warning instruments in cluster unit. Engine must start from panel board by ignition switch and it must be in a working condition with speed controlled from pannel board. Engine is with all necessary sensor like (1) ECU, (2) Absolute Pressure Sensor, (3) Throttle Position Sensor, (4) Intake Air Temperator Sensor, (5) Lambada sensor, (6) T.D.C. Sensor, (7) Engine Idling Acutuator & (8) Engine Coolant Temperature Sensor etc. Engine Specifications: Type : 4 Stroke cycle, water cooled - No. of cylinders : 4</p> <p>- Piston Displacement : 1000 to 1800 CC - Maximum Output : 60 to 120 BHP, 5000 to 6000 RPM - Maximum torque : 7 to 15 NM at 4000 to 4500 RPM - Fuel Tank Capacity : 30 to 35 Liters - Fuel System : M.P.F.I System .</p>	1 No.	560000	560000
6	104	<p>Petrol engines of cars latest models with manuals Specification:- (Huandai/Maruthi/Similar) MPFI four cylinder 16 Valves Petrol engine having cubic capacity of 1000 to 1800 cc developing about 60 to 120 BHP at 5000/6000 RPM water cooled and with multipoint fuel injection system complete with all required accessories like radiator with safe guard, fuel tank with stand, alternator, battery with stand, starter motor, cooling fan etc. Engine is mounted on M.S. sturdy frame having four wheels for easy shifting and a panel board fitted on a frame having warning instruments in cluster unit. Engine must start from panel board by ignition switch and it must be in a working condition with speed controlled from pannel board. ngine is with all necessary sensor like (1) ECU, (2) Absolute Pressure Sensor, (3) Throttle Position Sensor, (4) Intake Air Temperator Sensor, (5) Lambada sensor, (6) T.D.C. Sensor, (7) Engine Idling Acutuator & (8) Engine Coolant Temperature Sensor etc. with 16 valves. - Engine Specifications: Type : 4 stroke cycle, water cooled - No. of cylinders : 4 - Piston Displacement : 1500 to 2000CC - Maximum Output : 60 to 120 BHP, 5000 to 6000 RPM - Maximum torque : 7 to 15 NM at 4000 to 4500 RPM - Fuel Tank Capacity : 30 to 35 Liters - Fuel System : M.P.F.I System.</p>	1 Nos.	540000	540000
7	94	<p>Diesel engine 4 stroke up to 10 HP / 80 HP running condition Type : Indian Make 4 Stroke Cycle water cooled Inline Diesel Engine. Engine Valve Lay Out : 4 Cylinder in line with two valve per Cylinder. Arrangement of Cylinder : In line, Piston Displacement : 1500 cc to 2000 cc, Max. Output (Bhp) : 50 to 75 Bhp at 4000 – 5000 RPM. Torque : 80 to 125 Nm at 2500 – 3100 RPM, Fuel Tank Capacity : 30 Ltr. to 40 Ltr., Fuel Injection : Rotary pump, Ignition : Indirect injection with Turbo. Acrylic Sheet will be provided at the back side of the panel board for easy view of wiring. Diesel Engine complete with turbo assembly & all required accessories like radiator with safe guard, fuel tank with stand, alternator, battery with stand, starter motor, F.I. Pump, fuel filter, Cooling fan etc. With working condition. Engine will be mounted on M.S. Sturdy frame having four wheel for easy shifting and a panel board fitted on a frame .</p>	5 No.	560000	2800000

		Engine will be start from panel board by ignition switch and it will be in a running condition with speed controlled from panel board.			
8	64	Chassis of heavy commercial motor vehicle with all accessories in working condition -TATA/ Leyland make	1 No	650000	650000
9	82	Petrol engine(4 strokes, Multi cylinder) of different makes in running condition.(1 No. with MPFI system & 1 No.with carburettor) Set of 2 Nos. ISO approved.	1 set	1068000	1068000
10	84	Diesel engine(4 stroke, multi cylinder) of different makes in running condition - ISO approved.	2 Nos.	1200000	2400000
Total Rs. Ninty Eight Lakhs Seventy Three Thousand only					9873000

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SECTION-VI TECHNICAL SPECIFICATION

Package-12: Procurement list of Electronic Equipments for Electronic Sector

SL. NO.	DGET SL. NO.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET	TOTAL	Estimated Cost Per Unit	TOTAL Estimated Cost	Consignee Govt I.T.I
1	7,2	Linear ic trainer:- ,the unit should be micro controller based system. out put Dc voltage + 5 volts, 1 amp +12 volts, 0-15 volts 500 mili amps microcontrolled based Touch sensistive system for increment and Decrement for Voltage AC voltages 3-6-9-12,(transformer secondary, tappings)500 mili amps . E-12 series ½ watt resistar (ohms , kilo ohms , mega ohms values). capasiters electrolitic & non electrolitic capasiters standerd values. Bread board :- having high quality tie points. terminals 2mm(BS-2).Meter:- Micro controller based plasma meter for V&I mesuarments. Function genarater:- 20 hz to 20 kilo hz (sine,square,tringle waves.).TTL O/P Active components:- diodes , transisters ,zener diode of varieas values, FET, MOSFET, VDR,LDR,IC'S OP-AMP, TIMER IC's, REGULATOR IC's the above camponent should have a built-in CRT type 5Mhz single trace analog oscilloscope and should be mounted an a attractive and ragued cabinate. the above system should be controlled remotely operating voltage 230 volts AC	EAT-03 EBT-03	63 Nos.	63	19700	1241100	Tiptur-09, Chitradurga-09, Gowribidnur-09, Puttur-09, Nalathwad-09, Bagalkot-09, Mandya-09
2	2, 17, 23	Logic analyzer: 34 Channel Logic Analyzer 500MHz sampling, I2C, with BNC Inputs for channel inputs for each channel inputs with a computer interfaced internally config of INTEL C2Dpro, 250GB Hard disk and 64gb RAM and 14" TFT display for monitoring the signal path. with required softwares for operation, fully industrial type. the above system should be housed in a cubical 19X14" box. reputed company make.should have remote controlling facility.	EBT-04 EBT-06 EAT-03	21 Nos.	21	121200	2545200	Tiptur-03, Chitradurga-03, Gowribidnur-03, Puttur-03, Nalathwad-03, Bagalkot-03, Mandya-03

3	16,10	Magneto scope the system shouldbe microprocessor based system with control based on Atmeg system. the system should have Built in signal processors , Built in magnetoscope, built in atom processor, screen 17'inc TFT keyboard ;-flexible type built into the rack for operating, cubical ;-5 ft X 2.1/2ft X2. 1/2 ft, LCD display for field strength indication, switches touch sensitive microcontroller based and remotely operated build in deveice (8) field strength variation by micro controlled based increment/decriment system, built in moter of servo type power :- operating 230v 50hz and built in DC supply rack type	EBT-03 EBT-04	32 Nos.	32	495000	15840000	Tiptur-04, Chitradurga-04, Gowribidnur-04, Puttur-04, Nalathwad-04, Bagalkot-04, Mandya-04, Hoovinahadagali-02, Haliyala-02
TOTAL Rs. One Crore Ninty Six Lakhs Twenty Six Thousand Three Hundred Only							19626300	

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NCB-13

SECTION-VI TECHNICAL SPECIFICATION

Package-13: Procurement list of Electronic Trainers & Equipments for Electronic Sector

SL. NO.	DGET SL. NO.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET	Estimated Cost Per Unit	TOTAL Estimated Cost	Consignee Govt I.T.I
1	23,23	X-Y recorder: eight channel recorder should sense AC and DC voltage, AC and DC current, temperature, strain, pressure, light and should have an interfacing sampling unit interfaced to a PC. The whole system microcontroller based touch sensitive unit to be connected to a multicolor recorder, the whole system should be operated remotely.	EBT-05,05	32 Nos.	128000	4096000	Tiptur-04, Chitradurga-04, Gowribidnur-04, Puttur-04, Nalathwad-04, Bagalkot-04, Mandya-04, Hoovinahadagali-04
2	15,1,6	Oscilloscope Trainer 20 MH :-it should have 2 modules one is trainer module and other oscilloscope. the trainer module should be microcontroller based system. single PCB with each sections printed in multicolour for easy identification. All test points are drawn from the oscilloscope and can be connected to the trainer with the help of 24 pin D connector. 20MHz dual channel/dual trace oscilloscope having standard controls should be supplied along with the trainer Power - 230VAC/50Hz Mains operated . Oscilloscope in open form with all components and controls placed on single PCB. the above system should be controlled remotely. Amplifier, Time base, Channel section signals available as test points in the trainer. Separate sections for PS,EHT, VA, HA, TB & Trigger for easy identification. Fault creation and rectification should be provided. Legend Printing on PCB for easy identification of components. the whole unit should be used as a standard 20 MHz Dual Trace Oscilloscope.	EAT-03 EAT-05,EBT-05	63 Nos.	47500	2992500	Tiptur-09, Chitradurga-09, Gowribidnur-09, Puttur-09, Nalathwad-09, Bagalkot-09, Mandya-09,

3	26,26	Frequency Analyzer: freefrequency range 150KHz to 1050MHz resolution, band width 20KHz - 500KHz, amplitude range - 100dbm to 10dbm, phase locked direct digital systems, resolution bandwidth 9KHz, 120KHz, 1MHz, analog processing and display. The above system should be remotely controlled	EAT-03,03	8 No.	178500	1428000	Tiptur-01, Chitradurga-01, Gowribidnur-01, Puttur-01, Nalathwad-01, Bagalkot-01, Mandya-01, Hoovinahadagali-01
4	6,192(A),1,1,14	Digital Electronics Trainer :-The unit should be microcontroller based system. o/p voltage $\pm 5V/2A, \pm 12V/15V$ at 500ma. Socket, 8/16/20 pin Dip/ZIF - 4Nos, 28/40 pin dip/ZIF 1No. logic inputs: 12 Nos microcontroller based touch sensitive system for logic inputs. Logic outputs: 12 Nos dual color LED for logic status indication, ttl clock: 1Hz, 10Hz, 100Hz, 1KHz, 10KHz, 100KHz, 1MHz. Monopuls. Display: 3 digit seven segment display and also alpha numerical LCD display Potentiometer: 1K & 10K lin- 2No. Transistors complementary and symmetry pairs. Bread board: high quality terminals, 2mm, BS-2. The system should have robotic working module features i.e. forward, backward, left and right movements, which should be controlled remotely of an designated object. The above system should be mounted on a rugged suitcase type cabinet, and strongly supported by instructional manual, having hand on exercises. the above system should be controlled remotely. operating voltage 230V AC 50Hz.	EAT-03,EBT-4,4,4,6	70 Nos.	26500	1855000	Tiptur-10, Chitradurga-10, Gowribidnur-10, Puttur-10, Nalathwad-10, Bagalkot-10, Mandya-10,

5	5,3,340	<p>Power electronic trainer:- the unit should be microcontrolled system, <i>Built in power supply</i>:- Dc voltage + 5 volts, 2 amps. +12 volts, 1 Amps. 0-15 volts, 1amps.microcontrolled based Touch sensitive system for increment and Decrement for Voltage AC voltages:- 0 - 50V, 1 Amps. 15-0-15, 1 Amps (transformer secondary, tapings). <i>E-12 series ½ watt resistor</i> (ohms , kilo ohms , mega ohms values). capacitors electrolytic & non electrolytic capacitors of standard values. <i>Bread board</i> :- having high quality 840/1680 tie points. terminals 2mm(BS-2).<i>Meter</i>:- Alpha numerical Plasma meter for AC/DC V&I measurements. <i>Function generator</i>:- 20 hz to 20 kilo hz (sine,square,triangle waves.).TTL O/P. <i>Active components</i>:- diodes , transistors ,zener diode of various values, FET, MOSFET, SCR,TRIAC(small current ratings) DIAC,UJT, OP-AMP, VDR,LDR, TIMER IC's, REGULATOR IC's, Solar cells,Crystals, Wire wound potentiometer, the above component should be mounted on an attractive and rugged cabinet.should operate on Remote control system. operating voltage 230V AC 50Hz.</p>	EAT-03 EBT-03,EAT-02	77 Nos.	22400	1724800	<p>Tiptur-07, Chitradurga-07, Gowribidnur-07, Puttur-07, Nalathwad-07, Bagalkot-07, Mandya-07,</p>
6	18,18	<p>RF/AF signal generators Trainer: Frequency 0 - 30MHz ACCURACY OF FREQUENCY :Within 20%. MAX. OUTPUT VOLTAGE :Approx. 0.5V. MODULATED FREQUENCY :Approx. 1KHz. PERCENTAGE OF MODULATION : :Approx.40% of (MHz) OUTPUT CONTROL FOR CARRIER WAVE : :High/Low selection (20dB) and continuously adjustable. OUTPUT CONTROL FOR A.F. : :Continuously adjustable 0.7volts approximately at 1KHz , POWER SOURCE : :230V A.C.50Hz approx. trainer should have. Several test points on the circuit diagram to observe the waveforms and to make measurements. Housing: It is housed in an elegant fiber cabinet Power: 230VAC - Mains operated with remote operating system. the above system should be of microcontroller based touch sensitive switches and the system should be remotely controlled</p>	EAT-03,03	16 Nos.	22900	366400	<p>Tiptur-02, Chitradurga-02, Gowribidnur-02, Puttur-02, Nalathwad-02, Bagalkot-02, Mandya-02, Hoovina Hadagali-02</p>

7	25	IEEE interface multimeter: the unit should be of microcontroller based system. 6½ digits, true rms, 4 wire resistance meter, resolution 100nv, 100pa, 100mv and should have trigger input and offset correction and auto range correction. The above system is operated with microcontroller based touch sensitive system and remotely controlled.	EAT-03	14 Nos.	65500	917000	Tiptur-02, Chitradurga-02, Gowribidnur-02, Puttur-02, Nalathwad-02, Bagalkot-02, Mandya-02,
8	10,56,27,32,N,238,266,19,32,19	Soldering & Desoldering station :- SOLDERING IRON (TEMPERATURE CONTROLLED solder station):_Microprocessor controlled with digital display should have complete with a temperature control from 350°F to 850°F and is temperature stable within ±9°F. The automatic shut-off features turn off the station after 99 minutes of inactivity to prolong tip, iron and station life. . Operates on 220V. solder station should have integrated complete with IR control power unit, soldering iron, iron holder with sponge and ETA tip. Can switch between °F&°C, iron is fitted with an non burnable silicone rubber cord for safety. " the above system is remotely controlled.	EAT-01 ECBT-03,EBT-04,05,04,05,05,06,06,05,06	44 Nos.	36975	1626900	Tiptur-05, Chitradurga-05, Gowribidnur-05, Puttur-05, Nalathwad-05, Bagalkot-05, Mandya-05, Hoovina hadagali-02, Haliyala-01, Malavalli-02, Shivmogga-02, Gurumitkal-02
9	14,368,N	Digital Multimeter Trainer:- the system should be of microcontroller based The 4½ digit multimeter trainer should have. Several test points on the circuit diagram to observe the waveforms and to make measurements. The digital multimeter accepts an analog quantity and converts it to an equivalent digital readout. It has the ability to measure the values of unknown resistance, voltage, current, and component tester. Built in regulated power supply: -5V/150mA: -5V/150mA Input Supply: 230 VAC/50Hz mains operated. the unit should be remotely controlled.	EAT-03,03,03	6 Nos	52,500.00	315000	Chitradurga-02, Gowribidnur-02, Bagalkot-02,
10	52,50	Earth fault locator- To test the open, short test of UG coaxial, network, power cables, should have the capacity to measure upto 6000 meters, should have the accuracy of 1%. With LCD display to measure and should have battery backup for measurement upto 10-12 hours.	ECAT-03 ECAT-05	9 Nos.	335000	3015000	Malavalli-03, Shivmogga-03, Gurumitkal-03
Total Rs. One Crore Eighty Three Lakhs Thirty Six Thousand Six Hundred Only						18336600	

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**Joint Director (Trg)
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Employment & Training.**

NS-PKG-1
LIST OF TOOLS & EQUIPMENTS TO BE PROCURED UNDER SHOPPING FOR PROJECT I.T.I's

SL. No.	DGET SL. No.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET PER ITI	Estimate d Cost Per Unit	Total Estimated Cost	Consignee I.T.I	Govt
1	94,144	I) Hermetic compressors 1/8hp & 1/2hp CFC Compressor:1/8 HP-01 No, 1/6 HP - 1 No, 1/2HP-1No. HFC134(a) Comp:1/8 HP-01 No, 1/6 HP - 1 No, 1/2HP-1No.	RACBT-III,V	12 Nos.each	57800	693600	karwar-06, Bidar-06	
2	90,105,162	Working model of vapour absorption system : 01 Ton(3000 k-cal/hr) capacity plant construction with complete components of AQUA-AMMONIA (Ammonia & Water) Absorption system. Consists of - Evaporator, Absorber,cooling system , pump. Generator(Steam Generator or gas burner) Rectifier, Analyzer, Condenser (Water cooled), Expansion valve, with all controls accessories, fitting etc., ISO approved.	RACBT-VI,VI, RACAT-01	6 Nos	65000	390000	karwar-03, Bidar-03	
3	66,136,137	Water cooler storage type 60 ltrs cap. With stainless steel body. Hermetically sealed comp forced Air Cooled condenser with water storage tank & cooling coil distribution around water tank. With thermostat & other Electrical control temp. maintained about 5 to 8°C. ISO approved.	RACAT-01,RACBT-V	6 Nos	88060	528360	karwar-03, Bidar-03	
4	88,92,132	Acid test kit with Acid resistant centrifugal pump. 1/2 HP	RACBTT-III-V	6 Nos	54300	325800	karwar-03, Bidar-03	
5	151	Ice cuber, capacity 80 kg/24 hr with scaled compressor required capacity, Air cooled condenser, defrosting system PCB control & other complete accessories. Ice storage stainless steel tank. Capacity to store 80 kg of Ice ISO approved.	RACAT-01	2 Nos.	85000	170000	karwar-01, Bidar-01	
6	73	Split type AC 4500kcal/hr.(1.5 ton cap) with indoor unit & outdoor units with electronic remote control extension copper tube & other essential accessories. ISO approved.	RACBT-IV	4 Nos.	42373	169492	karwar-02, Bidar-02	
7	86	3 Ton (9000 k-cal/hr) capacity semi hermetic or open type compressor with fly wheel , Separate motor with coupler, pulley, belt & other Accessories to run compressor & provision of capacity control, a) speed control b) suction valve reed lift method OR any other capacity control may be adopted. ISO approved.	RACBT-VI	2 Nos.	79200	158400	karwar-01, Bidar-01	

8	55	Window air conditioner capacity 1.5 ton with remote control	RACBT-IV	4 Nos.	32810	131240	karwar-02, Bidar-02
9	99	Frost free Refrigerator 260 liters capacity used with Eco- friendly H.C.Refrigerant	RACBT-IV	4 Nos.	31068	124272	karwar-02, Bidar-02
10	62	Bottle cooler 110 litres 1/6 hp with stainless steel outer body, inner tank galvanized iron sheet, consist of 3 doors. Vertical Machine positive door seal with rubber gasket shelves for 300ML & 650ML , 1Ltr, 2Ltr bottle storage, capillary control Hermetically sealed compressor with forced Air fan type condenser cabinet frame with mild steel Eco friendly HC Refrigerant used temperature maintained between 1 to 5°C . ISO approved.	RACBT-V	2 Nos.	51500	103000	karwar-01, Bidar-01
11	59	Deep freezer 165 litres capacity temp maintained -18°C to -21°C with stainless steel outer body inner body made with galvanized iron.	RACBT-V	2 Nos.	28000	56000	karwar-01, Bidar-01
Total Rs. Twenty Eight Lakhs Fifty Thousand One Hundred Sixty Four Only						2850164	

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Joint Director(Trg)
for Commissioner
Dept Of Employment & Training

NS-PKG-2
LIST OF TOOLS & EQUIPMENTS TO BE PROCURED UNDER SHOPPING FOR PROJECT I.T.I's

SL. No.	DGET SL. No.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET PER ITI	Estimated Cost Per Unit	Total Estimated Cost	Consignee I.T.I	Govt
1	58	Phosphating plant for about 25 to 50 kgs materials	FBT-05	4Nos	105000	420000	BT Centre,B-22-01, chitradurgaraysamudra-01 kookanurnur-01, nanjangud-01	
2	19	Vee block 300mm	PMBT-01,AAT-01	09Nos	33575	302175	KGF-02, Belgaum-02, Kanakapura-02, Holenarasipura-02 Honnava-01	
3	50	Parallel shank end mill dia 5,8,10&12 HSS With IS Standard	FBT-03	16Nos	18000	288000	BT Centre,B-22-04, chitradurgaraysamudra-04 kookanurnur-04, nanjangud-04	
4	43	Side and face cutter A 160 x 10 x bore dia 27mm HSS With IS Standard	FBT-03	12Nos	22500	270000	BT Centre,B-22-03, chitradurgaraysamudra-03 kookanurnur-03, nanjangud-03	
5	44	Side and face cutter A 200 x 20 x bore dia 32mm HSS With IS Standard	FBT-03	12 Nos	18900	226800	BT Centre,B-22-03, chitradurgaraysamudra-03 kookanurnur-03, nanjangud-03	
6	37	Cylindrical cutter dia 80 x 90 x bore dia 27 mm HSS With IS Standard	FBT-03	08 SETS	22500	180000	BT Centre,B-22-02, chitradurgaraysamudra-02 kookanurnur-02, nanjangud-02	
7	38	SHELL END MILL 100X50X32 MM	PMBT-05	8Nos	22000	176000	KGF-02, Belgaum-02, Kanakapura-02, Holenarasipura-02	
8	38	BALL END MILL 3,6,8,10 & 12 MM (SET OF 4 Nos.)	PMBT-05	8Sets	22000	176000	KGF-02, Belgaum-02, Kanakapura-02, Holenarasipura-02	
10	67	Arbor press No.2 and fly press No 2 standard make or Equivalent	PMBT-05	4Set	54000	216000	KGF-01, Belgaum-01, Kanakapura-01, Holenarasipura-01	
Twenty two Lakhs fifty four thousand nine hundred and seventy five only						2254975		

Draft approved by the Commissioner)

Joint Director(Trg)
for Commissioner
Dept Of Employment & Training

NS-PKG-3

LIST OF TOOLS & EQUIPMENTS TO BE PROCURED UNDER SHOPPING FOR PROJECT I.T.I's

SL. No.	DGET SL. No.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET PER ITI	Estimated Cost Per Unit	Total Estimated Cost	Consignee I.T.I	Govt
1	116	Shear (Straight) Bench Shear 450 mm to cut MS Sheet upto 5MM thickness	RACBT-I	8 Nos.	45000	360000	karwar-06, Bidar-06	
2	26,49,49,33	Drill twist -Addision make or Equivalent 6,8,10,12,14,16,18,20,22,24mm	ABT-05,FBT-01,AAT-02	22 SETS	14600	321200	BT Centre,B-22-03, chitradurgarayamsudra-03, kookanurnur-03, nanjangud-03, Honnavara-10	
3	33	Drill twist2-12MM set of 8 nos. parallel shunk/straight shunk-Addission make or equivalent	AAT-01	10 sets	16872	168720	Honnavara-10	
4	55	Shearing machine for cutting flat, square ,round bar ,and plates hand operated 10mm(appox)	FBT-05	04Nos	42000	168000	BT Centre,B-22-01, chitradurgarayamsudra-01, kookanurnur-01, nanjangud-01	
5	10	Ring spanner set of 12 pieces(6mm to 32mm) Geodar or Equivalent	ABT-05	17 Nos	8400	142800	Honnavara-17	
6	27	Taps and Dies complete set in a box BA, BSW, BSF , metric with handle--Addision make or Equivalent 0-6 BA , 6-24 mm ,1/4" - 1" , 1/4" - 1" set of 1 No. each	ABT-05	2 SETS	59373	118746	Honnavara-02	
7	25	File assorted 200mm , 2nd Cut (8 types) - Jk make or Equivalent	ABT-05	16 nos	7200	115200	Honnavara-16	
8	106	Tin smiths bench folder 600x1.6mm standard make	ABT-02	1 No.	65450	65450	Honnavara-01	
9	33	Bench Type Hand shear universal 250mm Taparia make or Equivalent	ABT-02	4 Nos.	12580	50320	Honnavara-04	
10	53	Tripod axle stand adjustable 1500kg capacity Standard make	ABT-06	8 Nos.	4500	36000	Honnavara-08	
11	7	Protractor with blade 150mm Mitutoyo make or Equivillant	ABT-02	17 Nos	365	6205	Honnavara-17	
12	39	Horses Standard make	ABT-05	4 Nos.	1400	5600	Honnavara-4	
13	23	Shear Tinmans 300mm Bench shear	PMBT-02	32 Nos.	22500	720000	KGF-08, Belgaum-08, Kanakapura-08, Holenarasipura-08	
Twenty two Lakhs seventy eight thousand two hundred and fourty one only						2278241		

Draft approved by the Commissioner)

Joint Director(Trg)
for Commissioner
Dept Of Employment & Training

NS-PKG-4

LIST OF TOOLS & EQUIPMENTS TO BE PROCURED UNDER SHOPPING FOR PROJECT I.T.I's

SL. No.	DGET SL. No.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET PER ITI	Estimated Cost Per Unit	Total Estimated Cost	Consignee Govt I.T.I	
1	,33,33,33,33,33	½ Dove tail chisel	EBT-01,01,01,01,EBT-01,EBT-01	102 Nos.	450	45900		chitradurga-17,madikeri-17,puttur,17,hadagal-17,mandya-17,Tiputtur-17
2	,26,26,26	18' jack plainer	EBT-01,EBT-01,EBT-01,01	68 Nos.	1900	129200		chitradurga-17,mandya-17,puttur-17,Gowribidnur-17
3	102,69,69,69,69,69,69	24" Jack plainer, reputed company make	EBT-01,01,EBT-01,EBT-01,01,01,01	14 Nos	3200	44800		Gowribidnur-2,hadagali-2,mandya-2,haliyala-2,madikeri-2,puttur-2,Tiputtur-2
4	25,25	9" smooth plainer	EBT-01,01	33 Nos.	1800	59400		puttur-16,hadagali-17
5	18,18	Adjustable spanner 300 mm	FBT-06,06	2 Nos	1200	2400		chitradurga-01 NO, nanjangud-01 NO
6	35	Adjustable spanner 12 cms / 150 mm	FBT-01	33 Nos	600	19800	chitradurga	
7	11,11,,,11,11	Adjustable spanner/slide rinch: 20cms - taparia	EBT-02,03,02,03,EBT-02,03	102 Nos.	900	91800		Tiputtur-17,Tiputtur-17,chitradurga-17,chitradurga-17,mandya-17,mandya-17.
8	33,12,63,67,12,63,	Allen hexagonal keys 2.5 to 12	FBT-01,EAT-02,EBT-01,EBT-01,EAT-02,EBT-01,01	26 Sets	350	9100		nanjangud-02,bagalkote-4,mandya-04,nalatwad-4,Tiputtur-4,Tiputtur-4,chitradurga-4
9	64,64	Alloy steel test pieces of known composition of atleast 15 different steel sizes	FBT-05,05	2 Sets	2500	5000		bt centre-01,nanjangud-01 NO
10	108	Anemometer WANE type)	RACAT-01	2 Nos.	18300	36600	karwar	
11	,42,9,9,9	Angle plate 10x20 cm	EBT-01,01,01,01,EBT-01	20 NOS	2200	44000		chitradurga-4,Gowribidnur-4,puttur-4,Tiputtur-4,mandya-4
12	38,38	Angle Plate Adiustable 250x150x175	PMBT-01,FBT-01,	4 nos	9000	36000		KANKAPUR-02,nanjangud-02NO

13	37	Angle plate size 200x100x200 mm	FBT-01	2 Nos	4500	9000	nanjangud	
14	28,28,28,26	Annealing box 152 x 50 x 45 cm M.S Plate 3 mm Thick	FBT-05,05,02,05	4No	3500	14000		kookanuranur-02,nanjangud-01,bt centre-01 NO.
15	16,16,16,16	Anvil face stake	FBT-02,02,02,PMBT-02	16 Nos	2500	40000		bt centre-04,kookanuranur-04,nanjangud-04,kanakapura-04
16	2,2,2,2,2,2,2,3,3	Apron leather	FAT-03, 01, 04, 03, 04,01, FBT-04,05,05	153Nos	350	53550		chitradurga-68,kookanuranur-51,nanjangud-34,
17	30,33,33	Assorted carbide lathe tools with holder different shapes and sizes (Set of 6 pcs)	FBT-03,03,03	6 sets	2500	15000		kookanuranur-04,bt centre-01,nanjangud 01
18	36,36,36	Auto - transformer - variac, 5amps enclosed type 230 v AC	FBT-06,06,06	3Nos	4500	13500		bt centre-01,nanjangud-01,chitradurga-01 NO
19	112	Ball valve service valve, hand hut of valve of ¼" to 7/8"	RACAT-3	5 no.	17200	86000	BIDAR	
20	9,9,9	Ballpane hammer 0.5 Kg with handle	FBT-02,02,02	51 No.	350	17850		bt centre-17,chitradurga-17,nanjangud-17
21	24,24,24	Bar magnet	FBT-06,06,PMBT-03	3 No.	600	1800		chitradurga-01,bt centre-01,Holenarsipura-01 NO
22	17,17,17	Beak iron stake	FBT-02,02,02	12Nos	2500	30000		nanjangud-04,kookanuranur-04,bt centre-04 NO.
23	76,81,81,81,33	Bench lever shears 250 mm blade x 3 mm capacity	FBT-02,PMBT-02,02,02,ABT-02	4No	5600	22400		nanjangud-01,KGF-01,KANK-01,HNPUR-01
24	6	Bending spring external type, for copper	RACBT-03	4 Sets	750	3000	karwar	
25	53,53,53,53,53	Bessing mallet	FBT-02,02,02,PMBT-02,02	20 nos	2800	56000		bt centre-04,kookanuranur-04,nanjangud-04,KANK 04,holenarsipura-04
26	,40,7,7	Block V pair 7 cm and 15 cm with clamp	EBT-01,01,01,01	14 Sets	19500	273000		chitradurga-2,Gowribidnur-4,hadagali-4,Tiputtur 4

27	43,45	Blow lamp 1 lt	FBT-02,05	3Nos	1500	4500	nanjangudan	
28	21,21,21,5 1,51,19,01, 01,01,01,0 1,19,01,19	Brass rule 30 cm or nickle chrome steel rule 30 cm	FBT-04,04,04,01,06,RAC T-01,03,PMBT-03,04,01,05,01,02,03	119Nos	130	15470		bt centre-04,nanjangud-21, chitradurga-08,BIDAR-10,kanakapura-55,holenarsipura-21,
29	44,44,34,34,64	Brush steel wire 5 cm x 15 cm	FBT-05,05,05,05,PMBT-02	26Nos	250	6500		nanjangud-05,kookanuranur-01,chitradurga-04,kanakapura-16
30	87,87	Buffing and polishing machine	FBT-02,02	2 Nos	4500	9000		chitradurga-01,nanjangud-01
31	78,31	C' Clamp 150mm	PMBT-02,04	8 Nos.	450	3600	holenarsipura	
32	4,3,10	Caliper inside 20 cm spring,reputed company make.	EBT-01,01,FBT-05	42 Nos.	220	9240		Puttur-17,17,nanjangudud-8
33	10,10,10	Caliper Outside 15 cm	FAT-01,03,04	51Nos.	160	8160	kookanurNUR	
34	9	Calipers outside 20 cm	FBT-05	8 Nos	220	1760	nanjangud	
35	7,7	Camber Angle gauge	AAT-02,01	2 Nos	22700	45400	Honnavara	
36	33,63	Card file	EBT-01,01	8NOS	90	720		hadagali-4,nalatwad-4
37	70,,70,70	Carpenter vice 10 "	EBT-01,01,01,01	64Nos	4800	307200		hadagali-16,chitradurga-16,madikeri-16,puttur-16
38	37,37,44,44	Centre drill A 1 to 5 (A1,A2,A3,A4,A5)	FBT-03,03,01,01	12Nos	4000	48000		chitradurga-06,nanjangud-06 Nos
39	58	Centre gauge 60	PMBT-05	1 No.	290	290	holenarsipura	
40	19,6,3,6,6	centre punch 10 cm	FBT-05,01,02,03,PMBT-05	85Nos	100	8500		nanjangud-68, holenarsipura-17 Nos
41	8,8,8,8	Centre punch 9 mm x 127 mm	FBT-04,FAT-01,03,04	68Nos	150	10200	nanjangud	nanjangud-17,kookanuranur-51 Nos
42	67,67	Chart for spark test	FBT-05,05	2 Nos	800	1600		chitradurga-01,nanjangud-01
43	23,23,23	Chiesel cold cross 9mm	FAT-01,03,04	3 No.	200	600	bt centre	
44	14,14,14,14,14,14,14	Chipping screen hand	FAT-04,01,03,04,FBT-04,FAT-01,03	119Nos	850	101150		chitradurga-51,kookanuranur-51,nanjangud-17
45	41,41,41	Chisel 9 mm round nose	EBT-01,EBT-01,EBT-01	12 nos	160	1920		mandya-4,puttur-4,tiptur-4
46	,9,9	Chisel cold	EBT-01,EBT-01,EBT-01	51 Nos	160	8160		bagalkote-17,mandya-17,puttur-17
47	39,39	Chisel cold & cross cut	EBT-01,01	8 Nos.	390	3120		hadagali-4,puttur-4

48	40,7,7,7	Chisel cold 19 mm flat : reputed company make	EBT-01,FAT-01,03,04	55 Nos.	290	15950		puttur-4,kookanuranur-51
49	7,32,38,14,14	Chisel cold flat 25mm x 250 mm	FBT-05,02,ABT-02,FBT-01,PMBT-01	76 Nos	350	26600	nanjangud	nanjangud-55,HON-04,KGF-17
50	8	Chisel cold flat 6 mmx150mm	FBT-05	17 Nos	190	3230	nanjangud	
51	75	Circlip Pliers Out Side	AAT-01	1 Nos	1280	1280	Honnavaara	
52	126	Circulating water pump (small)	RACAT-3	1 no.	13400	13400	BIDAR	
53	42,,75,42	Clamp "C" 5 cm & 10 cm: reputed company make	EBT-01,01,01,EBT-01	16 Sets	6100	97600		Tiputtur-4,chitradurga-4,Gowribidnur-4,mandya-4
54	46,46	Clamps C 100 mm	FBT-01,ABT-01	4Nos	400	1600		nanjangud-02,HON-02 No
55	47	Clamps C 200 mm	FBT-01	2 Nos	850	1700	nanjangud	
56	48	Cleaning tray 45 X 30 c.m	AAT-02	4 Nos	430	1720	Honnavaara	
57	51	Coil spring compressor for suspension spring	ABT-06	1 Nos	12600	12600	Honnavaara	
58	31	Combination plier 200 mm	FBT-01	2 Nos	470	940	nanjangud	
59	5,5,6,6,6,3,8,38,40,1	Combination pliers: 150 mm with serrated jaws pipe grip side cutters capacity 1.60m hard wire (1500 newton/mm square)- taparia or equivalent make.	EBT-04,05,EAT-02,02,02,EBT-01,01,PMBT-02,ABT-03	73 Nos.	325	23725		puttur-17,17,Tiputtur-4,puttur-4,bagalkote-8,puttur-4,HNP-2,HONVR-17
60	5,7,7,7	Combination pliers: 180 mm with serrated jaws pipe grip side cutters capacity 1.60m hard wire (1800 newton/mm square)- taparia	EBT-06,02,03,06	68 NOS	400	27200		Tiputtur-04,puttur-17,17,17
61	100	Compressors testers for small hermetic compressors	RACBT-03	1 No	8700	8700	karwar	
62	22	Copper bit soldring iron 0.25kg	ABT-03	5 Nos	1260	6300	Honnavaara	
63	68,68,68,6,9,68,68,68	Counter Drill 18"	EBT-01,01,01,01,01,01,EBT-01	28 NOS	3400	95200		hadagali-4,Tiputtur-4,haliyala-4,nalatwad-4,madikeri-4,puttur-4,mandya-4.
64	6,6,6,6	Cross Peen Hammer 0.25 Kg with handle	PMBT-02,FBT-02,02,02	68Nos	400	27200		holenarsipura-17,bt centre-17,chitradurga-17,nanjangud17
65	20,20,20	Cross pein hammer 115 gms with handle	EBT-01,01,01	51 Nos.	210	10710		puttur-17,Tiputtur-17,bagalkote-17.
66	65	Crow bar 910 x 25 mm	FBT-02	2 Nos	900	1800	Devarayasamudra	
67	52	D E Spanner G P (6 mm to 32 mm)(set of 12 spanner)	FBT-02	2 Nos	1500	3000	Devarayasamudra	
68	128,123,124	Db meter	RACAT-1,2,3	6 Nos.	8000	48000	BIDAR	

69	75,75	DeScaling pump set with stainless steel impeller & housing complete with motor 1 hp & accessorie.	RACBT-6,6	2 No.	69550	139100	BIDAR	
70	106, 107, 106, 106	Dial thermometer remote control, armoured capillary dial 75mm-50C to + 50C	RACAT-02,01,02,03	8 Nos	3600	28800		karwarWR-04,BIDAR-04
71	8,8	Diagonal cutter: 160mm, Taparia or equivalent	EAT-02,02	8 Nos.	275	2200		bagalkote-4,puttur-4
72	5,,9,9,9,9	Divider spring 20cm	EBT-01,FAT-01,3,4,4	34 Nos.	200	6800		puttur-17,kookanuranur-17
73	,17,17	Dot slot punch	EBT-01,01,01	51Nos	230	11730		BGK-17,puttur-17,Tiputtur-17
74	3,3,3,3,3,3, 3,19,19,19, 19,19,4,4,1 1,11,11,11	Double bladed electricain knife:- heavy duty, reputed company make.	EBT-06,04,05,06,EBT04, EBT-06,EBT-01,EBT-01,01,01,FBT-06,PMBT-03,EAT-02,02,02,02	270 Nos	150	40500		haliyala-17,hadagali-17,17,17mandya-17,madikeri-17,mandya-17.hadagali-17,mandya-17,haliyala-17,madikeri-17.puttur-17,,chitradurga-17,holenarsipura-17,puttur-16,bagalkote-16,hadagali-16,Tiputtur-1
75	39	Double ended off -set spanner (W.W) - 3 to 13.5 mm set of 7 No.s	AAT-03	1 Set	2496	2496	Honnagara	
76	38	Double ended spanner 6 to 32 mm-set of 12 No.s	AAT-03	1 Set	9900	9900	Honnagara	
77	40	Double open ended Ignition spanner set (BA0X128X9 set of 5)	AAT-03	1 Set	2700	2700	Honnagara	
78	29,33,29,2 9,29,47	Dow tail saw	EBT-01,01,01,01,01	85 NOS	480	40800		madikeri-17,bagalkote-17,hadagali-17,puttur-17,Tiputtur-17,
79	47,14	Drill brace hand 0-12 MM	EBT-01,01	5 Nos.	3300	16500		Gowribidnur-4,puttur 1
80	53	Drill chuck 12 mm: reputed company make	EBT-01	4	600	2400		Tiputturtur
81	33	Drill Twist (asotted) 3-6 MM Set of 4 Nos	AAT-01	10 Sets.	2000	20000	Honnagara	
82	48,15,15,1 5	Drill twist S/S 1.5 to 12 MM by 0.4 MM	EBT-01,01,EBT-01,EBT-01	16 NOS	6500	104000		Gowribidnur-4,hadagali-4,mandya 4,Tiputtur-4
83	41	Earth clamps	FBT-04	12 Nos	300	3600	nanjangud	

84	50,50,50	Elco meter	FBT-05,05,05	3 Nos	500	1500		bt centre-01,kookanuranur-01,nanjangud-01
85	26,26,26,5	Electric Drill machine portable 6mm capacity 250 V	PMBT-03, FBT-06, 06, ABT-03	4 Nos.	6000	24000		KGF-01,chitradurga-01,kookanuranur-01,HONVR-01
86	17,17	Electric Drilling machine portable 10mm	EAT-02,02	8 NOS	7000	56000		BGK-04,puttur-04
87	7	Electrician testing pencial (line/neon tester)	ABT-03	17Nos	85	1445	Honnavaara	
88	45,45,44,45	Electrode holder 400 amps	FBT-04,FAT-04,03,01	24 Nos	500	12000	devarayamdra	
89	54,54,54	Endfaked mallet	FBT-02,02,PMBT-02	12 Nos	230	2760		chitradurga-4,nanjangud-04,holenarsipura-04
90	12,12	Engineers screw driver	PMBT-01	34 Nos.	125	4250	holenarsipura	
91	47	Face mill dia 30 with 2 sets of carbide inserts	FBT-03	2 Nos	8000	16000	nanjangud	
92	48	Face mill dia 40 with 2 sets of carbide inserts	FBT-03	2 Nos	8000	16000	nanjangud	
93	49	Face mill dia 80 with 2 sets of carbide inserts	FBT-03	2 Nos	8000	16000	nanjangud	
94	6,4,,26,4,72,72,102,102, 102	Feeler gauge 10 blades: with handle reputed company make	EBT-02,02,01,01,02,PMBT-01,01,RACAT-01,03,02	37 NOS	475	17575		nalatwad-4,Tiputtur-4,chitradurga-4,puttur-4,bagalkote-4,KANK-01,holenarsipura-01,karwar-10,BID-05
95	20,20,20,20	File cut saw 15 m smooth: with handle reputed company make	EBT-01,01,01,EBT-01	16 Nos.	715	11440		puttur-4,Tiputtur-4,haliyala-4,mandya-4.
96	21,21,21,,32	File feather edge 15 cm smooth	EBT-01,EBT-01,01,01,01	20nos	650	13000		mandya-4,haliyala-4,Tiputtur-4,bagalkote-4,nalatwad-4.

97	11,11	File flat 2 nd Cut 250 mm	PMBT-01,01,05,05	68Nos	685	46580		kanakapuraPR-17,holenarsipura-17
98	18	File flat 200mm 2nd cut with handel	EAT-02	4 Nos	600	2400		Tiputturtur
99	13	File flat 25 smooth	EBT-01	17 nos	600	10200		Mandya
100	35,35,41	File flat 250 mm smooth	PMBT-02,02,ABT-02	6 Nos.	720	4320		holenarsipura-02,HONVR-02,KANKPR-02
101	18	File Flat 2nd cut 200mm	EAT-02	4Nos	600	2400		bagalkotealkot
102	36	FILE FLAT 300MM BASTARD'	PMBT-02	2 Nos	475	950	KANAKAPURA	
103	32,32,32,3 2,32,32,32	File flat 35 cm rough	FAT-01,03,04,03,01,04,01,04	48 Nos	600	28800		bt centre-18,chitradurga-18,kookanuranur-12
104	10,10,10	File flat bastard 300 MM	PMBT-01,05,FBT-01	51 Nos	600	30600		kanakapuraPR-34,chitradurga-17
105	51,13,35	File flat smooth 200 mm	FBT-01,PMBT-01,FBT-02	23 Nos	600	13800		bt centre-04,holenarsipura-17,kookanuranur-2
106	65	File flat,2nd cut, length 150mm	RACAT-2	5 no.	420	2100	BIDAR	
107	52,52	File H/R 2nd cut 250 mm	FBT-01,PMBT-01	8 Nos	850	6800		nanjangud-04,holenarsipura-04
108	37,38,38,37	File half round 300 mm smooth	FBT-02,02,02,PMBT02	12Nos	1200	14400		nanjangud-6,bt centre-10,holenarsipuraA-02
109	30,30	File half round 25 Cm 2nd cut	EBT-01,01	8 Nos.	600	4800		hadagali-4,madikeri-4.
110	31,31,31	File half round 25 Cm bastered	EBT-01,01,01	12 NOS	600	7200		hadagali-4,madikeri-4,Tiputtur-4
111	31,31,31,31,37	File half round bastard 30 cm	FBT-04,FAT-01,04,03,FBT-02	26Nos	700	18200		bt centre-6,chitradurgaRA-18,kookanuranur-02
112	14,14,14	File half round second cut 15 cm, with handle, reputed company make	EBT-01,01,01	51 NOS	480	24480		hadagali-17,haliyala-17,madikeri-17
113	32,32,32	File hand 15 Cm	EBT-01,EBT-01,EBT-01	12 NOS	480	5760		hadagali-4,mandya-4,nalatwad-4.
114	19,19,19,19,19	File knife edge 15 Cm smooth	EBT-01,01,01,01,EBT-01	20 NOS	480	9600		hadagali-4,madikeri-4puttur-4,Tiputtur-4,mandya-4.
115	6	File round 150mm	PMBT-03	16Nos	700	11200	holenarsipura	
116	23	File round 20cm 2nd cut	EBT-01	4 nos	150	600		Mandya
117	24	File square 15 cm2nd cut:with handle reputed company make	EBT-01	4 Nos.	250	1000		Puttur
118	25,42,55	File square 25 cm 2nd cut:with handle reputed company make	EBT-01,PMBT-05,01	12 Nos.	780	9360		puttur-04,holenarsipura-08
119	12	File square rough 25mm	FBT-05	8Nos.	780	6240	chitradurga	

120	29,,29,62,29,29	File swiss needle type set of 12 reputed company make	EBT-02,01,01,01,01,EBT-01	24 NOS	1900	45600		madikeri-4,chitradurga-4,Tiputtur-4,Gowribidnur-4,hadagali-4,mandya-4
121	22,22,22	File traingular 15 cm smooth:with handle reputed company make	EBT-01,01,EBT-01,EBT-01	12 Nos.	450	5400		puttur-4,Tiputtur-4,mandya-4
122	53,53	File Triangular Smooth 200 mm	PMBT-01,01	8Nos.	780	6240		kanakapura-04,holenarsipura-04
123	76	File Triangular Smooth 250mm	PMBT-02	4Nos	780	3120	KANAKAPURA	
124	18,18,18,18	File warding 15 Cm smooth	EBT-01,01,01,EBT-01	16 Nos.	480	7680		hadagali-4,madikeri-4,Tiputtur-4,mandya-4.
Rupees Thirty one Lakhs thirty five thousand nine hundred and seventy one only						3135971		

Draft approved by the Commissioner)

Joint Director(Trg)
for Commissioner
Dept Of Employment & Training

NS-PKG-5

LIST OF TOOLS & EQUIPMENTS TO BE PROCURED UNDER SHOPPING FOR PROJECT I.T.I's

SL. No.	DGET SL. No.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET	Estimate d Cost Per Unit	Total Estimated Cost	Consignee Govt I.T.I	
1	101,101	Fin starightner/fin comb.	RACAT-01,03,	10 Nos.	305	3050		karwar-05,BID-05
2	3	Finner chisel wood 6mm,12mm,25mm	ABT-03	2 Nos	1890	3780	Honnavaara	
3	8,10,8,11,6,8,8,8,8,9,8,8,8,11,8,8,10,8,11	Fire Extinguisher 5 kg Capacity	EBT-03,04,05,06,N,EBT-01,02,04,03,05,06,E BT01,EBT-01,03,05,06,02,03,04,05,08	21 NOS	9000	189000		Mandya-04,hadagali-1,nalatwad-1,1,1,1,1,1,mandya-N,puttur-1,haliyala-1,2,1,puttur-01,1,1,1,1
4	11,11	Firmer Chisel 25 mm	PMBT-03,03	8Nos	295	2360		kanakapura-04,holenarsipura-04
5	61	Flange Micrometer Size 25-50mm	PMBT-05	1 Nos	2300	2300	KANAKAPURA	
6	33,33,15,15,15,15	Funnel Stake	FBT-05,05,02,02,02, PMBT-02	20Nos.	1250	25000		chitradurga-4,nanjangud-4,bt centre-04,kookanuranur-04,holenarsipura-04
7	95,62,62,62	Gauge imperial sheet	EBT-01,01,EBT-01,EBT-01	16 Nos.	190	3040		Gowribidnur-4,madikeri-4,mandya-4,puttur-4.
8	23	Gimlet 6 mm	EBT-01	17 Nos.	100	1700		Puttur
9	53,53,52,52,52,52,51,52	Glass with 108 mm x 82 mm / Equilent For welding	FBT-04,04,04,04,FAT-01,01,03,04	136Nos.	50	6800		chitradurga-36,nanjangud-84,bt centre-16
10	51,51,51	Gllasso meter	FBT-05,05,05	3Nos.	1500	4500		bt centre-01,nanjangud-01,kookanuranur-01
11	1,1,1,1,	Gloves pair leather	FBT-04,FAT-01,03,04	68Nos	325	22100		chitradurga-17,kookanuranur-51
12	5,5,5,5,5,,1,5,5,5,8,206,8	Goggle pair welder	FBT-04,FAT-1,03,04,FBT-04,05,FAT-01,03,04,EBT-04,04,04	188 Nos	125	23500		bt centre-34,nanjangud-51,chitradurga-17,kookanuranur-51,bagalkote-17,Gowribidnur-17,Tiputtur-1.

13	45	Grinding Wheel dresser star type	FBT-01	1 No	2000	2000	kookanurNUR	
14	41	Grip wrench 200 mm	FBT-02	1 No	500	500	chitradurga	
15	57,34,27,15	Hacksaw adjustable 250-300 mm with blades / 300 MM	FBT-01,03,04,EBT-01	27 Nos	450	12150		chitradurga-10,mandya-17
16	5	Half inch dow tail chisel	EBT-01	17Nos	250	4250		Nalatwad
17	14,14,14,14	Half Moon Stake	FBT-02,02,PMBT-02,02	16 Nos	400	6400		kookanuranur-04,bt centre-04,kanakapura-04,KGF-04
18	60,60,60,60,60,60,60	Hallowing hammer with handle	FBT-02,02,02,02,PMBT-02,02,02	28Nos	1100	30800		bt centre-04,nanjangud-04,chitradurga-04,holenarsipura-04,BELGM-04,kanakapura-04,kookanuranur-04
19	12,23,23,28,28,23,22,22,22,22,22	Hammer ball pien 1.0Kg / 900 GRMS	FBT-06,06,03,03,01,01,03,01,PMBT-03,FBT-05,04,04,FAT-04,01	95 Nos	900	85500		chitradurga-66,bt centre-22,kookanuranur-06,kanakapura-01
20	5,11	Hammer ball Pein 0.25 Kg / 300 GMS	FBT-06,EBT-01	34Nos	350	11900		chitradurga-17,Tiputtur-17
21	7,7,7,7,7,14,22,14,10	Hammer B.P. 0.5 Kg	PMBT-05,FBT-01,03,01,03,EAT-02,02,02,02,EBT-01	122 Nos	465	56730		KGF-17,bt centre-34,chitradurga-34,bagalkote-8,nalatwad-4,mandya-4,Tiputtur-21
22	22,28,22,22,22,22,22,22	Hammer block	PMBT-02,02,02,ABT 02,FBT-02,02,02,02	29 Nos	600	17400		BELGM-17,kookanuranur-02,kanakapura-02,bt centre-02,chitradurga-02,nanjangud-02,holenarsipura-02
23	20,20,20,82,82,20,20	Hammer creasing with handle	FBT-02,02,02,02,PMBT-02,RACBT-01,01	28 Nos	1200	33600	bt centre	bt centre-4,kookanuranur-04,kanakapura-04,BIDAR-04,karwar-04,chitradurga-04,nanjangud-04
24	30,30,27,30	Hammer lead 1 Kg	FBT-01,01,01,RACBT-01	8 Nos	2200	17600	chitradurga	chitradurga-02,nanjangud-02,BIDAR-02,kookanuranur-02

25	81,19,19,8 1,19,19,19, 14	Hammer peaning with handle	RACBT-1,01,01,FBT- 02,02,02,02,PMBT- 02,EAT-02,02	36 Nos	1200	43200		BIDAR- 04,kookanuranur- 04,kanakapura- 04,karwar-04,bt centre- 04,chitradurga- 04,nanjangud- 04,madikeri- 4,chitradurga-4
26	21	HAMMER PLANISHING WITH HANDLE	PMBT-02	4Nos	1200	4800	KANAKAPURA	
27	6,6,6,6,6,6, 6,6,6,6,6,6	Hammer scaling 0.25 kg with handle	FBT-04,04,04,FAT- 04,01,03,04,03,01,0 1,03,04	204 Nos	300	61200		bt centre- 17,chitradurga- 68,nanjangud- 68,kookanuranur-51
28	22	Hammer smith 1.8 kg handled	FBT-05	4 Nos	1100	4400	nanjangud	
29	28,28,28,2 8,28,28,28, 28,28,28,2 8	Hammering block 5 cm thick 60 sq	FBT-04,04,FAT- 01,03,04,01,03,04,0 1,04,03	22Nos	1300	28600		chitradurga-08,bt centre-06,nanjangud 08
30	101	Hand blower portable complete 1/10 HP	RACBT-03	1 No	3900	3900	karwar	
31	45,45	Hand drill 0 to 6 mm, 8mm, 10mm, and 12 mm	FBT-02,02	4 Nos	1500	6000		nanjangud- 02,chitradurga-02
32	77	Hand Drilling Machine power 10 mm	FBT-01	1 No	5000	5000	kookanurNUR	
33	32,32	Hand File, 15 cm: with handle reputed company make	EBT-01,01	8 Nos.	400	3200		madikeri-4,puttur-4.
34	136,136	Hand former & 20 g capacity lock former.	RACBT-5,05	2 Nos	6500	13000	BIDAR	BIDAR-01,karwar-01
35	39,39,39,3 9,98,39	Hand Groover 3 mm ,4mm, 5mm,.	PMBT-02,02,FBT- 02,02,02,RACBT-01	24 Nos	345	8280		kanakapura- 04,kookanuranur- 04,NSN- 04,holenarsipura- 04,karwar-04,bt centre-04
36	36,36,38,3 3	Hand hammer 1 kg with handle	FBT-03,03,03,PMBT- 04	8 Nos	1200	9600	bt centre	bt centre- 02,chitradurga- 02,kanakapura- 02,kookanuranur-02
37	35,35	Hand Reamer adjustable 10.5 to 11.25, 11.25 to 12.75, 12.752 to 14.25, 14.25 to 15.75 mm OR IN INCHES H1 TO H5	AAT-02,01	4 Sets	16900	67600	Honnavaara	

38	27,27,33,27,27,16,16,16,,16	Hand shear universal 250 mm	FBT-02,02,02,02,ABT-02,EAT-02,02,02,02,02	44 Nos	3500	154000		chitradurga-04,nanjangud-04,HON-04,bt centre-04,kookanuranur-04,hadagali-4,puttur-4,Tiputtur-4,mandya-4,BGK-8.
39	58,53	Hand vice 50 mm jaw	FBT-01,02	18Nos	850	15300		kookanuranur-02,chitradurga-16
40	13,13,13,13,	Hardie or bottom sit for anvil 5 cm	FBT-05,05,05,05	16 Nos	1800	28800		bt centre-04,chitradurga-04,kookanuranur-04,nanjangud-04
41	61	HC refrigerant in cylinder/disposable containers	RACBT-03	1 No	650	650	karwar	
42	9,9	Heat sink pliers: reputed co. Make	EBT-02,03,	34 Nos.	200	6800		puttur-17,17
43	41,91,91,41	Heating kit with infra red bulb (200 watt capacity)	RACBT-03,02,01,03	4 Nos	5750	23000		karwar-1,BIDAR-03
44	44,44,44	Heavy Duty Cutting Blow Pipe with Cutting Nozzles	FAT-01,04,04	3 Nos	3800	11400		kookanuranur-01,chitradurga-01,nanjangud-01
45	6,6,10,6	Heavy duty screw driver 150 mm	EBT-02,02,02,02	68 NOS	320	21760		bagalkote-17,hadagali-17,nalatwad-17,Tiputtur-17
46	8,8	Heavy duty screw driver - 300MM	EBT-05,05,	34 Nos.	290	9860		puttur-17,Tiputtur-17
47	22	Heavy duty screw driver 200 mm	EBT-01	17 Nos.	200	3400		Puttur-17
48	139	Hermetic compressor 3 ton capacity	RACAT-2	1 no.	56000	56000	BIDAR	
49	31	Hiigh rate discharge tester (cell tester)	ABT-03	1 Nos.	3600	3600	Honnagara	
50	94	Hole Punch Round 3mm, 4mm & 6mm Dia	RACBT-1	4 No.	1285	5140	BIDAR	
51	44,44	HSS twist drill 3 mm, 4mm and 6 mm (parallel shank)	FBT-02,PMBT-02	6 Nos Each	600	3600		chitradurga-03,kanakapura-03
52	20,20	Instrument file set: set of 6 Nos consisting of hand, square, warding, half round, 3 squares and round files.&the set kept in roged box	EAT-02,02	6 Nos.	700	2800		BGK-4,PUT-2
53	4,4,4,4	Insulated handel thin connector screw driver 150 mm reputed co. Make.	EBT-03,03,02,02	68 NOS	150	10200		Tiputtur-17,puttur-17,Tiputtur-17
54	39,36,36,36	Knife folded Stainless steel - 150 mm	FBT-05,RACAT-01,02,03	19 Nos.	80	1520		nanjangud-04,karwar-05,BIDAR-10
55	42	Ladle 150 mm dia	FBT-02	2Nos	900	1800	nanjangud	
56	69,69,73	Lazy tong	FBT-02,02,PMBT-02	6Nos.	2000	12000		bt centre-02,kookanuranur-02,kanakapura-02
57	88	lead accid battery 12 Volt	AAT-01	4 Nos	10900	43600	Honnagara	

58	56,55,56,5 5,56,56,56, 56,56,55	Leather sleeves	FAT- 01,03,03,04,01,03,0 4,01,FBT-04,04	160 Nos	350	56000		bt centre- 32,chitradurga- 64,nanjangud-64,
59	26	Left cut snips 250 mm	FBT-02	4 Nos	400	1600	devarayasamudra	
60	25,25,25,2 5,25,25	Leg vice 150 mm	FAT- 01,03,04,01,04,03	6Nos.	15000	90000		nanjangud- 03,chitradurga-03
61	7,7	Long nose plier: 160mm, Taparia or equivalent	EAT-02,02	8 Nos.	480	3840		bagalkote-4,puttur-4
62	8	Long nose pliers: 200mm half round jaws serrated gripping surface & side cutter capacity 1.66mm medium wire. - taparia or equivalent make.	EBT-03	17 Nos.	480	8160		Puttur-17
63	59,29	Magnifying glass 75 mm dia	FBT-01,04	6Nos.	300	1800		chitradurga- 02,nanjangud-04
64	15,57,57,5 7	Mallet	EAT-02,EBT- 01,01,01	16 NOS	450	7200		bagalkote- 04,hadagali- 4,madikeri-4,puttur-4
65	97	Micron Vacuum gauge capable for reading upto 20 microns	RACAT-01	4 Nos.	9000	36000	karwar	
66	31,31	Mortice chisel 6mm	EBT-01,01	34Nos	400	13600		bagalkote-17,puttur- 17
67	30,30,30	Mortice chisel 9mm	EBT-01,01,01,	51 Nos.	390	19890		hadagali-17,puttur- 17,Tiputtur-17
68	52	Muffle furnace	FBT-05	1No	26000	26000	nanjangud	
69	54	Needle file st	FBT-01	1No	1500	1500	bt centre	
70	26	Number punch 6 mm and letter punch 6 mm	FBT-04	1No	3400	3400	bt centre	
71	29	Oil gun with flexible pipe	ABT-06	1No	950	950	Honnavara	
72	5,76	Ordinary wooden mallet 50 mm	FBT-02,RACBT-01	34 NoS	150	5100		chitradurga- 17,BIDAR-17
73	19	Outside spring caliper 200 mm	FBT-03	2Nos	225	450	chitradurga	
74	53,54,54,5 4,54	out fit spanner	FAT-03,04,01,FBT- 04,04	40 NoS	500	20000		chitradurga- 32,nanjangud-08
75	21	Outside spring caliper 150 mm	FBT-01	2Nos	175	350	nanjangud	
76	48,48	Paint mixer	FBT-05,05	2Nos	22000	44000		bt centre- 01,kookanuranur-01
77	5,5,5,5	Permanent magnet bar	EBT-02,EBT- 02,02,02	32 nos	400	12800		mandya-4,Tiputtur- 4,madikeri-4,puttur-4
78	17	Petrol injector	ABT-05	2 Nos.	1800	3600	Honnavara	
79	25	Philip screw driver – complete set in leather case	RACAT-3	5 set	850	4250	BIDAR	
80	10,10,20,1 7,20,21,20	Picering plier 6-18 mm & reversing valve with access fitting	RACAT- 01,02,RACBT- 05,06,03,04	20 Nos.	1845	36900		karwar-18,BIDAR-2

81	18,18,18,3, 3,3,3,3,3,3, 3,3,	Pincer	EBT- 010,1,01,02,3,02,02, 03,02,03,02,03	188 Nos	450	84600		bagalkote-1,puttur- 17,Tiputtur- 17,17,17,mandya- 17,hadagali- 17,mandya-17,puttur 17,17,madikeri- 17,17
82	9,16,10	Pinch of plier/crimping plier tool 6mm -18mm dia	RACAT-02,RACBT- 06,06	11 Nos	850	9350	karwar	
83	5,9,8,8,7,9 8	Pipe cutter miniature for copper tube 3mm to 16mm DIA	RACAT- 2,4,3,5,6,RACAT-01	26 Nos	800	20800		BIDAR-21,karwar-5
84	128	Pipe threading die protection glae.	RACBT-5	1 No.	12800	12800	BIDAR	
85	87	Pipe wrench 40 Cm	EBT-01	4	1200	4800		Gowribidanur-4
86	42	Pipe wrench size 50 mm to 150 mm	RACAT-02	5 Nos	1800	9000	karwar	
87	33	Piston ring filer	ABT-05	2 Nos	9500	19000	Honnavaara	
88	119	Pitot tube and inclined tube manometer	RACAT-2	2 no.	10000	20000	BIDAR	
89	60	Planishing	EBT-01	4	450	1800		HUVINAHADAGALI.
90	69	Planner 18" wooden	RACBT-1	2 No.	4200	8400	BIDAR	
91	73	Planner Wooden 9"	RACBT-1	4 No.	1500	6000	BIDAR	
92	139	Plumb weight 200g.	RACBT-5	1 No.	165	165	BIDAR	
93	90,138,168	Pop rivet gun.	RACBT-3,5,FBT-02	4 Nos.	4500	18000		BIDAR- 02,chitradurga-02
94	68,64,69,1 3,13,13	Portable Electric drill (Single Phase) 6 MM Capacity	PMBT-02,FBT- 02,04,EBT- 01,01,EBT-01	14 Nos	6700	93800		kanakapura-02,bt centre-02,nanjangud 01,hadagali-3,PTUIR 3,mandya-3
95	59,59,59,5 9	Portable sand / shot blasting equipment with blasting materials	FBT-05,05,05,05	4 Nos.	28000	112000		kookanuranur- 01,BIDAR-01,bt centre- 01,chitradurga-01
96	56	Prick punch	EBT-01	4	150	600		MADIKERI-4
97	7	Punch center,150mm ,reputed company make	EBT-01	17	150	2550		Tiputturtur-17
98	58	Punch hole for cutting gasket, 4.7mm to 16mmDIA.	RACBT-5	4 Nos.	1250	5000	BIDAR	
99	33,33	Punch letter 4 mm and punch number 4mm	FBT-02,PMBT-02	2 Sets	2900	5800		bt centre- 01,kanakapura-01
100	11	Punch letter 4 mm set	EBT-01	1 No.	250	1000		Puttur-1
101	28	Punch Round 3mm,4mm & 6mm Dia	FBT-02	4 Nos.	350	1400	kookanurNUR	

102	29	Punch round 4mm Dia	FBT-02	4 Nos.	100	400	kookanurNUR	
103	30	Punch round 6mm Dia	FBT-02	4 Nos.	100	400	kookanurNUR	
104	44	Puncture repair equipment and vulcanising uni 230V, 55W Electrical/Steam	ABT-06	1 set	8910	8910	Honnavaara	
105	71	Radius guage for metric pitches (0.5 to 7mm)	PMBT-01	2 Nos	1800	3600	KGF	
106	52,64,58,5 8,58,58	Raising hammer with hammer	FBT-02,02,02,ABT- 02,PMBT-02,02	24 Nos	1200	28800		chitradurga- 04,HONVR-04,bt centre- 04,kanakapura- 04,holenarsipura- 04,kookanuranur-04
107	7,12	Ratchat Spanner of 6.4 sq. mm reversible	RACAT-01,RACBT- 06	9 Nos.	750	6750	karwar	
108	64,64,59	Rawl punch holder and bits (no 8,10,12,14)	EBT-01,01,FBT-02	10 NOS	800	8000		madikeri-4,Tiputtur- 4,chitradurga-02
109	56	Reamer 6 mm to 13 mm by 1 mm	FBT-01	1 No.	3000	3000	nanjangud	
110	36,23,23,2 6	Reduction sleeve MT 0-1, 1-2, 2-3,	FBT-01,03,PMBT- 04,04	4 Sets	1800	7200		chitradurga- 01,holenarsipura- 01,kanakapura- 01,nanjangud01
111	31,31,31	Rivet sets snap and dolly combined 3 mm, 4mm , 6 mm	FBT-02,02,PMBT-02	12 sets	1800	21600		chitradurga- 04,kanakapura-04,bt centre-04
112	23,7,7,7,23	Rubber gloves	EBT-02,04,05,05,02	67 NOS	400	26800		madikeri-8,puttur- 42,bagalkote-17
113	55,55,54,5 5	Rubber hose pipe black and red 5mm (in meters)	FAT-04,03,03,FBT- 04	120Mtrs	160	19200		bt centre- 9chitradurga-30
114	9,11,12,9,9 ,9,9,10	Rubber mat	EBT- 3,04,06,02,03,03,05, 06	92 NOS	1500	138000		mandya-12,nalatwad 80
115	9,9,12	Rubber Mat 38"x18"x1 "	EBT-03,05,06	4 NOS	5800	23200		haliyala-4
116	9	Rubber mat size 50"x25" (for panel board)	EBT-05	01 no	700	700		Mandya
117	11,11,11,1 1,11,11,11	Rule 60 cm tow fold brass Tiputturped to read inches and mm	FAT-03,04,01, 02,04,01,03,FBT-04	136Nos.	130	17680	bt centre	bt centre- 68,chitradurga-68
118	1	Rule steel 15 cm (metric gruaduations)	EBT-01	17	200	3400		Tiputturtur
119	1	Rule steel 30 cm (Metric)	EBT-01	4	100	400		MADIKERI
120	2,2,35	Rule steel 60 cm	EBT-01,01,01	12 NOS	200	2400		puttur-4,madikeri- 4,Gowribidnur-4
121	1,1,1,1,1,1	Rule wooden 4 fold	EBT- 02,03,03,03,02,02	102 NOS	250	25500		hadagali-34,puttur- 34,Tiputtur-34
Rupes Twenty four lakhs twenty thousand one hundred and sixty five only						2420165		

Draft approved by the Commissioner)

Joint Director(Trg)
for Commissioner
Dept Of Employment & Training

NS-PKG-06**LIST OF TOOLS & EQUIPMENTS TO BE PROCURED UNDER SHOPPING FOR PROJECT I.T.I's**

SL. No.	DGET SL. No.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET	Estimate d Cost Per Unit	Total Estimated Cost	Consignee Govt I.T.I	
1	110	Scaper traingular blade removable 60 mm	RACAT-01	2 Nos.	1650	3300	karwar	
2	36,37	Scarper flat 15 cm: reputed company make	EBT-01,01	8 NOS	340	2720		Tiputtur-4,hadagali-4
3	37,37,37	Scraper 3 corner 15 cm: reputed company make	EBT-01,01,01	12 NOS	500	6000		madikeri-4,puttur-4,Tiputtur-4
4	38	Scraper 1 or 2 (Half round & Traingular 200 mm)	FBT-05	2 Nos.	3200	6400	nanjangud	
5	4,4,4	Screen Welding Hand	FAT-01,03,04	51 Nos.	1100	56100	kookanurNUR	
6	3,3,3,3,3,3	Screen welding helmet type	FAT-01,03,01,03,04,FBT-04	112Nos	1200	134400		bt centre-17,chitradurga-34,kookanuranur-51
7	2	Screw Driver 100mm 200mm	FBT-06	17Nos	400	6800	nanjangud	
8	24,24,24,24,24	Screw Driver 25 cm and 20 cm	FAT-3,04,04,01,03	5Nos	600	3000		bt centre-02,chitradurga-03
9	106	Screw copressor (open type)	RACBT-06	1 No	65000	65000	karwar	
10	8	Screw Driver	EBT-01,01	34 NOS	220	7480		BGK-17,hadagali-17
11	10,10	Screw driver set	EAT-02,02	22 NOS	500	11000		puttur-6,BGK-16
12	29	Screw driver, heavy duty 300 mm with handle	PMBT-01	4Nos	325	1300	KGF	
13	8	Screw driver,200mm,reputed company make	EBT-01	17 Nos.	200	3400		Puttur
14	70	Screw driver250mm	FBT-02	2 Nos.	250	500	devarayasamudra	
15	3,3	Screw drivers assorted size: Toporia or equivalent	EAT-02,02	4 NOS	1000	4000		puttur-2,bagalkote-2
16	67,70,51,51	Screw pitch gauge for metric pitches (0.5 to 6mm)	FBT-03,01,EBT-01,01	12Nos	2000	24000		madikeri-4,Tiputtur-4,bt centre-4
17	2,2,6,2,2,6,27,6,6,6,2,2	Scriber	EBT-02,03,01,02,03,01,02,03,01,02,03	204 Nos	850	173400		bagalkote-34,hadagali-51,mandya-17,nalatwad-51,puttur-51
18	,2,2,	Scriber : 120 mm X 22mm	N,EBT-02,03	68 NOS	500	34000		chitradurga-34,madikeri-34

19	,6	Scriber : 30 cm	EBT-01,01	34 NOS	400	13600		chitradurga-17,madikeri-17
20	18,18,18,18,10,10,	Scriber 15 cm	FAT-01,03,04,FBT-04,02,PMBT-02,EBT 01	119Nos	350	41650	kookanurNUR	kookanuranur-51,bt centre-34,kanakapura-17,bagalkote-17
21	18,17	Scribing block universal 300 mm	PMBT-01,05	4Nos	3300	13200	KGF	
22	159	see through model of direct cooled refrigerator	RACAT-1	1 no	66000	66000	BIDAR	
23	160	see through model of frost free refrigerator	RACAT-1	1 no	68000	68000	BIDAR	
24	100,100	senor thermometer (digital)	RACAT-1,2	10Nos	2400	24000	BIDAR	
25	92,59,59	Setting hammer with handle	EBT-01,01,01	12 NOS	540	6480		Gowribidnur-4,puttur 4,Tiputtur-4
26	23	Shear Tinmans 300 mm	PMBT-02	8 Nos.	1600	12800	holenarsipura	
27	18,12,32	Sheet metal gauge	ABT-02,FBT-02,05	7 Nos.	600	4200		HON-04,bt centre-02,nanjangud-01
28	120	Shell & tube , DX chillers (small)	RACBT-05	1 No	59000	59000	karwar	
29	48	Shell end mill dia 50-27 bore	FBT-03	2 Nos.	29000	58000	nanjangud	
30	49	Shell end mill dia 80-32 bore	FBT-03	2 Nos.	27500	55000	nanjangud	
31	62	Shock absorbers	ABT-06	4 Nos	6300	25200	Honnavaara	
32	118,123	silver and copper brazing alloy rod for ¼" to 7/8 tube – Cu touch, cu to steel, cu to bra and appropriate fluxe	RACAT-3,01	10 set	1250	12500		BIDAR-05,karwar-05
33	55	Sine Bar 200 mm	PMBT-05	1 No	5400	5400	KANAKAPURA	
34	54,47,53,76	Sling Pycrometer mounted on aluminium back scale - 50 c to + 50 C	RACBT-04,04,06,RACAT-03	11 Nos	2525	27775		karwar-02 , BIDAR-09
35	133	small capacity Shell and tube condenser	RACAT-2	1 no.	49000	49000	BIDAR	
36	61,61	Snip bent 25 cm	EBT-01,01	8 NOS	400	3200		madikeri-4,putturUR-4
37	58,58	Snip straight:-250mm	EBT-01,01	8 NOS	400	3200		madikeri-4,puttur-4,
38	67,67,67,24	snipper sheet metal straight noe 200 mm	RACAT-2,01,03,PMBT-02	23 Nos.	1750	40250		BIDAR-15,kanakapura-08
39	55,55	Soft hammer (brass,copper, lead, rubber and rawhide heads with handle)(01 no each)	FBT-02,02	6 Nos	8000	48000	bt centre	bt centre-4,kookanuranur-02
40	46,46	Soldering copper hatchet type 500 gms	FBT-02,02	16Nos	1800	28800		nanjangud08,kookanuranur-08
41	33,33,33,33	Spanner 12 mm and 15 mm double ended	FBT-04,FAT-03-04-01	16Nos	150	2400	devarayasamudra	
42	34,34,34,24,34,33,17	Spanner D E 6mm to 15 mm by 1.5.mm	FAT-01,01,04,FBT-04,03,06,PMBT-01,03	20Nos	3800	76000		bt centre-01,kanakapura-08,chitradurga-9,kookanuranur-2,
43	11,19	Spanner double ended 4.7 mm to 16 mm	RACAT-01,06	10 Set	700	7000	karwar	
44	41	Spanner For Spark plug 14 mm	AAT-01	02 Nos	180	360	Honnavaara	
45	13,13,13	Spark Lighter	FAT-01,03,04	51 Nos	80	4080	kookanurNUR	
46	31,32,32	Spindle blade Screw driver 100 mm	PMBT-01,05,ABT-01	8 Nos	160	1280		kanakapura-06,HON 02

47	10	Spirit level 150mm	EBT-01	4 Nos.	300	1200		Puttur
48	26,19,137, 22,27,19	Spirit level 200MM	PMBT-01,05,04,RACBT-05,FBT-03,03	6 Nos	450	2700		kanakapura-03,karwar-01,nanjangud-01,chitradurga-01
49	83,83,83,5 4,54,54	Spray Gun (Painting) 500 ml	PMBT-02,02,02,FBT-05,05,05	6 Nos	350	2100		holenarsipura-01,KGF-01,kanakapura-01,chitradurga-01,nanjangud-01,bt centre-0
50	17,17,17,8	Square adjustable blade 15 cm	FAT-01,03,04,EBT-01	55 Nos	600	33000		kookanuranur-51,madikeri-4
51	73	Square file 2nd cut 250 mm	FBT-01	4 Nos	600	2400	nanjangud	
52	2	Square try 15 cm	EBT-01	17 Nos.	100	1700		Puttur
53	13,13,13	Stake round and Bottom	FBT-02,02,PMBT-02	12Nos	2000	24000		kookanuranur-04,nanjangud-04,kanakapura-04
54	16	star Allen key	AAT-03	4 Sets	1260	5040	Honnavaara	
55	74	steel Jack planner 9"	RACBT-1	1 No.	2200	2200	BIDAR	
56	15,15,15,1 5	Steel measuring tape 20 mtrs	FBT-06,06,PMBT-03	3 Nos	1000	3000		chitradurga-01,kanakapura-01,nanjangud-01
57	11,11,11,5 6,18	Steel rule 60 cm	FAT-01,03,04,FBT-02,03	70Nos	80	5600	kookanurNUR	
58	11	STEEL SQUARE450*600	PMBT-02	4 Nos	1200	4800	KANAKAPURA	
59	38,38	Steel tape 182 cm flexible in case	FBT-04,04	2 Nos	200	400		chitradurga-01,nanjangud-01
60	24	straight edge steel 1 meter	RACBT-1	1No.	18500	18500	BIDAR	
61	23,25,3,3	Straight Edge steel 500 mm	PMBT-05,FBT-01,EBT-01,01	10 Nos	9000	90000		kanakapura-01,nanjangud-01,madikeri-4,mandya-4
62	2	swaging tool, punch type, set of ize for tube 4.7mm to 16mm O.D.	RACAT-3	5 set	5800	29000	BIDAR	
63		T Slot cutters with parellel shank 17.5 X 8 X 8 mm	PMBT	02 Nos	19000	38000	BELGAUM	
64	85	Tap & die set ¼" to 5/8" SAE size	RACAT-1	1 set	11000	11000	BIDAR	
65	84	Tap set with matching drills ¼" to 5/8"	RACAT-1	1 set	11000	11000	BIDAR	
66	83,83,87,8 7	Tap set with matching drills 3 mm to 16 mm	RACAT-01,01,01,02	4 SetS	14000	56000		karwar-01,BIDAR-03
67	52,52,52,5 2	Tape measuring 10 m graduation in mm	RACAT-01,01,02,03	8 Nos.	300	2400	karwar	karwar-02 , BIDAR-06
68	32,32	Tape measuring 2 m graduation in mm	RACAT-1,03	10 Nos.	124	1240	BIDAR	

69	50,17,,17,4 8,48,	Taps & dies complete set Metric, pitch M6 to M24 reputed company make	EBT-01,01,01,01,FBT-01,PMBT-01	32 NOS	13000	416000		Gowribidnur-4,mandya-4,chitradurga-4,Tiputtur-4,kanakapura-01,nanjangud-01
70	64,47,47	Telescopic gauge 13 mm to 300 mm	FBT-03,PMBT-04,04	3 Nos	18000	54000		nanjangud-01,BELGM-01,kanakapura-01
71	98	Thermostatic Exp. Valve	RACBT-6	1 No.	5900	5900	BIDAR	
72	39,39,39,3 9	tin mans square 60cmx30cm	FAT- 04,03,01,FBT-04	4 Nos	1200	4800		chitradurga-03,nanjangud-01,
73	24,18,18	Tinmans Horse	ABT-02,FBT-02,PMBT-02	6 Nos	2270	13620		HON-02,nanjangud-02,kanakapura-02
74	48,48	Trammel point (with beam 600 mm)	FBT-02,02	2 Nos	4500	9000	bt centre	bt centre-01,nanjangud-01
75	19	Tri Square	EAT-02	4Nos	450	1800		bagalkotealkot
76	32	Triangular file 4"	EBT-01	17Nos	850	14450		Tiputturtur
77	2,,2,2	Trimming kit:- consist of anti static small screw driver set for fine tuneing communication receivers. (tuening of IFT,TRIMMERS, PADDERS)	EAT-1,01,01,01	20 SETS	3000	60000		bagalkote-8,chitradurga-4,puttur-4,Tiputtur-4
78	61,61,61,6 1,61	Tripaning Tool 70 MM	PMBT-02,02,02,FBT-02,02	5 Nos	450	2250		kanakapura-01,nanjangud-01,holenarsipura-01,BELGM-01,bt centre-01
79	66	Trowel medium	FBT-02	1No	500	500	nanjangud	
80	67	Trowel small	FBT-02	1No	290	290	nanjangud	
81	10,6,6,6,4, 6,4,4	Tweezer 10 cm stainless steel	EBT-03,04,05,06,04,03,05,06	136 NOS	110	14960		nalatwad-68,Tiputtur-68
82	4,4,4,6,9,4, 4,4	Tweezers: stainless steel tweezer coated in anti-static pvc of length 150mm & have a fine points with serrations on inner surface of the Tiputturs	EBT-05,06,04,03,05,06,04,02,03,02,04,05,06	221 Nos.	200	44200		puttur-68,chitradurga-85,bagalkote-68
83	29,29,29,3 2	Twist drill & drill chucks including keyless drill chuck	PMBT-04,FBT-03,03,03	4set	2000	8000		kanakapura-01,chitradurga-
84	28	Twist drill taper shank set 12 to 20 mm in Step of 1 mm	PMBT-04	2set	9500	19000	KANAKAPURA	
85	42,42	Twist drills 3mm to 13 mm (parallel shank) by 1 mm	FBT-01,PMBT-01	2set	4500	9000		chitradurga-01,kanakapura-01
86	125,138,12 5,	Two stage rotary vacuum pump capacity approx. 60 – 10rmp capable of evacuating to 50 microns of Hg and fitted with gas ballast, anti such back valve and single phase motor	RACAT-2,01,02	3 Nos	67750	203250		BIDAR-01,karwar-02

87	111	Two way manifold with gauges	RACAT-01	2 Nos.	2800	5600	karwar	
88	3,3	Tyre vulcanizing machine	AAT-01,02	2 Nos.	8910	17820	Honnavara	
89	6,6	Universal scribing block 22 cm	EBT-01,01	8 Nos.	1000	8000		puttur-4,Tiputtur-4
90	45	Universal table angle plate	PMBT-05	1No	30000	30000	KGF	
91	14,17	V' block 100/7-80-A	FBT-03,03	4 Nos	9000	36000		kookanuranur-02,bt centre-02
92	17	V block 63 mm fare with clamp	FBT-03	2 Nos.	9000	18000	nanjangud	
93	67,63	Valve grinding Tool Suction type	AAT-01,02	12 Nos	180	2160	Honnavara	
94	54	Valve spring compressor	ABT-05	1 Nos	4500	4500	Honnavara	
95	155	Vertex tube	RACAT-1	2 no.	3000	6000	BIDAR	
96	55	Vice bench jaw type 12 cm & 10cm: reputed company make	EBT-01	4 Sets	8000	32000		Tiputturtur
97	42,42,42	Viscosity cup	FBT-05,05,05	3 Nos.	5000	15000		bt centre-01,kookanuranur-01,nanjangud-01
98	13,13,13,13	Wall jumper 37x450mm	PMBT-03,03,03,FBT-06	4 Nos	275	1100		BELGM-01 chitradurga-01,kanakapura-01,holenarsipura-01
99	1,13,,,,,10,10,6,6,6,11,10,6,6,6	Watch maker screw driver set: watch maker screw drivers combining hardened steel shafts with nickle plated bodies & revolving heads, supplied in convinient plastic pouch,k flat balded parallel type sizes 0.6 to 2.5 mm	EBT-02,03,04,05,06,02,03,04,05,06,02,04,05,06,06,02,03,04,05	340 NOS	450	153000		nalatwad-85,Tiputtur-85,bagalkote-85.chitradurga-85
100	89	Wheel cylinder	AAT-02	4 Nos	9700	38800	Honnavara	
101	,52,,3	Wire gauge metric standard	EBT-01,01,02,02	16 NOS	400	6400		chitradurga-8,puttur-8,
102	6,1,1,1,1,2,2,4,1,67	Wire insulation stripper for shinning conductor from 0.4mm to 4mm	ABT-03,EBT-02,04,05,06,02,05,06,02,01	118 Nos	240	28320		Honnavara-17,hadagali-55,nalatwad-38,Tiputtur-8
103	1	Wire stripper 150 mm	EBT-02	4 Nos	240	960		bagalkotealkot
104	67,68,67,67	Wire Stripper 20 Cm	EBT-01,01,01,01	16 NOS	350	5600		hadagali-4,nalatwad-4,puttur-4,mandya-4
105	,1,1,1,1,1,1,1,1,	Wire stripper: for strips PTFE wires between 0.5 to 4.5mm dia with clean and accurate cutting action. Supplied complete in its own storage are with bushes, two separate blades and an adjustable screw drives.	EBT-04,05,06,02,04,05,06,04,05,06,02,	123	300	36900		chitradurga-17,madikeri-55,puttur-51,
106	92,98	Wooden rule 450 mm	FBT-02,PMBT-02	2 Nos	200	400		chitradurga-01,holenarsipura-01
Rupees Twenty nine Lakhs and Seventy Two Thousand thirty five only						2972035		

Draft approved by the Commissioner)

Joint Director(Trg)
for Commissioner
Dept Of Employment & Training

NS-PKG-07**LIST OF TOOLS & EQUIPMENTS TO BE PROCURED UNDER SHOPPING FOR PROJECT I.T.I's**

SL. No.	DGET SL. No.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET	Estimate d Cost Per Unit	Total Estimated Cost	Consignee Govt I.T.I	
1	15,15,15	Safety Boots for Welders Pair	FAT-01,03,04	51Nos.	1800	91800	kookanurNUR	
2	86,81,84,74	Welding CDS (processes and inspection methods)	FAT-01,03,04, FBT-04	16 Nos	64000	1024000		BT Centre-4,devarayasamudra, 04 kookanuranur 04,Nanjangud-04
3	77	Oxygen acetylene argon & CO2 cyclinder STANDARD SIZE ISI STANDARD	FBT-04	8 Nos	45000	360000		BT Centre-2,devarayasamudra, 02 kookanuranur 02,Nanjangud-02
4	71	Welding helmets With IS standard	FBT-04	64 Nos	3300	211200		BT Centre-16,devarayasamudra ,16 kookanuranur 16,Nanjangud-16
5	76,79,79	IIW/ASTM reference radiograph standard	FAT-03,04,01	12 Nos	12000	144000		BT Centre-03,devarayasamudra ,03 kookanuranur 03,Nanjangud-03
6	89	Carbon arc gouging torch 300A	FAT-03	4 Nos	23400	93600		BT Centre-01,devarayasamudra ,01 kookanuranur 01,Nanjangud-01
7	51,50,51,51,51	Tiputtur cleaner	FAT-04,03,01,01,FBT-04	40Nos	200	8000		chitradurga-24,kookanuranur-08,nanjangud-08
8	14	Tong bolt 300, 500, 1000, 1500 mm	FBT-05	6 Nos	12000	72000	chitradurga	
9	16	Tong flat 300, 500, 1000, 1500 mm	FBT-05	6 Nos	12000	72000	chitradurga	
10	18,18	Tong hollow bit 300, 500, 1000, 1500 mm	FBT-05,05	12 Nos	12000	144000		chitradurga-06,kookanuranur-06
11	17	Tong round 300, 500, 1000, 1500 mm	FBT-05	6 Nos	12000	72000	chitradurga	
12	15	Tong side 300, 500, 1000, 1500 mm	FBT-05	6 Nos	12000	72000	chitradurga	
13	19,19,19,19	Tongs Holding 30 cm	FAT-01,03,04, FBT-04	68Nos	1300	88400		kookanuranur-51,nanjangud-17
14	30,30,30,30,30,30,30	Weld measuing gauge fillet and butt	FBT-04,FAT-01,04,03,04,03,01	14 Nos	3500	49000		nanjangud-08,chitradurga-06
15	46	Welding rubber hose, oxygen and acetylele 8 mm	FBT-04	100 Mtr	180	18000	chitradurga	
16	43,43	Whiping materials (white kerosene/methylene)	FBT-05,05	10 Ltr	150	1500		bt centre-5Ltr, nanjangud-5Ltr
17	2,2	Wing Divider 200 mm	PMBT-02,FBT-02	34 Nos	225	7650		holenarsipura-17,kookanuranur-17

18	20,20,20,	Wire Brush (SS)	FAT-01,03,04	51 Nos	225	11475	kookanurNUR	
19	12,12,12	Wire Brush (MS)	FAT-01,03,04	51 Nos	170	8670	kookanurNUR	
		Rupees twenty five lakhs forty nine thousand two hundred & ninety five only				2549295		

Draft approved by the Commissioner)

Joint Director(Trg)
for Commissioner
Dept Of Employment & Training

NS-PKG-08**LIST OF TOOLS & EQUIPMENTS TO BE PROCURED UNDER SHOPPING FOR PROJECT I.T.I's**

SL. No.	DGET SL. No.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET	Estimate d Cost Per Unit	Total Estimated Cost	Consignee Govt I.T.I	
1	46,46,46,63,63	Bevel gauge 200 mm	PMBT-03, 04, 04,04,FBT-03	05 Nos	1000	5000		BELGM-02,nanjangud-01,kookanuranur-01,holenarsipura-01 NO.
2	25,31,25,25,31	Combination set 300 mm	FBT-03,01,03,03,01	7 Nos	23000	161000		bt centre-01,chitradurga-03,nanjangud-01,kookanuranur-02
3	65,63,63,56	Compound dial gauge with stand (metric)	FBT-03,03,03,PMBT-05	4Nos	18000	72000		nanjangud-01,KAN-01,chitradurga-01,kookanuranur-01
4	106	D.E .Grinder Pedestal motorized 200 mm	RACBT-1	1 No.	43900	43900	BIDAR	
5	64,68,66,68	DE grinder 30 cm wheel motorized pedestal type	FBT-04,FAT-01,03,04	4Nos	65000	260000		nanjangud-01,chitradurga-03
6	69	Dial gauge stand	FBT-01	4Nos	7500	30000	nanjangud	
7	66,35	Dial test indicator with magnetic base	FBT-03,ABT-06	2 No.	12200	24400		bt centre-01,HONR-01
8	80	DIGITAL micrometer (0-25mm) Out Side	ABT-01	1 Nos	5400	5400	Honnagara	
9	60,70,58,60,64	Direct reading Vernier caliper 0-300 mm	ABT-01, FBT-03,03,03,01	11 Nos.	12600	138600		HONR-04,chitradurga-05,bt centre-01,nanjangud 01
10	72,85	Disk Brake with caliper assembly	AAT-02,01	04 Nos	23600	94400	Honnagara	
11	77	Distributor	AAT-01	2 Nos	19800	39600	Honnagara	
12	76,76,74	Dye penetrant testing kit	FAT-01,04,03	6 Nos	20000	120000	chitradurga	
13	4,4,4,37,4	Plate surface 45 x 45 Cm	EBT-01,01,01,01,EBT-01	20 NOS	14500	290000		hadagali-4,madikeri-4,puttur-4,Gowribidnur-4,mandya-4.
14	80	Fuel feed pump	ABT-05	1 Nos	16300	16300	Honnagara	
15	79,79,74	Light General purpose portable forge having dia of 450mm with hand blower mounted on tripod stand	PMBT-02,02,FBT-02,	6Nos.	40000	240000		holenarsipura-02, nanjangud-02,kanakapura-02
17	43	Micrometer 0-2.5 mm inside: Mitutoyo	EBT-01	4 Nos	2100	8400		Tiputtur
18	45,50,55,60,43,76	Micrometer 0-25 mm outside : Mitutoyo or equivalent	EBT-01,01,01, PMBT-02,FBT-03,01,01	21 NOS	6200	130200		Tiputtur-04,holenarsipura-01,kookanuranur-08,Mandya-04,Gowribidanur-04

19	47,47,47,47	Micrometer 25-50 mm inside with extension rod	EBT-01,01,01,01	16 NOS	8000	128000		madikeri-4,haliyala-4,puttur-4,Tiputtur-4.
20	44,44,61,58	Micrometer 25-50 mm outside: Mitutoyo or equivalent	EBT-01,01,FBT-01,03	14 NOS	6100	85400		Tiputtur-4,hadagali-4,chitradurga-06
21	79,46,62	Micrometer 50-75 mm outside	EBT-01,01,FBT-01	10 NOS	8850	88500		Gowribidnur-4,Tiputtur-4,chitradurga-2
24	53,66,66,45,83,50,	Vernier bevel protractor with 150 mm blade With least count of 5 Min	PMBT-05,01,04,FBT-01,EBT-01,01,01	16 Nos	22000	352000		holenarsipura-03,chitradurga-01,Gowribidnur-4,mandya-4,chitradurga-4,
25	48,48,48	Vernier caliper 20 cm : Mitutoyo	EBT-01,01,01	12 NOS	7000	84000		Tiputtur-4,mandya-4,hadagali-4.
26	49,49	Vernier Caliper (0mm -150mm) least count of .02 mm	FBT-02,PMBT-02	2 Nos.	6500	13000		chitradurga-01,kanakapura-01
27	88	Vernier caliper length 250 mm	RACAT-01	1 No	9000	9000	karwar	
28	52	Vernier gear tooth caliper	PMBT-05,	1 No.	13500	13500	holenarsipura	
29	51,65,51,44,82,49,49	Vernier Height 300mm	PMBT-05,05,04,01,EBT-01,01,01	16 Nos	21288	340608		kanakapura-01,holenarsipura-03,Gowribidnur-4,Tiputtur-4,mandya-4
Rupees Twenty nine lakhs sixty seven thousand two hundred and eight only						• 2967208		

Draft approved by the Commissioner)

Joint Director(Trg)
for Commissioner
Dept Of Employment & Training

NS-PKG-09**LIST OF TOOLS & EQUIPMENTS TO BE PROCURED UNDER SHOPPING FOR PROJECT I.T.I's**

SL. No.	DGET SL. No.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET	Estimate d Cost Per Unit	Total Estimated Cost	Consignee Govt I.T.I	
1	53,140,84	Air compressor, two stage for oil - less dry air, with rush proof tank assembly, heater & controls max. pr. 10kg/sq.cm. Capacity 45 liter, motor 1 hp.	RACBT-5,6,RACT-01	3 No.	63000	189000		BIDAR-02, karwar-01 NO.
2	#####	Cut section of semi-harmetic screw compressor	RACBT-04,02,04	3 Nos	48900	146700		karwarWR-02,BIDAR-01
3	129,137	Reciprocating compressor with provision of capacity control etc. for demonstration. Capacity 9000Kcal/hr. emi hermetic open type.	RACAT-2,3	2 Nos	175000	350000	BIDAR	
5	103	Cut Section of Hermetic Scroll Compressor 1/2 HP capacity ISO approved.	RACBT-VI	2 Nos	44000	88000		karwar -01, BIDAR-1
6	89	Condensing unit of 01 Ton capacity(3000 K-cal/hr) open type compressor with Additional prime mover motor required capacity fly wheel , puller & belt arrangement to drive compressor & Receiver tank with EVAPORATIVE CONDENSER construction for demonstation with all controls. <u>Evaporative condensor</u> consists of condenser coil pump & pipe line arrangement, Nozzles for water spray on condenser coil top fan arrangement to draw air over condenser. ISO approved.	RACBT-VI	2 Nos	85000	170000		karwar -01, BIDAR-1
7	88	Condensing unit consist of 01 Ton capacity (3000 k-cal/hr) open type compressor with fly wheel, additional motor for driving compressor with puller, coupler & belts arrangement with Air cooled condenser & receiver tank. ISO approved.	RACBT-VI	2 Nos	85000	170000		karwar -01, BIDAR-1

8	15	Granite Surface plate 630 mm x 630 mm grade 1 ISO approved.	RACBT-I,AAT-02	8 Nos.	22500	180000		karwar -04, BIDAR-04
9	15,15,15	Granite surface plate 1000mmx630mm grade workshop,MMTM make or Equivalent ISO approved.	PMBT-01,ABT-01,FBT-01,FBT-03	40 Nos.	40500	1620000		KGF-4, BELGM-4,kanakapuraPR-4,holenarsipuraA-4, bt centre-4,DVR-4,kookanur-4,nanjangudJ-4, Honnavara-8
Rupes twenty nine lakhs thirteen thousand seven hundred only						2913700		

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Joint Director(Trg)
for Commissioner
Dept Of Employment & Training

NS-PKG-10**LIST OF TOOLS & EQUIPMENTS TO BE PROCURED UNDER SHOPPING FOR PROJECT I.T.I's**

SL. No.	DGET SL. No.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET	Estimate d Cost Per Unit	Total Estimated Cost	Consignee Govt I.T.I	
1	65,82	Impact testing machine Impact Testing Machine Max capacity 175 joule Minmum scale graduation 2J with standared attachment accessores, caliper gauge, templete for checking 10*10mm, dept notch gauge, izod support for dia 0.45round specimen, or equalient ,With IS standard	FBT-05,01	8 Nos	278000	2224000		bt centre-2, DVR-2, kookanur-2, nanjangudJ-2
2	61	Brinell hardness testing machine Test force min 250kgf to 3000 kgf appox,with accessories & brinell microscope, ISO approved.	FBT-05	4 Nos	390000	1560000		KGF-1, BELGM-1, kanakapura- 1,holenarsipura-1
3	63	Rockwell hardness testing machine with ABC scale lead 60, 100 and 150 kgs	FBT-05	1 No.	115000	115000	nanjangud	
		Rupees Thirty eight lakhs ninety nine thousand only				3899000		

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Joint Director(Trg)
for Commissioner
Dept Of Employment & Training

NS-PKG-11**LIST OF TOOLS & EQUIPMENTS TO BE PROCURED UNDER SHOPPING FOR PROJECT I.T.I's**

SL. No.	DGET SL. No.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET	Estimate d Cost Per Unit	Total Estimated Cost	Consignee Govt I.T.I	
1	50,49,50,50	Pressure regulator acetylene Regulators	FAT-01,03,04, FBT-04	32 Nos	15600	1996800		bt centre-32, DVR-32, kookanur-32, nanjangudJ-32
2	50,49,48,49	Pressure regulator oxygen double stage	FBT-04, FAT-01,03,04	32 Nos	12600	1612800		bt centre-32, DVR-32, kookanur-32, nanjangudJ-32
		Rupees Thirty six lakhs nine thousand six hundred only				3609600		

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for Commissioner
Dept Of Employment & Training

NS-PKG-12**LIST OF TOOLS & EQUIPMENTS TO BE PROCURED UNDER SHOPPING FOR PROJECT I.T.I's**

SL. No.	DGET SL. No.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET	Estimate d Cost Per Unit	Total Estimated Cost	Consignee Govt I.T.I	
1	57,56,57, 57	Transformer welding set with all accessories 300 A.	FAT-01,03,04, FBT-04	32 Nos.	72000	2304000		bt centre-08, DVR-08, kookanur-08, nanjangudJ-08
2	40,40	Welding torch with 10 nozzles.	FBT-04, FAT-01	48 sets	19000	912000		bt centre-12, DVR-12, kookanur-12, nanjangudJ-12
3	5	Tyre pressure gauge with accessories-wall type with hoses and connecting nipples - Pyramid machine tools make or equivalent	AAT-02	1 set	79560	79560	honnagara	
4	#####	Triple leg grip puller with bearings attachments screw hydrolic powered maximum spread 80,160,250,450,mm	ABT-06, AAT-01, AAT-03	3 Nos	78000	234000	honnagara	
5	47	Pneumatic rivet gun	PMBT-02	8 Nos.	31365	250920		KGF-2,BELGM-2, kanakapura-2, holenarsipura-2
Rupees Thirty seven Lakhs eighty thousand four hundred and eighty only						3780480		

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for Commissioner
Dept Of Employment & Training

NS-PKG-13**LIST OF TOOLS & EQUIPMENTS TO BE PROCURED UNDER SHOPPING FOR PROJECT I.T.I's**

SL. No.	DGET SL. No.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET	Estimate d Cost Per Unit	Total Estimated Cost	Consignee Govt I.T.I	
1	86	Liquified petroleum Gas(LPG) cylinder, regulator and Torch with burner -Indian / HP / Bharath or Equivillant	ABT-02,FBT-02,PMBT-02,RACAT 01,02,03	22 Nos.	49000	1078000		nanjangudJ-01, Honnavara-20
2	53,74,77, 77	Magnetic [particle testing machine working 230v/50 hz single phase.	FBT-05, FAT-03,04,01	16 Nos.	105000	1680000		bt centre-04, DVR-04, kookanur-04, nanjangudJ-04
3	57,69,63,63	Depth Micrometer 0-150mm Mitutoyo make or Equivillant	RACBT-1, ABT-01, PMBT-01,FBT-01	88 Nos.	11500	1012000		bt centre-08, DVR-08, kookanur-08, nanjangudJ-08,KGF-08,BELGM-08, kanakapura-08, holenarsipura-08, karwar-08,BDR-08, holenarsipura-08
4	69	Taper gauge M T No.1,2,3,4, & 5(MASTER)	FBT-03	1No	74000	74000	nanjangud	
5	8,8	Toe-in Toe-out gauge	AAT-02,01	2 Nos	45630	91260	Honnavara	
Rupees thirty nine lakhs thirty five thousand two hundred and sixty only						3935260		

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Dept Of Employment & Training

NS-PKG-14**LIST OF TOOLS & EQUIPMENTS TO BE PROCURED UNDER SHOPPING FOR PROJECT I.T.I's**

SL. No.	DGET SL. No.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET	Estimate d Cost Per Unit	Total Estimated Cost	Consignee Govt I.T.I
1	#####	Welding Transformer (200 to 400 amps) - Air Cooled with following Accessories a) 6 meter cable (2 length) b) Electrode holder (copper) -1 no. c) Earth clamp - 1 no. d) Lugs - 4 Nos .	RACBT-I,ABT-02,PMBT-02	14 Nos	72000	1008000	holenarsipura-02, KGF-02,BELGM-02, kanakapura-2, holenarsipura-02, karwar-02,BDR-02
2	43,43,42,43	Cutting torch oxy-aceteline with set of cutting nozzles	FBT-04, FAT-01-04	32 Sets	29600	947200	bt centre-08, DVR-08, kookanur-08, nanjangudJ-08
3	80,86	Circular cutting machine 300mmdia ISO approved.	FBT-02,PMBT-02	8 Nos	117000	936000	bt centre-01, DVR-01, kookanur-01, nanjangudJ-01,KGF-1,BELGM-1, kanakapura-1, holenarsipura-1
4	73, 67,60,13	Sensitive Drilling machine pillar 12 mm capacity with accessories Motor required capacity, pulley, starter, Drill chuck, Arbor etc.,	FBT-01, RACBT-I, AAT-03,ECBT-01	12 Nos.	23000	276000	bt centre-02, DVR-02, kookanur-02, nanjangudJ-02,karwar-02,BDR-02
5	71	Brake lining riveting machine -Standard make(Pneumatic)	ABT-06	1 No	144000	144000	Honnavaara-01
Rupees thirty three lakhs eleven thousand and two hundred only						3311200	

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Dept Of Employment & Training

NS-PKG-15**LIST OF TOOLS & EQUIPMENTS TO BE PROCURED UNDER SHOPPING FOR PROJECT I.T.I's**

SL. No.	DGET SL. No.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET	Estimate d Cost Per Unit	Total Estimated Cost	Consignee Govt I.T.I
1	75,75,85,80,68	Drilling machine pillar 20mm cap.with chuck and key HMT make or Equivalent.	PMBT-01,FBT-01,ABT-01, RACBT-V,I	13 Nos.	69300	900900	Honnavara-01 KGF-1,BELGM-1, kanakapura-1, holenarsipura-1,bt centre-01, DVR-01, kookanur-01, nanjangudJ-01,02,
2	94,100,100	Portable pneumatic shear	FBT-02,ABT-02,PMBT-02	14 Nos.	63000	882000	Honnavara-02,KGF-1,BELGM-1, kanakapura-1, holenarsipura-1,bt centre-02, DVR-02, kookanur-02, nanjangudJ-02,,
3	6,7	Wheel alignment gauge -computerised laser beam type- standard make.	AAT-02,02	2 set	380000	760000	Honnavara-02,
4	95,101	Pipe bending machine hydraulic type 12mmto 25mm Dia	FBT-02,PMBT-02	8 Nos.	82000	656000	KGF-1,BELGM-1, kanakapura-1, holenarsipura-1,bt centre-01, DVR-01, kookanur-01, nanjangudJ-01,,
5	74,55,66,92	Pedestal grinder, double ended with 180 x 31.75 x 25 mm (fabricated ms stand).	FBT-03,01, PMBT-04, 05, RACBT-01,AAT-01	24 Nos	24030	576720	KGF-4,BELGM-4, kanakapura-4, holenarsipura-4,bt centre-02, DVR-02, kookanur-02, nanjangudJ-02,,
Rupees Thirty seven lakhs seventy five thousand six hundred and twenty only						3775620	

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Dept Of Employment & Training

NS-PKG-16**LIST OF TOOLS & EQUIPMENTS TO BE PROCURED UNDER SHOPPING FOR PROJECT I.T.I's**

SL. No.	DGET SL. No.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET PER ITI	Estimated Cost Per Unit	Total Estimated Cost	Consignee Govt I.T.I
1	68	3 pin micro meter 12-20mm least count 0.01mm.	FBT-03	08 Sets	81000	648000	bt centre-02, DVR-02, kookanur-02, nanjangudJ-02,,
2	53	3 pin micrometer 12-20 mm , 20-40 mm Mitutoyo make or Equivalent	PMBT-04	8 sets	242000	1936000	KGF-2,BELGM-2, kanakapura-2, holenarsipura-2
3	57,70,65,81	Cylinder bore gauge capacity 18-35 , 35-60 , 50-150 mm -Mitutoyo make or Equivalent	ABT-05,AAT-01,02, ABT-01	6 Nos	82000	492000	Honnavara-06
4	62	Limit plug gauges 5mm to 25mm by 5mm range	PMBT-05	4 set	94000	376000	KGF-1,BELGM-1, kanakapura-1, holenarsipura-1
5	80,92,98	Bearing puller screw Powered with Hydraulic powered with attachment max spread 80,200 and 300mm.	AAT-01-03	4 Nos.	69000	276000	Honnavara-04
6	43,33	Torque wrench set of 3 Nos.5-35 Nm , 14-68 Nm , 50-220Nm , set of 3 Nos. Taparia make or Equivalent	ABT-05,06	2 Nos	66000	132000	Honnavara-02
Rupees thirty eight lakhs sixty thousands only						3860000	

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NS-PKG-17**LIST OF TOOLS & EQUIPMENTS TO BE PROCURED UNDER SHOPPING FOR PROJECT I.T.I's**

SL. No.	DGET SL. No.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET	Estimate d Cost Per Unit	Total Estimated Cost	Consignee Govt I.T.I	
1	3	Tool presetting chitradurgaice with digital readout for measuring length and radius with all accessories.	PMAT-01	4No.	715000	2860000	Honnavara	
2	99,99	Portable nibbler	PMBT-02, ABT-02	6 Nos.	58000	348000		Honnavara-1, KGF-1, BELGM-1, kanakapura-1, holenarsipura-1
3	66,4,6	Air Compressor -stationary, single stage , 2 cyl. 2Hp, 240 Lpm, 9 Kg /cz, 160 ltr cap.	ABT-06, AAT-02, PMBT-06 , FBT-02	7 Nos	59040	413280		nanjangudJ-01, HONVRA-2,KGF-1, BELGM-1,kanakapuraPR-1,holenarsipura-1
4	62	Lever Type dial gauge along with magnetic stand and clamping arrangement with box MITUTOYA or Equivalent make	RACBT-I	8 Nos.	33000	264000		karwar-04, BDR-04
		Rupees Thirty eight Lakhs eighty five thousand two hundred and eighty only				3885280		

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for Commissioner
Dept Of Employment & Training

NS-PKG-18**LIST OF TOOLS & EQUIPMENTS TO BE PROCURED UNDER SHOPPING FOR PROJECT I.T.I's**

SL. No.	DGET SL. No.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET	Estimated Cost Per Unit	Total Estimated Cost	Consignee Govt I.T.I	
1	36,39,25,39,37,39	Solid parallels in pairs(Different sizes) in metric 100x10x5 mm, 100x15x5mm, 150x10x6 mm, 150x15x6 mm, 150x20x10 mm, 150x20x15mm, 200x20x15mm, 200x25x15 mm, 200x30x25 mm, 200x30x20mm, 250x25x20 mm, 250x30x20mm.	RACBT-01,FBT-01,03, PMBT-01,05, ABT-01	19 SET	59400	1128600		Honnavara-1, KGF-2, BELGM-2, kanakapura-2, holenarsipura-2, bt centre-02, DVR-02, kookanur-02, nanjangudJ-02,,karwar-01, BDR-01
2	44,43	Chain and pully block 3000 kg capacity electric type	AAT-01,02	2 Nos	288000	576000	Honnavara	
3	97	Engine analyzer.	AAT-01	1 No.	560000	560000	Honnavara	
4	73	Engine scanner-with all attachments and accessories-Sunmake,launch or equivalent.	AAT-03	1 No.	913750	913750	Honnavara	
5	95	Injector dismantling jig - Standard make	ABT-05	1 no	33400	33400	Honnavara	
6	94	Injector testing set(hand operated) - Standard make	ABT-05	1 no	36400	36400	Honnavara	
7	54	Portable crane hydraulically operated hook lifting capacity 1 Ton -Standard make	ABT-06	01 no	110000	110000	Honnavara	
8	2	Tyre remover pneumatic type--Standard make	AAT-02	1 set	163000	163000	Honnavara	
9	154	Working model of a car AC . Complete kit a) Wobble plate compressor with mounting brackets b) Serpentine Evaporator c) Parallel flow condenser d) Hoses, tubes, receiver, Expansion valve e) Electrical components & wiring harness & other required accessories. ISO approved.	RACAT-01	2 no	180000	360000		karwar -1, BDR-1
Rupees Thirty eight lakhs eighty one thousand one hundred fifty only						3881150		

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Dept Of Employment & Training

NS-PKG-19**LIST OF TOOLS & EQUIPMENTS TO BE PROCURED UNDER SHOPPING FOR PROJECT I.T.I's**

SL. No.	DGET SL. No.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET	Estimated Cost Per Unit	Total Estimated Cost	Consignee Govt I.T.I	
1	92,90	C.V. Joint units of 3 types- Maruti/Santro/Hyundai ISO approved.	AAT-01,02	8 sets	63000	504000	Honnagara	
2	11	Fuel injection pump test bench with accessories		1 No	400000	400000	Honnagara	
3	87,86	Tandem master cylinder with booster Specification:- For LMV Vehicle(Diesel) ISO approved.	AAT-02,01	8 Nos.	112000	896000	Honnagara	
4	77	Fuel injection pump – pneumatic governor, RQC governor and RSV governor Specification:-pneumatic governor P6 EngineA brand new in line fuel injection pump suitable for 4 cylinder diesel engine. Complete with RQV mechanical governor, stop and control lever. The pump should be with original equipments and tested OK by manufacturer. RSV -Mico make or equivalent set of 2 Nos. ISO approved.	AAT-02	2 Sets	158000	316000	Honnagara	
5	59	Starter motor, alternator, dynamo cut out Starter motor Specifications: Suitable for LMVtype Free engagement12 VoltAlternatorSpecifications: SUITABLE FOR LMV12 Volt40 amp DynamoSpecifications:SUITABLE FOR LMV 12 Volt22 Amp set of 1 No each. ISO approved.	AAT-03	2 sets	110000	220000	Honnagara	
6	87	Cut model of 4 stroke diesel engine on stand Maruti/Toyota/Hindustan/PAL or Equillant ISO approved.	ABT-05	1 No.	244000	244000	Honnagara	
7	69	Vacuum assisted hydraulic brake assembly (Model) -Tata make or Equillant	ABT-06	1 No	162000	162000	Honnagara	
8	85	Cut model of 4 stroke petrol engine on stand - Maruti/Santro /Ford /Toyota/Chavarlet or Equillant ISO approved.	ABT-05	1 No.	165000	165000	Honnagara	
9	70	Air brake assembly (Model) -Ashoka Leyland / Tata make or Equivalent ISO approved.	ABT-06	1 No	162900	162900	Honnagara	

10	72	Hydraulic brake assembly(Brake paedal, booster, Tandem master cylinder, wheel cylinder, brake drum-mock up assembly (Model) -Ashoka Leyland / Tata make or Equivalent ISO approved.	ABT-06	1 No	95200	95200	Honnagara	
11	79	Fuel injection pump one with pneumatic governor, one with RQ governor and one with R.S.V.governor -New Mico make or Equivalent ISO approved.	ABT-05	1 Set	86900	86900	Honnagara	
12	60	Conventional front axle assembly & I.S.F. wheel assembly (Model) -TATA/ Leyland make or Equivalent ISO approved.	ABT-06	1 No.	86000	86000	Honnagara	
13	20	Cut-section model of differential assembly - Mahindra / Hindustan make or Equivalent-TATA /LEYLAND make or Equivalent ISO approved.	ABT-06	1 No.	84000	84000	Honnagara	
14	50	Carburetor(two different types) NEW latest ISO approved.	ABT-05	2 Nos	33703	67406	Honnagara	
15	73	wall charts of Automobile Engg	ABT-06	1 Set	38000	38000	Honnagara	
16	7	Working model of lift	PMAT-03	4 Set	34000	136000		KGF-1,BELGM-1, kanakapura-1, holenarsipura-1
Rupees Thirty six lakhs sixty three thousand four hundred and six only						3663406		

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Joint Director(Trg)
for Commissioner
Dept Of Employment & Training

NS-PKG-20**LIST OF TOOLS & EQUIPMENTS TO BE PROCURED UNDER SHOPPING FOR PROJECT I.T.I's**

SL. No.	DGET SL. No.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET	Estimated Cost Per Unit	Total Estimated Cost	Consignee Govt I.T.I	
1	85	Diaphragm type clutch assembly Specification:- SUITABLE FOR LMV TYPE(Diesel) ISO approved.	AAT-02	2 Nos.	33065	66130	Honnagara	
2	83	Petrol engine (2 stroke) of different makes in running condition -Bajaj/TVS or Equvillant	ABT-05	1 Set	40800	40800	Honnagara	
3	102	STEERING & SUSPENSION SYSTEM (LJT make) This module provides a hardware training aid that is based on the real automotive components found in a typical front-end steering and suspension system. This includes front wheel assemblies, MacPherson strut and coil spring assemblies, road wheels and power steering rack. The unit is mounted on a steel frame fitted with solid rubber castors and a single-phase electric motor is used to power the power steering pump that is connected to the power rack using the correct hydraulic hoses. A complete steering wheel and column assembly is also fitted to the unit to allow the student to perform a full range of tests on the system. To aid in this the unit is fitted with a manually operated suspension loading system that enables the student to simulate the typical loaded conditions of a front-end suspension system. The module has been designed to allow the student to practically investigate all the principles and operations of a frontwheel drive steering and suspension system. Typical topic areas include Stee	AAT-02	1 No.	262000	262000	Honnagara	

4	85	<p>Disk brake with caliper assembly (LJT MAKE/ Equivalent) Specification:- Disc brake assembly is mounted on sturdy stand. The assembly consists of bellow stated parts to make it working model. The equipment is supplied duly painted with a pre defined colour codes for better understanding. (1) Tandem master cylinder (2) Wheel cylinder (3) Brake drum assembly (4) Brake light unit in working condition (5) Disc brake assembly (6) Brake pad (7) Brake pipe line (8) Suitable Electrical motor with Reduction Gear box assembly. (With V belt pulley drive) (9) Brake Caliper Required parts provided to make it complete working model. With suitable stand.</p> <p><u>Disc and Drum Brake Systems</u> : This module shall consist of a hardware trainer based on the real automotive components found in a front / rear disc and drum braking system. This must include a pair of front wheel hubs with disc rotors and calipers mounted on a rigid steel frame. The rear wheel hubs and drums shall also be mounted on the same frame. The parking brake assembly and cables together with a diagonally split hydraulic circuit, fitted with</p>	AAT-01	1 Nos.	224640	224640	Honnavara	
5	86	<p>Drum brake assembly (LJT MAKE) Specification:- Drum Brake Assembly consist of following items for its working model 1. Wheel Drum 2. Brake Shoes 3. Wheel Cylinder 4. Spring 5. Nut., Bolts 6. Front Axle Assembly 7. Electrical Motor with reduction gearbox (V-Belt with Pulley) Whole Assembly Fitted on proper Stand With proper colour code apply. <u>Disc and Drum Brake Systems</u>: This module shall consist of a hardware trainer based on the real automotive components found in a front / rear disc and drum braking system. This must include a pair of front wheel hubs with disc rotors and calipers</p>	AAT-02	1 No.	224640	224640	Honnavara	

6	78	<p>Disk brake with caliper assembly (LJT MAKE/ Equivalent) Specification:- Disc brake assembly is mounted on sturdy stand. The assembly consists of bellow stated parts to make it working model. The equipment is supplied duly painted with a pre defined colour codes for better understanding. Tandem master cylinder Wheel cylinder Brake drum assembly Brake light unit in working condition Disc brake assembly Brake pad Brake pipe line Suitable Electrical motor with Reduction Gear box assembly (With V belt pulley drive) Brake caliper Required parts provided to make it complete working model. With suitable stand. Santro/Maruti make or equivalent. <u>Disc and Drum Brake Systems</u> : This module shall consist of a hardware trainer based on the real automotive components found in a front / rear disc and drum braking system. This must include a pair of front wheel hubs with disc rotors and calipers mounted on a rigid steel frame. The rear wheel hubs and drums shall also be mounted on the same frame. The parking brake assembly and cables together</p>	AAT-02	1 No.	224640	224640	Honnagara	
7	84	<p>Drum brake assembly (LJT MAKE / Equivalent) Specification: Drum Brake Assembly consist of following items for its working model 1. Wheel Drum 2. Brake Shoes 3. Wheel Cylinder 4. Spring 5. Nut, Bolts 6. Front Axle Assembly 7. Electrical Motor with reduction gearbox (V-Belt with Pulley) Whole Assembly Fitted on proper Stand With proper colour code apply. -TVS/Leyland make <u>Disc and Drum Brake Systems</u> : This module shall consist of a hardware trainer based on the real automotive components found in a front / rear disc and drum braking system. This must include a pair of front wheel hubs with disc rotors and calipers mounted on a rigid steel frame. The rear wheel hubs and drums shall also be mounted on the same frame. The parking brake assembly and cables together with a diagonally split hydraulic circuit, fitted with the master cylinder, fluid reservoir and brake pedal shall also be fitted to the unit. The unit must also include a working brake light system. It shall be designed to allow students to learn the principles of disc and</p>	AAT-01	4 Nos.	224640	898560		

8	99	<p>Cut model of 4 stroke diesel engine on stand</p> <p>Specification:- Motorised actual working cut sectioned of four stroke four cylinder diesel engine mounted on sturdy stand. The cutting should enable the working parts visible i.e. connecting rod. Piston, Valve spring, fuel filter pump, cooling system, lubrication system etc. Suitable Electric motor drive with reduction gear to be provided to understand working of engine. The equipments shall be supplied duly painted with a pre-defined colour codes for better understanding. The engine should be cut in such a way to demonstrate below stated parts movable & stationary parts. (1) Cylinder head (2) Engine block (3) Piston, Piston rings & Connecting rod (4) Rocker shaft assembly (5) Crank shaft (6) Timing gear / Chain (7) Fly Wheel (8) Valves (Operation & Timing) (9) Oil filter & pump (10) Water pump (11) Air Cleaner (12) F. I . pump. (13) Fuel Feed pump. (14) Injector (15) Intake & Exhaust manifold (16) Starter motor (17) Fuel Filter (18) Alternator (19) Silencer (20) Radiator To understand working</p>	AAT-02	1 No.	228096	228096	Honnavara	
9	81	<p>Synchromesh gear box of LCV</p> <p>Specification:- Synchromesh gear box should be visualized the gears and synchronized unit, main shaft, Lay Shaft, Reverse gear, sleeter mechanism. The motor should be provide power to driving shaft & working of gear box can be shown for power transmission. 'V' belt and pulleys may be used to avoid slip. The whole assembly should be properly mounted on</p>	AAT-01	2 Nos.	113760	227520	Honnavara	

10	83	Synchromesh gear box of LCV Specification:- Synchromesh gear box should be visualized the gears and synchronized unit, main shaft, Lay Shaft, Reverse gear, sleeter mechanism. The motor should be provide power to driving shaft & working of gear box can be shown for power transmission. 'V' belt and pulleys may be used to avoid slip. The whole assembly should be properly mounted on suitable stand. Required parts should be provided If needed working condition of synchromesh gear box .- Mahendra/Maruti make or equivalent	AAT-02	2 Nos.	113760	227520	Honnavara	
11	84	Gear box with differential (Transaxle) Specification:- Gear box With Differential assembly properly mounted on strudy stand with proper colourized .Following parts require 1. Gearbox Assembly2. Differential Assembly3. Propeller Shaft4. Rear Axle Assembly 5. Brake Drum Assembly 6. Brake pipe 7. Tandem master cylinder 8. Oil tank 9. Brake PedalElectrical Motor With Reduction Gearbox With V belt pulley--Mahendra/Maruti make or equivalent	AAT-02	1 No.	172000	172000	Honnavara	

12	95	<p>Cut model of 4 stroke Petrol engine on stand</p> <p>Specification:- Motorised actual working cut sectioned of four stroke four cylinder petrol engine mounted on sturdy stand. The cutting should enable the working part visible i.e. connecting rod. Piston, Valve, Valve springs, fuel filter, pump, cooling system and lubrication system. Suitable Electric Motor drive with gear reduction be provided to understand working of engine. System should be designed for easy visibility & understanding of inner parts & should be provided with needed parts. The equipment shall be supplied duly painted with a pre-defined colour codes for better understanding. The engine should be cut in such a way to demonstrate bellow stated parts movable & stationary parts.(1) Cylinder head.(2) Engine block.(3) Piston, Piston rings & Connecting rod.(4) Rocker shaft assembly.(5) Crank Shaft(6) Timing gear / chain.(7) Fly wheel(8) Valves (Operation & Timing)(9) Compression chamber(10) Oil filter & pump.(11) Water pump & Radiator (12) Air Cleaner.(13) Intake &</p>	AAT-01	1 No.	126864	126864	Honnavara	
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13	77	Distributor (LJT MAKE) Specification:- 4 Cylinder /6 Cylinder 12 volt Suitable for LMV type-Delco make or equivalent This module shall include a hardware trainer that is based on the real automotive components found in a distributorless ignition system. The unit shall be powered by a 12V DC motor and must be supplied with an appropriate power supply. The unit must be fully guarded and be intrinsically safe for student usage. It must feature an inductive pickup system, four spark plugs, HT ignition coil, and DIS module. A series of high resistance and open circuit faults shall be inserted using a bank of switches. This module must enable students to learn the principles of distributorless ignition systems and shall allow students to carry out the following hands-on tasks: · Investigate the fundamentals of ignition systems. · Inspect and test ignition primary circuit wiring and components. · Inspect and test ignition system secondary circuit wiring & components. Inspect and test ignition coils. · Inspect and test distributor. · Inspect & test ignition system pick-up sensor or triggering circuit	AAT-01	1 Nos.	85536	85536	honnavara	
14	21	Rear axle assembly complete with drive shaft and brake drums (full floating, semi floating type, and 1/4 floating) (Model) - Mahindra / Hindustan make or Equivalent ISO approved.	ABT-06	01 no	180000	180000	Honnavara	
15	84	Gear box with differential (Trans axle)	AAT-03	1 No	162000	162000		
Thirty three lakhs fifty thousand nine hundred and forty six onl						3350946		

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Joint Director(Trg)
for Commissioner
Dept Of Employment & Training

NS-PKG-21**LIST OF TOOLS & EQUIPMENTS TO BE PROCURED UNDER SHOPPING FOR PROJECT I.T.I's**

SL. No.	DGET SL. No.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET	Estimate d Cost Per Unit	Total Estimated Cost	Consignee Govt I.T.I	
1	64	AC Alternator slip ring press	AAT-03	1 Nos	12600	12600	Honnagara	
2	72	AG 7 Grinder	FAT-01	1No.	28000	28000	chitradurga	
3	70,71,68,97,97	AG 7 Grinder & AG4	FAT-03,04,04,FBT-04,02,02	8 Nos	35000	280000		nanjangud-07,kookanuranur-01 NO.
4	86	Alternator and in built regulator	AAT-03	2 Nos	22770	45540	Honnagara	
5	91,62	Battery Charger 6-24 V with 10 A rate	AAT-02,03	2 Nos	18100	36200	Honnagara	
6	105,106,98,79,82	Spot welding machine-3KVA 3 phase water cooled arm & electrode.	ABT-02,PMBT-02, FBT-02,03,04	17 Nos	79800	1356600		chitradurga-08,kookanuranur-08, HONNAGARA -01
7	66	Electrical test bench-Standard make.	AAT-03	1 No.	163000	163000	Honnagara	
8	84	Starter test bench .	AAT-03	1 Nos	163000	163000	Honnagara	
9	6,8,6,6	Solenaid with core: a) coil voltage of 12 volts DC at 6mm strokes of 035kg forces of maximum stroke 18, having coil power 10 watts b) coil voltage of 240 volts AC of having 04kg forces at 6mm stroke maximum strock 24coil power 15VA	EBT-02,02,EBT-02,02,02	36 NOS	3200	115200		chitradurga-8,Tiputtur-8,nalatwad-8,puttur-8,bagalkote-4
10	103	Smoke Testing Machine.AAI approved. AC Power Supply : 100-300V AC, 1 Phase, 48 - 63 Hz DC Power Supply : 11V – 14V DC, Automated sensor with printer LG or Equivalent make.	AAT-01	2 No.	164150	328300	Honnagara	
11	9	Wheel balancing machine with accessory-computerised type- standard make.	AAT-02	1 set	312000	312000	Honnagara	
12	96	Engine Cranker with 12V & 24V , AC to DC power supply system having Battery Charger , 12V , 21 plates-2batteries connected in series, and cable for 3 mtr each, monted on a movable trolley.	ABT-05	1 No.	163000	163000	Honnagara	
Rupees Thirty Lakhs three thousand four hundred and fourty only						3003440		

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NS-PKG-22**LIST OF TOOLS & EQUIPMENTS TO BE PROCURED UNDER SHOPPING FOR PROJECT I.T.I's**

SI No	DGET SL NO.	DESCRIPTION OF THE ITEMS	Module Code	TotalQTY	Estimated Cost	Total Estimated Cost		Consignee Govt I.T.I
1	1,1,1,1,11, 2,99,67,67, 73,84,1, 10,75,3,3,7 5.	Bench Vices 100 mm width of jaw for work benches Smith or Equivalent Make	EBT-1, PMBT-3, EBT-5,6, EAT-1, ECBT-1, EAT-1,3,5, EBT-1,ECBT-1, ECBT-5,4, EAT-1	204 Nos	3500	714000		bagalkotealkote-8, KGF-16, Haliyal-16, Huvinahadagali-8, Malavalli-52, Gurumitkal-56, Gowribidanur-8.
2	1,1,1,4,1,1, 1,1,2,2,2,2, 1,	Bench Vices 125 mm width of jaw for work benches Smith or Equivalent Make	PMAT-1,2,3, FBT & FAT, PMBT-2,4,5,6, PMAT-1to3, RACAT 3, AAT-3, FBT & FAT, FBT-1,2,3,4,5,6 & FAT-2,4&5, ECBT-1, ECBT-5,4,3, EBT-1, PMBT-2,5,5, PMAT-1.	276 Nos	5600	1545600		Belgaum-24, kookanuranur-40, KGF-44, karwar-8, Honnavara-8, nanjangud-44, chitradurgaarayasanudra-44, Malavalli-4, Gurumitkal-12, Madikere-12, Kanakpura-16.
3	91,35,29	Bench vice 120mm, 150mm	PMBT-02, FBT-05,05	10 sets	17800	178000		nanjangud-02 Sets
4	21,21,21	Bench vice 200mm	EAT-02,02,02	18Nos	11800	212400		bagalkote-6,Tiputtur-6,puttur-6
Rupees Twenty six Lakhs sixty five thousand only						2650000		

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NS-PKG-23**LIST OF TOOLS & EQUIPMENTS TO BE PROCURED UNDER SHOPPING FOR PROJECT I.T.I's**

SL. NO.	DGET SL. NO.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET	Estimated Cost Per Unit	TOTAL Estimated Cost	Consignee Govt I.T.I
1	10,11	8085 kit :- 8085 C,P,U, at 4k powerfull firm ware, including all standard comands, lodes function and utility subroding besides assembles and disammables 8k user RAM 6264. memory expention provision UP to 56k versatile keyboard/display controler using 8279 46 parallel 7/0 lines serial I/O through auto adjusting type RS-232 channel programable lines. 2*40 LED display 104 key standard PC comfertable all address,data and control & hardware intrapt lines are brough at a 50 pin FRC connecter RAM sockets are provided with battery bark up.supplied in attractive enclosure. with built in PS and interfacing modules such as DAC,ADC, Traffic lights, stepper motors,elevators,LED display and keyboard. the above system should be remotely controlled	EAT-03,	32 Nos.	21400	684800	Tiptur-04, Chitradurga-04, Gowribidnur-04, Puttur-04, Nalathwad-04, Bagalkot-04, Mandya-04, Hoovinahadagali-04
2	20	IC based power supply :- I/P voltage-230v-50hz ±12v 2a, ± 5v 2a. Line regulation=0.05%, ± 3mv for line voltage variation of ± 10%. Load regulation:- ± 0.05% ± 3mv from no load to full load. Metering:- microcontroller based Plasma.Ripple:- 2mv Rms. Protection:- short circute & over load protected o/p with remote controlled system	EAT-03	28 Nos.	8150	228200	Tiptur-04, Chitradurga-04, Gowribidnur-04, Puttur-04, Nalathwad-04, Bagalkot-04, Mandya-04,
3	24,24	Microprocessor based recorder: Should accept voltage, current, RTD input, Thermocouple, techo generator inputs, should have data logging fecilities and four pens recorder and it should be industrial type.	EAT-03,03	8 Nos	165000	1320000	Hoovin hadagali-1

4	22,N,22,N, 22,22,22,2 3	Color pattern generator : Operating Vg : A/C 230V 50Hz standard accessories, user manual, RS-232 communication port & cable, VGA connectors, HD-15 pin, signals RGB, H sink & V sink, source impedance 75 ohms, o/p level 0.714V, Auto calibration, output protection, diode buffer should have standard test patterns and controls programmable pattern with interfacing facility to pc.	EAT- 03,03,03,0 3,03,03,03 ,03	15nos	55800	837000	HDL-1,mandya-8,MDK-1,DHURGA-1,TIP-1,PTR-1,BAG-1,NLT-1.
5	59	CRO Digital , Dual Trace 60 MHz, X-Y mode, Storage upto 10 waveforms, Max. i / p voltage 400 V (DC + Peak AC), On screen readout display with remotely power controlled-	ECAT-05	3 Nos.	98000	294000	Malavalli-1, Shimoga-1, Gurmitkal
6	4,N,4,4,7	SMPS trainer (IC & Transistorized based) with various test points for check the voltage and wave form having O/P 110V, 24V,12V,5V The above system should be mounted on a rugged suitcase type cabinet, and strongly supported by instructional manual, havi	EBT- 03,03,03,0 3,03	25 Nos	16400.00	410000.00	Puttur-5,chitradurgs-5,Tiptur-5,Bagalkote-5,Nalatwad-5
Rupees Thirty seven lakhs seventy four thousands only						3774000	

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Joint Director(Trg)
for Commissioner
Dept Of Employment & Training

NS-PKG-24**LIST OF TOOLS & EQUIPMENTS TO BE PROCURED UNDER SHOPPING FOR PROJECT I.T.I's**

SL. NO.	DGET SL. NO.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET	Estimated Cost Per Unit	TOTAL Estimated Cost	Consignee Govt I.T.I
1	16	Function generators with different O/P:- "Function generator:- 0- 2MHZ micro controller based, with Microcontroller based alpha numeric read out, Functions Sine, Square, Triangular ramp & Pulse (TTL).with microcontroller based touch sensitive system with remotely controlled.	EAT-03	56 Nos.	41400	2318400	Tiptur-08, Chitradurga-08, Gowribidnur-08, Puttur-08, Nalathwad-08, Bagalkot-08, Mandya-08,
2	15,332,10,9,15	Function generator:- s 0.1 Hz to 3MHz, sine,square,pulse, Sine Square, TraingFunction generator:-s 0.1 Hz to 3MHz ,sine,square,pulse, Sine Square, Traingular,ramp DC-off set,NUMERIC DISPLAY&ADJUSTEMENT FOR DC OffSET,OUTPUT AMPLITUDE, Frequency sweep etc. Should have AM/FM,PWM,PAM 40MHZ AUTO ranging frequency counter, PC interface for remote control and programming."	EAT-02,02,EBT 03,04,EAT 02	15 Nos	15000	225000	Tiptur-2,Gowribidnur-2,Puttur-5,4,2
3	36	TRAINERS OF VARIOUS SENSORS:- HALL SENSORS, MAGNETIC SENSORS, TACHO GENERATORS, OPTO CUPLERS WITH COMPLETE SETUP. (EACH SENSORS SHOULD HAVE SEPARATE TRAINER SETUP CONSISTING OF DC SUPPLY SENSING ELEMENT, AMPLIFIER AND DISPLAY OF SENSED PARAMETER.) EACH systems should be Microcontroller based touch sensitive system and controlled remotely	EAT-02	7No.	36500	255500	Tiptur-01, Chitradurga-01, Gowribidnur-01, Puttur-01, Nalathwad-01, Bagalkot-01, Mandya-01,

4	4,339,22,4 ,22,5,1	Basic electronic trainer :- supply voltage 230 volts AC, output Dc voltage + 5 volts, 1 amp +12 volts, 0-15 volts 500 mili amps microcontrolled based Touch sensitive system for increment and Decrement for Voltage, AC voltages 3-6-9-12,(transformer secondary, tappings)500 mili amps . E-12 series ½ watt resistor (ohms , kilo ohms , mega ohms values). capacitors electrolytic & non electrolytic capacitors standard values. Bread board :- having high quality tie points. terminals 2mm(BS-2).Meter:- alpha numerical digital meter for V&I measurements. Function generator:- 20 hz to 20 kilo hz (sine,square,triangle waves.) Active components:- diodes , transistors ,zener diode of various values FET,LDR. the above component should be mounted in an attractive and rugged cabinet should operate on remote controlled system.	EAT-03,02,02,02,03	49Nos	21500	1053500	Gowribidnur-7,4Tiptur-7,4,Puttur-7,4, Chitrdurga-4, nalatwad-4, bagalkote-4, mandya-4
	Rupees Thirty eight lakhs fifty two thousand four hundred only					3852400	

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Joint Director(Trg)
for Commissioner
Dept Of Employment & Training

NS-PKG-25

LIST OF TOOLS & EQUIPMENTS TO BE PROCURED UNDER SHOPPING FOR PROJECT I.T.I's

SL. NO.	DGET SL. NO.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET	Estimated Cost Per Unit	TOTAL Estimated Cost	Consignee Govt I.T.I
1	9,3,3,9,19,	Multimeter: Analog type, High resistant measurement, 0-200Mohms, accuracy: $\pm 3\%$ at mid scale. DC voltage: 0-1000, DC current: 0-10 Amps, AC voltage 0-1000V, AC current: 0-10 Accuracy: $\pm 1\%$ of fullscale value. Battery operated and mains operated cutout mechanism for overvoltage and over current protection and should be supplied with standard accessories for high voltage and high current measurement. make Motwane/Philips	EBT-03 EBT-05 ECBT-01,EAT-02,03,03,02,EBT-02,EAT-02	191 Nos.	7500	1432500	MDK-4,PTUR-12,TIP-4,NLT-4
2	12	SINE-WAVE GENERATOR:- 0.1 Hz to 3MHz, sine, square, pulse, Sine Square, TraingFunction generator:- 0.1 Hz to 3MHz, sine,square, pulse, Sine Square, Traingular,ramp DC-off set, NUMERIC DISPLAY& ADJUSTEMENT FOR DC OFFSET,OUTPUT AMPLITUDE,Frequency sweep etc. Should have AM/FM,PWM,PAM 40MHZ AUTO ranging frequency counter, PC interface for remote controlling and programming. Scientek / Phillips / HP make or equivalent.	EBT-03	35 Nos.	24500	857500	Tiptur-07, Chitradurga-07, Gowribidnur-07, Puttur-07, Nalathwad-07, Bagalkot-07, Mandya-07,
3	34	DC DRIVE/TRAINER:- USING PHASE CONTROL, PWM TECHNOLOGY SUITABLE FOR CONTROL OF THE DC SHUNT AND COMPOUND MOTOR OF 5HP WITH THE OPEN LOOP AND THE CLOSED LOOP FACILITY OPERATED WITH 220V AC SUPPLY. THE TRAINER SHOULD HAVE ALL SECTIONS PRINTED ON THE PANEL WITH TEST POINTS WITH DIGITAL DISPLAY TO READ VOLTAGE AND CURRENT AND SHOULD HAVE TACHO FEED BACK FOR PROTECTION OF DC MOTORS. THE DRIVE SHOULD BE OF INDUSTRIAL GRADE HAVING ALL PROTECTIONS TO THE MOTORS AND DRIVE AND OF LATEST TECHNOLOGY.AND SHOULD BE SUPPLIED WITH DETAILED INSTRUCTIONAL MANUAL FOR TRAINING PURPOSE.	EAT-02	07 each	68175	477225	Tiptur-01, Chitradurga-01, Gowribidnur-01, Puttur-01, Nalathwad-01, Bagalkot-01, Mandya-01,

4	16	Digital Multimeter 0-1000 V DC ,750 V AC 0 to 10 mega ohms, 0 to 10 amps AC DC -Meco or Equivalent	ECBT-03	51 Nos.	7500	413100	Malavalli-17, shimoga-17, gurmitkal-17
5	59	CRO Analog , Dual Trace 60 MHz, X-Y mode, Storage upto 10 waveforms, Max. i / p voltage 400 V (DC + Peak AC), On screen readout display with remotly power controlled -	ECAT-05	3 Nos.	132500	397500	Malavalli-1, shimoga-1, gurmitkal-1
6	N,8,19	DC Power supply:- 0-30v, 5A, I/P voltage-230v-50hz , Line regulation=005%, \pm 3mv for line voltage variation of \pm 10% Load regulation: \pm 005%, \pm 3mv from load to full load microntrolled alha numeric display Ripple: 2mv Rms Protection: short circuit & over load protected o/p with micro controller based touch sensitive device for increment and decrement of voltage and current and remote control facility - reputed company make	EAT-02,02,03	12Nos	19700	236400	DHURGA-2,PTUR-2,8
Rupees thirty eight lakhs fourteen thousand two hundred and twenty five only						3814225	

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Joint Director(Trg)
for Commissioner
Dept Of Employment & Training

NS-PKG-26**LIST OF TOOLS & EQUIPMENTS TO BE PROCURED UNDER SHOPPING FOR PROJECT I.T.I's**

SL. NO.	DGET SL. NO.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET	Estimated Cost Per Unit	TOTAL Estimated Cost	Consignee Govt I.T.I
1	73,28,N,28	Motor AC phase wound Slip ring type 5 HP 400 volts, 3 phase 50 cycles with Microcontroller based starter with alpha numerical LCD display MPB controller with VU 400Volts Mechanical loading arrangement	ECBT-04,EAT-02,02,02	9 Nos.	188190	1693710	Tip[tur-1,Chitrdurga-1, Puttur-1, malavalli-2, Shimoga-2, gurmitkal-2
2	26,27,27,N	DC SHUNT MOTOR DC 220 volt, 2HP YLM with SB finishing with TVC drive with digital display with Mechanical loading arrangement with test reports	EAT-02,FBT-06,PMBT-03,03	13nos	58670	762710	KOK-2,HNP-2,KNP-2
3	N,27,73,29	Motor of AC squirrel cage 3 phase 440 volt,50Hz,3HP with Microcontroller based starter alpha numerical LCD display MPB controlled with VU and Mechanical loading arrangement	EAT-02,02,ECBT-04,FBT-06	9 Nos.	97920	881280	DHURGA-1,PTUR-1,KOK-1
4	29	4 POINT STARTER SUITABLE FOR CONTROL OF 5 HP DC MOTOR WITH REQUIRED METERING AND CONTROL SYSTEM	EAT-02	02Nos.	20000.00	40000.00	Puttur
5		Motor AC single phase 230 volts 50 Hz capacitor type with Micro controller based starter with alpha numeric LCD display MPB controller with VU and Mechanical load	ECBT-04	6 Nos.	54766	328596	malavalli-2, Shimoga-2, gurmitkal-2
		Rupees thirty seven lakhs six thousand two hundred and ninety six only				3706296	

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Joint Director(Trg)
for Commissioner
Dept Of Employment & Training

NS-PKG-27**LIST OF TOOLS & EQUIPMENTS TO BE PROCURED UNDER SHOPPING FOR PROJECT I.T.I's**

SL. NO.	DGET SL. NO.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET	Estimated Cost Per Unit	TOTAL Estimated Cost	Consignee Govt I.T.I
1	73,27	DC compound motor- DC 220 volt, 3HP YLM with SB finishing with TVC drive with digital display with Mechanical loading arrangement with test reports	ECBT-04,EAT-02	12 NOS	58670	704040	malavalli-3, Shimoga-3, gurmitkal-3
2	89	Transformer single phase 1KVA 230/115V 50Hz core type, air cooled-AE or equivalent	ECBT-02	12 Nos.	16600	199200	malavalli-4, Shimoga-4, gurmitkal-4
3	63	Oil testing kit, digital display, voltage range upto 36KV-Megar 11101 model or equivalent	ECAT-03	3 No.	53200	159600	malavalli-1, Shimoga-1, gurmitkal-1
4	67, 66	Transformer 10 KVA, 415/230V, 3 Ph,(Delta/Star), oil cooled, fitted with safety/protection devices with tank and Castor wheels - Intrans/AE or Equivalent make	ECAT-03 ECBT-05	6 No.	84600	507600	malavalli-2, Shimoga-2, gurmitkal-2
5	88	Auto Transformer, continuous variation single phase, enclosed type 0-270V, 6A -AE or equivalent	ECBT-02	18Nos.	10025	180450	malavalli-6, Shimoga-6, gurmitkal-6
6	65 & 66, 65	Transformer 5 KVA, 415/230V, 3 Ph,(Delta/Star), oil cooled, fitted with safety/protection devices with tank and Castor wheels - Intrans/AE or Equivalent make	ECAT-03 ECBT-05	12 Nos.	56000	672000	malavalli-4, Shimoga-4, gurmitkal-4
7	90	Transformer three phase 2.5KVA 400/230V 50 Hz delta and star oil cooled-AE or equivalent	ECBT-02	6 Nos.	42200	253200	malavalli-2, Shimoga-2, gurmitkal-2
8	62,13,20,13,28,62,30	Auto Transformer, continuous variation, single phase, flush mounting type, 0-270V, 5A - AE make or equivalent	ECAT-01,EBT-04,03,04,,05,05	32 Nos.	11700	374400	Tiptur-03,Mandya-5 malavalli-8, Shimoga-8, gurmitkal-8
9	50,27	AC single phase induction motor with microcontrolled starter with alpha numeric display with machanical loading arrangement	EAT-02,02	02 Nos.	40000	80000.00	nalatwad-1, tiptur-1
10	8,8,8	Battery Storage : a) Lead Acid tubular type 12 V 120 AH, b) Sealed Maintenance free Battery 12V 120AH - reputed co Make	EBT-02	04 Nos.	30000	120000.00	MADIKERI
11	69	Auto Transoformer 3 phase input 400V, Output 0-440V-32 Amps, Enclosed type AE or equivalent	ECAT-05	6 Nos.	87500	525000	malavalli-2, Shimoga-2, gurmitkal-2
Rs. Thirty seven lakhs seventy five thousnd four hundred and ninety only						3775490	

**for Commissioner
Dept Of Employment & Training**

NS-PKG-28**LIST OF TOOLS & EQUIPMENTS TO BE PROCURED UNDER SHOPPING FOR PROJECT I.T.I's**

SL. NO.	DGET SL. NO.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET	Estimated Cost Per Unit	TOTAL Estimated Cost	Consignee Govt I.T.I
1	5,6,7	Oscilloscope: 100MHz. Dual trace with LCD Display:- Band width VD- DC-100 MHz. HD-DC-50 MHz.RISE TIME-5.8 ns accuracy VD&HD±3%. Difflection factor HD&VD - 2mv/ div-5v/div input Z. VD&HD-1M ohm/30 P ± 10% sensitivity. V&H 2mv/div. I/P voltage 2500V TIME BASE FREQUENCY-20ns/div-.5 sec/div. Display-LCD display. with standard accessories - Scientek / Phillips make or equivalent. the system should be remotely controlled.	EBT-05 EBT-05 EBT-04	28 Nos.	140500	3934000	Tiptur-04, Chitradurga-04, Gowribidnur-04, Puttur-04, Nalathwad-04, Bagalkot-04, Mandya-04,
Rupees Thirty Nine lakhs Thirty Four Thousand only						3934000	

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Dept Of Employment & Training

NS-PKG-29**LIST OF TOOLS & EQUIPMENTS TO BE PROCURED UNDER SHOPPING FOR PROJECT I.T.I's**

SL. NO.	DGET SL. NO.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET	Estimated Cost Per Unit	TOTAL Estimated Cost	Consignee Govt I.T.I
1	37	PLC SYSTEM WITH 20 DI, 20 RO, 4 AI AND 2 AO FOR CONTROL OF THE DRIVE SYSTEM. THE PLC SHOULD HAVE BUILT IN HIGH SPEED COUNTING UPTO 60 KHz AND SHOULD HAVE THE FEATURES OF PWM AND PULSE TRAIN OUTPUT AND ALL WILL BE OPERATED WITH THE 24 V DC SYSTEM WITH ENCODERS OF 1000 PPR, THE PLC SYSTEM SHOULD BE OF INDUSTRIAL GRADE, AND OF LATEST TECHNOLOGY.AND SHOULD BE SUPPLIED WITH DETAILED INSTRUCTIONAL MANUAL FOR TRAINING PURPOSE. REPUTED COMPANY MAKE. THE ABOVE UNIT SHOULD BE REMOTELY CONTROLLED.	EAT-02	7No.	267650	1873550	Tiptur-01, Chitradurga-01, Gowribidnur-01, Puttur-01, Nalathwad-01, Bagalkot-01, Mandya-01,
2	80	Universal IC tester-Suitable for testing digital IC's and linear IC's with digital display readout.- HAMEG/Siemens/LG or equivalent.	ECBT-03	6 Nos.	81090	486540	malavalli-2, Shimoga-2, gurmitkal-2
3	13	Universalr/PAL Progamme:- To programme all type of EPROMS,FLASH MEMORY,PROM NOVRAM, MICROCONTROLLER, PLD, PAL, AND OTHER STANDARDSLOGICS. .ighspeed progamming,chip identification, SECURITY FETURES:- multivoltage verification, multiple intefacing facility. Socket-48pin high qulity pin driver universal type.	EAT-03	14 Nos.	21400	299600	Tiptur-02, Chitradurga-02, Gowribidnur-02, Puttur-02, Nalathwad-02, Bagalkot-02, Mandya-02,
4	21,22,2,7	digital Multimeter 3 1/2 display 0-750 volt AC 0-1000 v DC 200 m.ohm -2 M ohm with testing of capitor and diode with beeper- Meco/AE make or equivalent.	ECBT-05 ECBT-04,EBT03,06	136 NOS	8000	1088000	NLT-17, PTUR-17 malavalli-34, Shimoga-34, gurmitkal-34
Rupees thirty seven lakhs forty seven thousand six hundred and ninety only						3747690	

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Joint Director(Trg)
for Commissioner
Dept Of Employment & Training

NS-PKG-30**LIST OF TOOLS & EQUIPMENTS TO BE PROCURED UNDER SHOPPING FOR PROJECT I.T.I's**

SL. NO.	DGET SL. NO.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET	Estimated Cost Per Unit	TOTAL Estimated Cost	Consignee Govt I.T.I
1	18,18,18	Dry film laminator	EBT-04,04,04	16 Nos.	138000	2208000	Haliyala-2,Hadagali-2,Tiptur-02, Chitradurga-02, Gowribidnur-02, Puttur-02, Nalathwad-02, Bagalkot-02, Mandya-02,
2	11,25	Microcontroller kit along with addon card DAC, ADC, Stepper Motor. CPU: 8031 Microcontroller working with 3.57 MHz crystal MEMORY:32K RAM Expandable to 64K, 32KEPROM(27256) Expandable to 64K, DISPLAY: 8 Digit 7 Segment LED Displays, KEYBOARD: 33 keys keyboard including RESET, PARALLEL PORT: 2 Nos 8255(Programmable Peripheral Interface), SERIAL PORT: 8251A (Programmable Communication Interface) , TIMER: 3 Nos, 16 Bit Programmable Timers using 8253 , TERMINATIONS: 12 Port lines of 8051 are terminated in the CPU Module in a single row, SOFTWARE FACILITIES: Break, Single Step, Execute, Register, Move, Fill, Download, Insert, Delete etc. the above system should be remotely controlled	EAT-03 EAT-02	56Nos.	28750	1610000	Tiptur-08, Chitradurga-08, Gowribidnur-08, Puttur-08, Nalathwad-08, Bagalkot-08, Mandya-08,
Rs. Thirty eight lakhs eighteen thousand only					Total	3818000	

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Joint Director(Trg)
for Commissioner
Dept Of Employment & Training

NS-PKG-31**LIST OF TOOLS & EQUIPMENTS TO BE PROCURED UNDER SHOPPING FOR PROJECT I.T.I's**

SL. NO.	DGET SL. NO.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET	Estimated Cost Per Unit	TOTAL Estimated Cost	Consignee Govt I.T.I
1	3,7,19,2,12	Digital Multimeter: 4% digit display .VOLTAGE RANGE:- 200 mv - 1000 v (AC/DC)having accuracy beter than 0 .8%. CURRENT RANG:-20 Micro Amps - 10 Amps (AC/DC) having accuracy beter than' 3%. REGISTANCE RANGE:-minimum of 200 mege ohms. and should havestanderd features frequency mesurement capacitence mesurment,hfe(Transistor) mesurment' and diode testing. and must have protection against over load. and should auto range & battery operatred.and mains operated.	EBT-03 EBT-06,02,EAT-03,03,02,01,02,01,3,2,1	322 Nos.	8100	2608200	mandya-4,DHURGA-56,PTUR-24, Tiptur-34, Chitradurga-34,56, Gowribidnur-34, Puttur-24,34, Nalathwad-34, Bagalkot-34, Mandya-34
2	38	OPEN LOOP AND CLOSED SPEED CONTROL TRAINER FOR AC TRAINER AND TEST SETUP COMPATIBLE WITH PLC SYSTEM:- THE TEST SETUP SHIULD HAVE ALL SENSOR, CONTROL ELEMENT, FOR SIMULATION OF SPEED CONTROLLING THE AC MOTORS USING PLC SYSTEM	EAT-02	7No.	70235	491645	Tiptur-01, Chitradurga-01, Gowribidnur-01, Puttur-01, Nalathwad-01, Bagalkot-01, Mandya-01
3	61	Regulated Power supplies 0-15 volts/1A with microcontroller based alpha numerical LCD display,shortcircuit protection and over load protection and microcontrolled touch sensitive switch system,with remote controlled operation reputed co.make.with-Standard Make	ECBT-03	24 Nos.	6800	163200	malavalli-8, Shimoga-8, gurmitkal-8

4	6,6,6,N	Digital IC trainer for Suitable for studying logic gates flipflops,counters,countership registers,multiflexcures,dimultifluxuresfor bit logic comperator,decodor and encoder,Half adder,full adder,programmer counters,memory elements RAM,ROM EPROM etc ALU,DAC and ADC with 8 microcontroller touch sensitive device logic input keys mono pulse clock generator 5V analogue input 8421 binary word generator,12 LEDS for output status indication,2 digit seven segment LCD display for 8421 inputs. the system should be remotely controlled.should have provision to interface the computer	EAT-03,03,03,03	16Nos	21450	343200	Puttur-04,Bagalkote-4,Tiptur-4,Mandya-4.
		Rupees Thrity six lakhs six thousand two hundred and forty five only				3606245	

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for Commissioner
Dept Of Employment & Training

NS-PKG-32**LIST OF TOOLS & EQUIPMENTS TO BE PROCURED UNDER SHOPPING FOR PROJECT I.T.I's**

SL. NO.	DGET SL. NO.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET	Estimated Cost Per Unit	TOTAL Estimated Cost	Consignee Govt I.T.I
1	17	Through hole plating system: the machine should be useful for plating the holes of a PCB. Should operate on 230V ac mains, should have a container and a stirrer mechanism for chemical reaction. The system should be provided with 10 containers.	EBT-04	14 Nos.	182000	2548000	Tiptur-02, Chitradurga-02, Gowribidnur-02, Puttur-02, Nalathwad-02, Bagalkot-02, Mandya-02,
2	20	Roller Tinning machine: the system should be provided with 2 rollers with provision to adjust the gap between them for easy flow of PCB. The system should be provided with speed controller and temperature temperature controller units	EBT-04	14 Nos.	88000	1232000	Tiptur-02, Chitradurga-02, Gowribidnur-02, Puttur-02, Nalathwad-02, Bagalkot-02, Mandya-02,
		Rupees thirty seven lakhs eighty thousands only			Total	3780000	

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NS-PKG-33**LIST OF TOOLS & EQUIPMENTS TO BE PROCURED UNDER SHOPPING FOR PROJECT I.T.I's**

SL. NO.	DGET SL. NO.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET	Estimated Cost Per Unit	TOTAL Estimated Cost	Consignee Govt I.T.I
1	26	PCB Drilling machine the unit should be of high speed of 6000rpm for PCB drilling. The system should be of table top type operated on 230V /50Hz mains.	EBT-04	14 Nos.	42500	595000	Tiptur-02, Chitradurga-02, Gowribidnur-02, Puttur-02, Nalathwad-02, Bagalkot-02, Mandya-02,
2	24,24,24	Double sided U-V exposure unit: the system should be provided with UV lights with timer for exposure setting. The system should be provided with suction pressure to hold the PCB with the film intact during exposure. The system should operate on 230V AC mains.	EBT-04,04,04	16 Nos.	148000	2368000	Haliyala-2,Hadagali-2,Tiptur-02, Chitradurga-02, Gowribidnur-02, Puttur-02, Nalathwad-02, Bagalkot-02, Mandya-02
3	23	PCB curing Machine: the system should have a inner size of 14' X 14' X 14' with blower type and the heating elements should be embedded type. The system should be provided with temperature controller unit.	EBT-04	14 Nos.	45000	630000	Tiptur-02, Chitradurga-02, Gowribidnur-02, Puttur-02, Nalathwad-02, Bagalkot-02, Mandya-02,
4	73	RF Oscillators-0.1 Hz to 3MHz, sine, square, pulse, Sin Square, TraingFunction generator:- s 0.1 Hz to 3MHz, sine,square, pulse, Sine Square, Traingular,ramp DC-off set, NUMERIC DISPLAY& ADJUSTEMENT FOR DC OffSET,OUTPUT AMPLITUDE,Frequency sweep etc. Should have AM/FM,PWM,PAM 40MHZ AUTO ranging frequency counter, PC interface for remote controlling and programming.	ECBT-03	12 Nos.	24500	294000	malavalli-4, Shimoga-4, gurmitkal-4
		Rupees thirty two lakhs ninety two thousand only				3292000	

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for Commissioner
Dept Of Employment & Training

NS-PKG-34**LIST OF TOOLS & EQUIPMENTS TO BE PROCURED UNDER SHOPPING FOR PROJECT I.T.I's**

SL. NO.	DGET SL. NO.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET	Estimated Cost Per Unit	TOTAL Estimated Cost	Consignee Govt I.T.I
1	22	Etcheing Machine hand operated type: should be for PCB etching spray type enclosed type. The system should have chemical resistant body	EBT-04	14 Nos.	145000	2030000	Tiptur-02, Chitradurga-02, Gowribidnur-02, Puttur-02, Nalathwad-02, Bagalkot-02, Mandya-02,
2	25,25	PCB shearing Machine	EBT-04,04	14 Nos.	29700	415800	Tiptur-02, Chitradurga-02, Gowribidnur-02, Puttur-02, Nalathwad-02, Bagalkot-02, Mandya-02,
3	21	Photo resistive machine dip coating: should have vertical dip automatically. The system should have stainless steel tank for chemical bath. The PCB holder should be driven by a chain and pully mechanism. The system should operate on 230V AC mains.	EBT-04	16Nos.	86000	1376000	Hadagali-2, Tiptur-02, Chitradurga-02, Gowribidnur-02, Puttur-02, Nalathwad-02, Bagalkot-02, Mandya-02,
Rupees Thirty eight lakhs twenty one thousand eight hundred only						3821800	

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Joint Director(Trg)
for Commissioner
Dept Of Employment & Training

NS-PKG-35

LIST OF TOOLS & EQUIPMENTS TO BE PROCURED UNDER SHOPPING FOR PROJECT I.T.I's

SL. NO.	DGET SL. NO.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET	Estimated Cost Per Unit	TOTAL Estimated Cost	Consignee Govt I.T.I
1	35	VARIABLE FREQUENCY DRIVE/TRAINER:- AC INVERTER DRIVE 5 HP WITH 150% OVERLOAD AND CONSTANT TORQUE. THE DRIVE SHOULD HAVE ANALOG AND DIGITAL FUNCTIONS SUITABLE FOR THE PLC CONTROLS. THE DRIVE SHOULD BE OF INDUSTRIAL GRADE HAVING ALL PROTECTIONS TO THE MOTORS AND DRIVE AND OF LATEST TECHNOLOGY.AND SHOULD BE OF MICROCONTROLLER BASED TOUCH SENSITIVE SYSTEM WHICH IS REMOTELY CONTROLLED.	EAT-02	07Nos.	89132	623924	Tiptur-01, Chitradurga-01, Gowribidnur-01, Puttur-01, Nalathwad-01, Bagalkot-01, Mandya-01
2	12	EPROM Progammer:- To programme all type of EPROMS,FLASH MEMORY,PROM NOVRAM, .highspeed programming,chip identification, SECURITY FEATURES:- multivoltage verification, interfacing facility, Socket-48pin high quality pin driver universal type.	EAT-03	14 Nos.	32000	448000	Tiptur-02, Chitradurga-02, Gowribidnur-02, Puttur-02, Nalathwad-02, Bagalkot-02, Mandya-02
3	72	IC Tester - Suitable for testing Digital ICs & Linear Ics with remotly power controlled -Siemens or equivalent	ECAT-05	6 Nos.	77200	463200	Malavalli-2,Shimoga-2, gurmitkal-2
4	74	Signal Generator sine and square 1 hz-10 M.hz.with Microcontroller based Plasma device and remoetly controlled-Standard make	ECBT-03	12 Nos.	39780	477360	Malavalli-4,Shimoga-4, gurmitkal-4
5	58	Signal generator- Different wave shapes with four digit LED/LCD display ,Frequency range 0.1 Hz to 5 MHz 0.5 %Correction.,Amplitute, 30V(p-p), Upto 1KOhm, With DC offset with remote controlled.- Hameg/APLAB Make or Equivalent	ECAT-05	6 Nos.	29200	175200	Malavalli-2,Shimoga-2, gurmitkal-2

6		Soldering iron: soldring iron station comprising of isolating transformer 200-240 volts, soldering iron & parking stand, the iron is equiped with 3 core connecting lead 50W with all standard accessories industrial type, reputed company make	EBT-02,03	21 Nos	15000	315000	Chitradurga-21
7	6,6,N,6	AM/FM signal generator :-10mhz micro controller based modulation function-pulse generator, with internal modulation function:-line,square,traiangular,ramp&pulse modulation:-DSB standared, DSB balance,FM,ASK,FSK,PWM. Make:-THE SYSTEM SHOULD BE CONTROOLED REMOTLY	EAT-01,01,01,01	8 Nos	28000	224000	Tiptur-2,Hadagali-2,Mandya-2,Puttur-2
8	78,2	LCR meter , testing probes with digital display read out. HAMEG make or equivalent.	ECBT-03,EBT-05	28 Nos.	11628	325584	Malavalli-8,Shimoga-8,gurmitkal-8, TIP-04
9	179,160	Function generators 0.1 Hz to 100KHz micro controller based with alpha numerical LCD display, sine square,traingle and pulse. The system should be controlled remotely	EBT-04,03	9 NOS	12025	108225.00	GWR-4,5
Rupees Thirty one lakhs sixty thousand four hundred and ninety three only						3160493	

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Joint Director(Trg)
for Commissioner
Dept Of Employment & Training

NS-PKG-36**LIST OF TOOLS & EQUIPMENTS TO BE PROCURED UNDER SHOPPING FOR PROJECT I.T.I's**

SL. NO.	DGET SL. NO.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET	Estimated Cost Per Unit	TOTAL Estimated Cost	Consignee Govt I.T.I
1	7,31,4,3,7	Oscilloscope: 20 MHz with probes dual trace/ dual channel high sensitive oscilloscope. Bandwidth: DC - 20MHz, Rise time: 5.8 nano sec. Deflection coefficient: 12 calibrated steps: 5mv - 20v/div, Accuracy: $\pm 3\%$, I/p impedance: 1Mohm, I/P voltage: Max 500V(DC/AC peak), time coefficient: 23 calibrated steps 50 ns/div to 1sec/div, and facility for component testing, it should have other standard and latest controls, display: CRT display, supply voltage: 220 - 240V with all standard accessories Scientek / Phillips / HP make or equivalent. the system should be remotely controlled.	EBT-03 EBT-II,5,EAT-1,EBT-5,3	33 NOS	52700	1739100	Honnagara-1, malavalli-4, shimoga-04, gurmitkal-04, mandya-06,02,04,04,02, Hadagali-04
2	5	Oscilloscope dual trace storage:- Analog/digital 100MHz band width, storage oscilloscope dual channel, DC-30MHz, 2m volts time base 20n sec to 0.2 secs variable hold off 10:1 * 10 magnification. two-in-one operation normal mode. Should have built-in remotely power operating device Diff mode FIP's 4500v max digital storage max surplus 20 MS/s should have a waveform process software. should have component testing facility and should be supplied with instruction manual and attenuation probes operating voltage 220-240v AC/50Hz. the above system should be remotely controlled.	EAT-01	14 Nos.	95445	1336230	Tiptur-02, Chitradurga-02, Gowribidnur-02, Puttur-02, Nalathwad-02, Bagalkot-02, Mandya-02
Rupees Thirty lakhs seventy five thousand three hundred and thirty only						3075330	

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Dept Of Employment & Training

NS-PKG-37

LIST OF TOOLS & EQUIPMENTS TO BE PROCURED UNDER SHOPPING FOR PROJECT I.T.I's

SL. NO.	DGET SL. NO.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET	Estimated Cost Per Unit	TOTAL Estimated Cost	Consignee Govt I.T.I
1	14 ,8	C.R.O :- 50 MHz :- dual trace/ dual channel high sensitive oscilloscope.Bandwidth: DC - 50MHz, Rise time: 5.8 nano sec.Deflection coefficient: 12 calibrated steps: 5mv - 20v/div, Accuracy: $\pm 3\%$, I/p impedance: 1Mohm, I/P voltage: Max 2500V(DC/AC peak), time coefficient: 23 calibrated steps 50 ns/div to 1sec/div, and facility for component testing,it should have other standard and latest controls, display: CRT display, supply voltage:220 - 240v with remotely controlled system.	EAT-02 EBT-03	28 Nos.	65500	1834000	Tiptur-04, Chitradurga-04, Gowribidnur-04, Puttur-04, Nalathwad-04, Bagalkot-04, Mandya-04,
2	76	CRO dual trace/double beam 25 Mhz, with probes dual trace/ dual channel high sensitive oscilloscope.Bandwidth: DC - 20MHz, Rise time: 5.8 nano sec.Deflection coefficient: 12 calibrated steps: 5mv - 20v/div, Accuracy: $\pm 3\%$, I/p impedance: 1Mohm, I/P voltage: Max 500V(DC/AC peak), time coefficient: 23 calibrated steps 50 ns/div to 1sec/div, and facility for component testing,it should have other standard and latest controls, display: CRT display, supply voltage: 220 - 240V with all standard accessories - Scientek / Phillips / HP make or equivalent. the system should be remotely controlled.	ECBT-03	6 Nos.	38250	229500	Malavalli-02, shimoga-02, gurmitkal-02
3	62,N,8,19, 20	Regulated Power supplies 0-30 volts/2A I/P voltage-230V 50hz , Line regulation= $\pm 0.05\%$, ± 3 mv for line voltage variation of $\pm 10\%$ Load regulation: $\pm 0.05\%$, ± 3 mv from load to full load microcontrolled alpha numeric display Ripple: 2mv Rms Protection: short circuit & over load protected o/p with micro controller based touch sensitive device for increment and decrement of voltage and current and remote control facility - reputed company make-Standard Make	ECBT-03,EAT-03,02,03,03	44 Nos.	8407	369908	Mandya-2, Tiptur-2, Bagalkote-2, Nalathwad-8, Puttur-4, Malavalli-08, shimoga-08, gurmitkal-08

4	17	Colour T.V LCD display 26" latest technology reputed company make.	EAT-01	14 Nos.	48550	679700	Tiptur-02, Chitradurga-02, Gowribidnur-02, Puttur-02, Nalathwad-02, Bagalkot-02, Mandya-02
Rupees Thirty one lakhs thirteen thousand one hundred and eight only						3113108	

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Dept Of Employment & Training

NS-PKG-38

LIST OF TOOLS & EQUIPMENTS TO BE PROCURED UNDER SHOPPING FOR PROJECT I.T.I's

SL. NO.	DGET SL. NO.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET	Estimated Cost Per Unit	TOTAL Estimated Cost	Consignee Govt I.T.I
1	31,30,30	DC BRUSHLESS MOTOR WITH THE SUITABLE DRIVE AND CONTROLLER OF RATING 1 Nm	EAT-02,2	09 Nos.	70000	630000	Haliyala-1,Hadagali-1, Tiptur-01, Chitradurga-01, Gowribidnur-01, Puttur-01, Nalathwad-01, Bagalkot-01, Mandya-01
2	18	DC & AC Meter 0-1amps, Analog and Digital - reputed company make	EBT-02	2 Nos. Each.	8250	16500	Tiptur
3	16	DC & AC Meter 0-1milli amps, Analog and Digital - reputed company make	EBT-02	2 Nos. Each.	8250	16500	Tiptur
4	15	DC & AC Meter 0-500micro amps, Analog and Digital - reputed company make	EBT-02	2 Nos. Each.	8250	16500	Tiptur
5	17	DC & AC Meter 0-500milli amps, Analog and Digital - reputed company make	EBT-02	2 Nos. Each.	8250	16500	Tiptur
6	14	DC & AC Meter 0-50micro amps, Analog and Digital - reputed company make	EBT-02	2 Nos. Each.	8250	16500	Tiptur
7	39,18,18,18,N,18	Discharge tester:- high rate discharge tests range:-	EAT-02,02,02,02,02,02	12 NOS	12,400.00	148800	Bagalkote-2,Haliyala-2,Hadagali-2,Tiptur-2,Mandya-2,Puttur-2
8	11,11	Earth Megger 500V, 100m ohms with metal body	EAT-02,02	3 Nos.	8000	24000	Tiptur-1,Puttur-2
9	7,7,7,7,7,7	Ellectric bell:-operating voltage 230 volts AC	EBT-02,02,02,02,02,02,02	48 NOS	550	26400	Hadagali-8,Madikeri-8,8,Mandya-8,Puttur-8,Tiptur-8,
10		Fan (Bracket Fan 40 W)	EBT-06	02 Nos	3500.00	7000	Haliyal
11		Fan (Ceiling fan 40 W, 1400 mm, 130 V)	EBT-03,04	05 Nos	1800.00	9000	Haliyal
12	228,22,22	SINGLE PHASE POWER FACTOR METER PORTEBLE TYPE ANALOG 5AMPS/300 VOLTS	EBT-05,05,05,	12 NOS	6000	72000	Gowribidnur-4,Puttur-4,Tiptur-4
13	60	Ammerter MI type, Rectangular shape, flush mounting, size 106x84mm, multi range 0-5-10A -IMP make or equivalent	ECAT-01	24 Nos.	6450	154800	Malavalli-08, shimoga-08, gurmitkal-08

14	86	Ammeter MI type , Portable AC multi range 0-5-10A-AE or equivalent	ECBT-02	48 Nos.	3570	171360	Malavalli-16, shimoga-16, gurmitkal-16
15	92	Testing machine for calibration & testing of electrical starter, relay, contractor, solenoid valve. LP, HP, Oil pressure cut out.	RACBT-6	1 No.	96400	96400	BIDAR
16	30	Transformer singul phase 500ma/250/120	FBT-06	4 NOS	1200	4800	KOOKNUR
17	32	THREE PHASE 415V INPUT AND VARIOUS TAPPINGS AT THE OUTPUT WITH 0-380-400-420, TRANSFORM 1 KVA	EAT-02	02 Nos.	20000.00	40000	Puttur

18	13,13,13	Tranformer: 500VA, 230/180V, 220V, 240V, 260V, 280V tappings in secondary side	EBT- 02,02,02	12 NOS	2500	30000	Madikeri-4,Puttur-4,Tiptur-4
19	22,N ,136,22	Transformer 0-12V, 6-0-6V, 1A	EBT- 02,02,02,0 2	16 NOS	1450	23200	Bgalkote-4,Nalatwad- 4,Gowribidnur-4,HADAGALI-4
20	127,13,22, 13	Transformer 500 VA	EBT- 02,02,02,0 2	16 NOS	3200	51200	Gowribudnur-4,Hadagali- 4,Nalatwad-4,Bagalkote-4
21		Transformer: 500VA, 230/180V, 220V, 240V, 260V, 280V tappings in secondary side	EBT-02	4 Nos.	2,750	11000	Chitradurga
22	22	Transformers Secondary voltages 6-0-6 of 1 amps rating	EBT-02	2 No.	500.00	1000	Puttur
23	22	Transformers: Secondary voltages 12-0-12, of 1 amps rating	EBT-02	2 No.	600.00	1200	Puttur
24	22,N,22	Transformers: Secondary voltages 30V, 6-0-6,12-0-12, 15-0-15 of 5 amps rating	EBT- 02,02,02	8 NOS	2298	18384	Madikeri-2,chitradurga - 2,Tiptur-2
25	25	Watt meter 1 KW Analog type, reputed company make.	EBT-05	2 Nos	7000.00	28000	Puttur-04
26	10,10,10	Watt meter 10A. reputed company make.	EAT- 02,02,02	3 Nos.	6900	20700	Hadagali-1,Haliyala-1,Tiptur-1
27	25	Watt meter 1 KW Digital reputed company make.	EBT-05	2 Nos	7000.00	14000	Puttur
28	8	Wheat stone bridge complete with galvanometer and battery - with manuals	EBT-05	2 Nos.	15000.00	30000	Puttur
29	32	SINGLE PHASE 230V INPUT AND VARIOUS TAPPINGS AT THE OuTPUT WITH 48v, 110v, 220v, TRANSFORMER 1 KVA	EAT-02	02Nos.	9600.00	19200	Puttur
30	1,24,24	Single phase energy meter: digital type, reputed company make.	EBT- 05,05,05	12 NOS	5000	60000	Nalatwad-4,Puttur-4,Tiptur-4
31	10,10	Single Phase Watt meter:- Digital type, reputed company make, 0-15 Amps.	EAT- 02,02	2 NOS	8000.00	16000	Puttur-1,Tiptur-1
32	32,33	Star Delta starter (contact type 8 points)	FBT-06,06	3Nos	5000	15000	Kookanur-1,BTCentre-2
33	232,26,26, N,26	Tacho Generator AC & DC Digital type	EBT- 05,05,05,0	20 NOS	18500	370000	Gowribidnur-4,Mandya- 4,Puttur-4,chitradurga-4,Tiptur
34	96	Technometer digital, multirange 0 rmp to 3000 rmp. Portable small size in leather case.	RACAT- 02	2 Nos	18500	37000	KARWAR

35	1	Trainee tool kit:- it consist of following accessories .a) combination player 160mm b)diagnal cutter 160mm c)nose player d)wire stripper 100mm e)cablr cutter160mm f)slip joint player 1 g)junior hacksaw h)ellectrician knife heavy duty blade i)adjustable spanner j)screw driver set of 3 k)soldring iron 25watts/ 230volts make soldran bar pholips l)metalic desoldring pump m)neonglow tester 100mm n)stainless steeltweaser 100mm o)needle file set p)scalpels conmsisting of corben steel blade q)digital multi meter 3 ½ digit .allthe above tools and meters should be kept in a robust tool case.	EAT-01,03	128 sets	7100	908800	,Tiptur-16, Chitradurga-16, Gowribidnur-16, Puttur-16, 16, Nalathwad-16, Bagalkot-16, Mandya-16,
Rupees thirty one lakhs twenty one thousand seven hundred and forty four only						3121744	

Draft approved by the Commissioner)

Joint Director(Trg)
for Commissioner
Dept Of Employment & Training

NS-PKG-39

LIST OF TOOLS & EQUIPMENTS TO BE PROCURED UNDER SHOPPING FOR PROJECT I.T.I's

SL. NO.	DGET SL. NO.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET	Estimated Cost Per Unit	TOTAL Estimated Cost	Consignee Govt I.T.I
1	79,71,98,98,98	Transistor tester- for testing NPN/PNP,FET's, MOS FET's, their working condition and characteristics, in different configurations with digital display readout..- Siemen's or equivalent make.	ECBT-03 EAT-05,RACA T-01,02,03	35 Nos.	61812	2163420	Karwar-10,Bidar-5, Malavalli-2, shimoga-2,gurmitkal-2Tiptur-02, Chitradurga-02, Gowribidnur-02, Puttur-02, Nalathwad-02, Bagalkot-02, Mandya-02
2	19	0 - 12V DC regulated power supply 5Amps with digital display with shortcircuit protection and over load protection - reputed co. Make.	EBT-03	4 Nos.	6250.00	25000	Puttur
3	21,169	0-12 V DC ,2 Amp power supply, I/P voltage-230v-50hz Line regulation=005%, $\pm 3\text{mv}$ for line voltage variation of $\pm 10\%$ Load regulation: $\pm 005\%$, $\pm 3\text{mv}$ from load to full load microntrolled alha numeric display Ripple: 2mv Rms Protection: short circuit & over load protected o/p with micro controller based touch sensitive device for increment and decrement of voltage and current and remote control facility - reputed company make	EBT-02,03	8nos	7500	60000	Hadagali-4 Gowribidnur-4
4	5,175,5	5V/2A DC Power supply I/P voltage-230v-50hz , Line regulation=005%, $\pm 3\text{mv}$ for line voltage variation of $\pm 10\%$ Load regulation: $\pm 005\%$, $\pm 3\text{mv}$ from load to full load microntrolled alha numeric display Ripple: 2mv Rms Protection: short circuit & over load protected o/p	EBT-04,04,BB BT-04	24 nos	4500	108000	Tiptur-8, Gowribidnur-8, Mandya-8.
5	35,35	D.C power Supply 0v - 110 v /5A with microcontroller based alpha numeric display and microcontrolled touch senitive system should be controlled remotely.	FBT-06,06	3 NOS	12000	36000	Devdurga-2,Nanjangud-1
6	N,381,,27	Barcode reader:- small & light weight 1 D laser bar code scanning width leanear RSS support, wire less networking based on IEEE 802 communication serial, USB connectivity for MS windows soft ware. Powerd with rechargeble lithium iron battery.	EAT-03,03,03	3 NOS	48330	144990	chitradurga-1,Gowribidnur-1,Puttur-03
7	13	Audio frequency generator: 10 -100 KHZ with digital display,sine distorton0.01%,with digital display. Scientek / Phillips / HP make	EBT-03	3 Nos.	5500	27500	Tiptur

8	156,176,134,20,20,20,6,6,6,6	BREAD BOARD: for connecting various components for testing ckts,should have DCpower supply of 0-15v(should have +, -, &Gnd points.)	EBT-03,04,02,02,02,02,03,04,04,03	80 Nos.	2500	200000	Gowribidnur-08,08,08, Hadagali-08,Puttur-08,08,08,,Tiptur-08,08,08
9	17,16	Colour T.V:- Flat CRT,with remote with latest technology reputed company make.	EAT-01,01	3 Nos.	20000	60000	Puttur-1,Tiptur-2
Rupees Twenty eight lakhs twenty four thousand nine hundred and ten only						2824910	

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Joint Director(Trg)
for Commissioner
Dept Of Employment & Training

NS-PKG-40

LIST OF TOOLS & EQUIPMENTS TO BE PROCURED UNDER SHOPPING FOR PROJECT I.T.I's

SL. NO.	DGET SL. NO.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET	Estimated Cost Per Unit	TOTAL Estimated Cost	Consignee Govt I.T.I
1	16,16,17,18	Artwork film maker	EBT-04,04,04,04,01	10 NOS	165000	1650000	Hadagali-2,Madikeri-2,Nalatwad-2,Puttur-2,chiradurga-2,
2	N,19,19,19,19	Art work table	EBT-4,BBBT-04,EBT-04,04,04	11 Nos	22000	242000	chitradurga-2,Mandya-4,Puttur-2,Tiptur-02,Bagalkote-01
3	12,13,19,19	DUAL DC Power supply:- 0-30v,5A, I/P voltage-230v-50hz , Line regulation=005%, \pm 3mv for line voltage variation of \pm 10% Load regulation: \pm 005%, \pm 3mv from load to full load microntrolled alha numeric display Ripple: 2mv Rms Protection: short circuit & over load protected o/p with micro controller based touch sensitive device for increment and decrement of voltage and current and remote control facility - reputed company make	EAT-01,02,03, EBT-03	17 NOS	16500	280500	Tiptur-4,1,8,4
4	13	Universalr/PAL Progamme:- To programme all type of EPROMS,FLASH MEMORY,PROM NOVRAM, MICROCONTROLLER, PLD, PAL, AND OTHER STANDARSLOGICS. ighspeed progamming,chip identification, SECURITY FETURES:- multivoltage verification, multiple intefacing facility. Socket-48pin high quality pin driver universal type.	EAT-03	14 Nos.	21400	299600	Tiptur-02, Chitradurga-02, Gowribidnur-02, Puttur-02, Nalathwad-02, Bagalkot-02, Mandya-02
5	13,N,155,N	Dual power supply :- I/P volt = 230v-50 hz Dual o/p variable =0-30v at 2A Line regulation = 0.05%, \pm 3mv for line voltage variation of \pm 10% Load regulation= 0.05% \pm 3m from no load to full load. Metering = Digital Ripple= 2mv Protect = S.C & over load protection	EAT-02,02,EBT-03,EAT-02	08 No.	17750	142000	Puttur-1,chitradurga-1,Gowrbidnur-5,mandya-1

6	22,20,N	IC based power supply 5V,12V,1 Amp Line regulation=0.05%, \pm 3mv for line voltage variation of \pm 10%. Load regulation:- \pm 0.05%, \pm 3mv from no load to full load. Metering:- microcontroller based Plasma.Ripple:- 2mv Rms. Protection:- short circute & over load protected o/p with remote controlled system	EAT-3,03,03	24 NOS	8000	192000	Nalatwad-8,Tiptur-8,Mandya-8
7	20	IC Based Power Supply 12V, 1A Line regulation=0.05%, \pm 3mv for line voltage variation of \pm 10%. Load regulation:- \pm 0.05%, \pm 3mv from no load to full load. Metering:- microcontroller based Plasma.Ripple:- 2mv Rms. Protection:- short circute & over load protected o/p with remote controlled system	EAT-03	4 Nos	8000.00	32000	PUTTUR
8	20	IC Based Power Supply 5V, 1A Line regulation=0.05%, \pm 3mv for line voltage variation of \pm 10%. Load regulation:- \pm 0.05%, \pm 3mv from no load to full load. Metering:- microcontroller based Plasma.Ripple:- 2mv Rms. Protection:- short circute & over load protected o/p with remote controlled system	EAT-03	4 Nos	7500.00	30000	PUTTUR
		Total Rs. Twenty eight Lakhs sixty eight thousand and one hundred only				2868100	

Draft approved by the Commissioner)

Joint Director(Trg)
for Commissioner
Dept Of Employment & Training

NS-PKG-41

LIST OF TOOLS & EQUIPMENTS TO BE PROCURED UNDER SHOPPING FOR PROJECT I.T.I's

SL. NO.	DGET SL. NO.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET	Estimated Cost Per Unit	TOTAL Estimated Cost	Consignee Govt I.T.I
1	52,348,31,54,N,31,32,N,31,31,28	Universal motor 230V,50 cycles,Micro controller based Alpha numeric LCD display MPB controller with VU and Mechanical loading arrangement	EAT-02,02,02,02,02,02,02,02,02,02,EBT-06	21 NOS	45000	945000	Bagalkote-2,Gowribidnur-2,Hadagali-2,Nalatwad-2,Mandya-1,Haliyala-2,Madikeri-2,chitrdurga-2,Puttur-2,Tiptur-2,kookanur-2
2	126,12,12,12,13,13	Variable resistance /potentiometer	EBT-02,02,02,02,02,ABT-03	24 NOS	400	9600	Gowribidnur-4,Hadagali-4,Puttur-4,Tiptur-4,Nalatwad-4,Honnavaara-4
3	12	Variable resistance/Potentiometers 100Kohm	EBT-02	8 Nos	400	3200	Bagalkot
4	18,18	VCD player with amplfier, for playing VCD - R/RW, mp3,-mp4 format with remove	EAT-01,01	8 NOS	4000	32000	Puttur-4,Tiptur-4
5	21,21,21,N,21,21,21,23	Volt meter Dinamo meter Type 0-50 V - Reputed company make	EBT-05,05,05,05,05,05,05	28 NOS	6500	182000	Madikeri-4,Puttur-4,Hadagali-4,chitradurga-4,Tiptur-4,Bagalkote-4,Nalatwad-4
6	31,31,31,31,N	VTVM (solid state)reputed company make.	EBT-05,05,05,05,05,05	12 NOS	14500	174000	Hadagali-2,Madikeri-2 Puttur-2,Tiptur-2,chitradurga-4
7	13,14,13,12,13	Washing machine:- full automatic, fuzzy logic controllrd temprature,and imbalance detection,self-diagnostics and operates suds free system.based,with latest technology ,10 kg front loadi ng.(reputed company make).	EAT-01,01,01,01,01,01	5 NOS	43500	217500	Hadagali-1,Nalatwad-1
8	13	Drill machine pillar 0-12mm cap.-Addision Make or equivalent	ECBT-01	2 Nos.	39200	235200	Malavalli-02, shimoga-02, gurnitkal-02
9	27	Marking gauge 6"	EBT-01	119 Nos	1450	172550	Tiptur-17, Chitradurga-17, Gowribidnur-17, Puttur-17, Nalathwad-17, Bagalkot-17, Mandya-17
10	5	Marking table 90x90x90 cm	EBT-01	28 Nos.	11500	322000	Tiptur-04, Chitradurga-04, Gowribidnur-04, Puttur-04, Nalathwad-04, Bagalkot-04, Mandya-04

11	87	Voltmeter Portable AC, multi range, 0-150-300-AE or equivalent	ECBT-02	48 Nos.	3570	171360	Malavalli-16, shimoga-16, gurmitkal-16
12	57,85	Watt meter single phase, single element(Flush mounting type) multi Range: 0-750-1500 watt rectangular shape-IMP make or equivalent	ECAT-01 ECBT-02	72 Nos.	6500	468000	Malavalli-24, shimoga-24, gurmitkal-24
13	32	SINGLE PHASE 230V INPUT AND VARIOUS TAPPINGS AT THE OUTPUT WITH 48V, 110V, 220V, TRANSFORMER 1KVA,THREE PHASE 415V INPUT AND VARIOUS TAPPINGS AT THE OUTPUT WITH 0-380-400-420, TRANSFORM 1 Kva.	EAT-02	2 Nos.	14500	29000	Tiptu-02
		Twenty nine lakhs sixty one thousand four hundred and ten only				2961410	

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Joint Director(Trg)
for Commissioner
Dept Of Employment & Training

NS-PKG-42

LIST OF TOOLS & EQUIPMENTS TO BE PROCURED UNDER SHOPPING FOR PROJECT I.T.I's

SL. NO.	DGET SL. NO.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET	Estimated Cost Per Unit	TOTAL Estimated Cost	Consignee Govt I.T.I
1		8031 based Microcontroller Trainer Kit (8bit)	EAT-03	4 nos	28500	114000	Mandya
2	4,4,N,4,4,	AM radio reciver kit:- mw/sw/fw radio receiver training kit consisting following features a) test points for measurement of voltage, current, wave forms b) pcb should have printed with block diagrames, componet values and wave forms pattrens and voltage levels at the point.c) facility to disconnect/ isolate stages for fauit creations and analysis/rectification d) each stage should have superate PCB's the above system should be mounted on a good looking cabinet.	N,EAT-01,01,01,01	20 nos	7000	140000	Mandya-4,Madikeri-4,chitraduga-4,Tiptur-4,Puttur-4
3	3,3,N,3,3,N	AM/FM radio receiver :- The radio receiver should be stereo type and should consist of MW,SW bands.	EAT-01,01,01,01,N,01	24 nos	1430	34320	Tiptur-4,Madikeri-4,chitradurga-4,Puttur-4,Mandya-4, 4
4	10,10,16,16	Battary charger: 12/24V,DC 10 Amps with microcontroller based touch sensitive and remotely controlled	EBT-02,02,EAT-02,02	11 NOS	8000	88000	Tiptur-4 Hadagali-4,Tiptur-2,Haliyala-1
5	12,285	DC Power Supply 0-30V, 1A , I/P voltage-230v-50hz , Line regulation=005%, ± 3 mv for line voltage variation of $\pm 10\%$ Load regulation: $\pm 005\%$, ± 3 mv from load to full load microntrrolled alha numeric display Ripple: 2mv Rms Protection: short circuit & over load protected o/p with micro controller based touch sensitive device for increment and decrement of voltage and current and remote control facility - reputed company make	EAT-01,01	8 NOS	8100	64800	Hadagali-4,Gowribidnur-4
6	12	DC-power supply :- 0-30V,2A, I/P voltage-230v-50hz , Line regulation=005%, ± 3 mv for line voltage variation of $\pm 10\%$ Load regulation: $\pm 005\%$, ± 3 mv from load to full load microntrrolled alha numeric display Ripple: 2mv Rms Protection: short circuit & over load protected o/p with micro controller based touch sensitive device for increment and decrement of voltage and current and remote control facility - reputed company make	EAT-01	4 Nos.	8100.00	32400	Puttur

7	19	DVD Player & recorder blueray/dolby-digital-dts for playing VCD Read R-RW, MP3-MP4, DVD-RW supported file format mpeg2 MPEG\$.o/p composite ,s-video--etc with 5.1 speaker system 1000watts PMPO.	EAT-01	2Nos.	3000.00	6000	Puttur
8	19	DVD players latest with USB ,SD card ports sony or philips or ONIDA	EAT-01	4	4500	18000	Tiptur
9	11,11	Frequency counters with alpha numerical Plasma Display upto 20 Mhz, microcontrolled touch sensitive system, to be controlled remotely.	EAT-01,01	4 NOS	6250	25000	Tiptur-2,Puttur-2
10	81,81,81,34,23,27,20,9	Multimeter Digital type 3,1/2 display 0-600 V DC/AC DC 10 amps 2M ohm testing for transistors with beeper.	RACAT-1,2,3,RACBT-4,3,5,6,EBT-05,05	53 NOS	8000	424000	Bidar-19,Bagalkote-17,chitrdurga-17
11	23,23,23	Multimeter 0-5, 100, 200, 500 mill amperes 0-100-1000, 10000 ohms 0-150, 300,600V AC/DC	FBT-06,06,06	6 NOS	7000	42000	Nanjangud -2,BTCentre-2,Devdurga-2
12	277,4,N	mw/sw/fw radio receiver training kit consisting following features a) test points for measurement of voltage, current, wave forms b) pcb should have printed with block diagrams, component values and wave forms patterns and voltage levels at the point.c) facility to disconnect/ isolate stages for fault creations and analysis/rectification d) each stage should have separate PCB's the above system should be mounted on a good looking cabinet.	EAT - 01,01,01	12 NOS	9800	117600	Gowribidnur-4,Hadagali-4,Mandya-4
13	325	Power supply 0-30V,5A , I/P voltage-230v-50hz , Line regulation=0.05%, $\pm 3\text{mv}$ for line voltage variation of $\pm 10\%$ Load regulation: $\pm 0.05\%$, $\pm 3\text{mv}$ from load to full load microcontrolled alpha numeric display Ripple: 2mv Rms Protection: short circuit & over load protected o/p with micro controller based touch sensitive device for increment and decrement of voltage and current and remote control facility - reputed company make	EAT-02	2 NOS	19700	39400	Gowribidanur
14	5	Power supply trainer: having facility of IC regulators using 78,79 and 317 series, and should have all test points, circuit diagram, and block diagram for measurement of voltage and waveforms with digital display with all short circuit protections and high	EBT-03	5 Nos.	10000.00	50000	Puttur
15	12	Pulse generator 20MHZ with digital display standard make with reputed company,	EBT-03	5	7600	38000	Nalatwad

16	21,21,21	SMPS Trainee 5V/12V: Transistor/Mosfet based, and it should have block diagram and circuit diagram on the PCB, and it should have sufficient test points to measure wave forms and voltage, and should be supplied with instructional manual.	EAT-03,03,03	6 Nos.	10000.00	60000	Puttur-2,Tiptur-2,Bagalkote-2
17	8,8	A.F. power meter:- Frequency range,0-100KHZ, Fullscale range:-2Watt,digital display.Reputed company make.	EAT-01,01	04 Nos.	9000.00	36000	Puttur-2,Tiptur-02
18	9,9	R.F. power meter:- Frequency range,0-2GHZFullscale range:-2Watt,digital display.Reputed company make.	EAT-01,01	04 Nos.	8000.00	64000	Puttur-02,Tiptur-2 Bagalkote-2,Gowribidnur-2
19	233,27,27,27,27	FET Millivoltmeter	EBT-05,05,05,05,05	20 NOS	12900	258000	Gowribidnur-4,Hadagali-4,Madikeri-4,Puttur-4,Tiptur-4.
Rupees sixteen lakhs fifty one thousand five hundred and twenty only						1651520	

Draft approved by the Commissioner)

Joint Director(Trg)
for Commissioner
Dept Of Employment & Training

NS-PKG-43

LIST OF TOOLS & EQUIPMENTS TO BE PROCURED UNDER SHOPPING FOR PROJECT I.T.I's

SL. NO.	DGET SL. NO.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET	Estimated Cost Per Unit	TOTAL Estimated Cost	Consignee Govt I.T.I
1	20	Auto Transformer, continuous variation single phase, enclosed type: 0-270V 8A,	EBT-03	2 NOS	4000	8000	tipturuttur
2	91	Four point relays	AAT-03	4 Nos	8100	32400	Honnavara
3	31	L.F oscilloscope with Attenuation probes	FBT-06	1 NOS	30000	30000	NANJANGUD
4	3	OHP/Epidiascope	EAT-03	6 NOS	56000	336000	tipturuttur
5	17	Soldering iron 25 Watt: with antistatic mat for soldering CMOS IC's - Reputed Co. Make.	EBT-03	4 Nos.	1000	4000	Puttur
6	N,66	Soldering iron 25W, 35W, 65W, 125W: reputed company make	EBT-01,01	12 NOS	3800	45600	chitradurga-2, tipturuttur-4
7	4,66,4,4	Soldring iron 65W : reputed company make	EAT-02,EBT-01,EAT-02,02	10 NOS	550	5500	bagalkotealkote-2,Puttur-6,tipturuttur-2
8	66	Soldring iron 125W: reputed company make	EBT-01	4 Nos.	600	2400	Puttur
9	66	Soldring iron 35W : reputed company make	EBT-01	4 Nos.	400	1600	Puttur
10	11,4,12,66,2	Soldring iron 25W : reputed company make	EBT-04,04,02,04,01,02,03	53 NOS	430	22790	bagalkote-8,Puttur-33,Nalatwad-12
11	346,29,29,51,29	3 Pt & 4 Pt starter	EAT-02,02,02,02,02,02	14 NOS	38000	532000	Gowribidnur-2,Hadagali-4,tipturuttur-2,Nalatwad-02,Haliyala -2
12	29,N	3POINT STARTER SUITABLE FOR CONTROL OF 5 HP DC MOTOR WITH REQUIRED METERING AND CONTROL SYSTEM	EAT-02,02	04Nos.	24800	99200	Puttur-2, chitradurga-2
13	8,8	Battery storage lead acid/Maintenance free 12 Volt 120 Ah EXIDE make	EBT-02,02	16NOS	32500	520000	Hadagali-8,tipturuttur-8
14	7,7,30,28,N,7,114	Clip on Meter – digital	EAT-02,02,02,02,02,02,RACAT-2	16 NOS	7500	120000	hadagali-2,tiptur-2,nalatwad-2,bagalkote-2,chitradugra-2,puttur-2.Bidar-4

15	1,N,1	Crimping tool to crimp different sizes of lugs make reputed company	EAT-02,02,02	12 NOS	11600	139200	BGK-4,chitradugra-4,puttur-4
16	15	Grinder Reputed company make.	EAT-01	1 Nos	15600	15600	Puttur
17	9,9,9	Hydrometer: for measuring specific gravity of battery electrolite	EBT-02,02,BB BT-02	12 NOS	790	9480	hadagali-4,puttur-4,mandya-4
18	17,17	LCR bridge reputed company make	EAT-03,03	4 NOS	14500	58000	bagalkote-2, hadagali-2
19	4,8,8,8,4,1 6,4,16,7,1 7,,9,4,8,N, N,N,4,4,16 ,16,8,16	Logic Clip: for CMOS and TTL IC's of 14 and 16 pin reputed company make.	EBT-04,EAT-03,03,03, EBT-04,06,BB BT-04,06,EBT 04,06,EAT 03,EBT-04,EAT-03,03EBT-04,,06,04, 04,06,06E AT-03,EBT-06	51 Nos	1200	61200	bagalkote-1,4,haliyala-4,hadagali-4,1,2,mandya-4,nalatwad-1,2,4,tiptur-1,4,mandya-4,chitradugra-1,2,haliyala-1,puttur-1,haliyala-2,tiptur-2,puttur-4,2
20	3,15,3,15, 3,15,3,15	Logic probe: for TTL & cm OS 1c's reputed company make	EBT-04,06,BB BT-04,06,EBT 04,06,BB BT-04,06	13 NOS	1200	15600	hadagali-1,2,mandya-4,tiptur-1,2,mandya-3
21	9,9,9,10,9, N,9,9	Logic Tester	EAT-03,03,03,0 3,03,03,03 ,03	32NOS	2000	64000	bagalkote-4,haliyala-4,hadagali-4,nalatwad-4,tiptur-4,mandya-4,madikeri-4,puttur-4
22	10,10,10	Maxwell bridge setup, reputed comapany make	EBT-05,05,BB BT-05	9 NOS	14500	130500	hadagali-2,tiptur-2,mandya-5

23	65,65,65,98	Megger 0-1000 M ohm & 2.5 KV to 5KV: reputed company make	EBT-01,BBBT-01,EBT-01,01	16 Nos.	12800	204800	puttur-4,mandya-4,tiptur-4,gowribidnur-4
24	14	MI Ammeter 0-5 Amp Panel type - Reputed company make	EBT-05	4 NOS	900	3600	tiptur
25	15	MI Ammeter 0-1 Amp Boxl Type - Reputed company make	EBT-05	4 NOS	4000	16000	tiptur
26	13	MI Ammeter 0-1 Amp Panel Type - Reputed company make	EBT-05	4 NOS	900	3600	tiptur
27	16	MI Ammeter 0-10 Amp box type - Reputed company make	EBT-05	4 Nos.	1000	4000	Puttur
28	19,19	MI Volt meter 0-100 V box Type - Reputed company make	EBT-05,05	8 NOS	4350	34800	tiptur-4,bagalkote-4
29	20	MI Volt meter 0-50 V box Type - Reputed company make	EBT-05	4 NOS	4000	16000	tipturuttur
30	13	Micro wave oven:- 2 Cubic ft capacity/1100 watt/10 power level, preset option,cooling, defrost reheat, programmable, sensor cooling, child safety lock, stainless steel cabinet, reputed company make.	EAT-01	2 Nos (different make)	14000	28000	Puttur
31	20	Microwave oven	EAT-01	1 NOS	14000	14000	Nalatwad
32	15	Mixer /Grinder:- Having jucer option with three separate blades. Reputed company make.	EAT-01	2 Nos (different make)	4000	8000	tiptur
33	15	Mixer Having jucer option with three separate blades. Reputed company make.	EAT-01	1 Nos	4000	4000	Puttur
34	5,5,5,3,3,3	Neon Testers, 500v:-High quality main testing screwdriver suitable for use on 150-700 volts having neon indicter.Reputed company make	EAT-02,02,02, FBT-06,PMBT-03,RACB T-2	46 NOS	550	25300	bagalkote-2,hadagali-2,puttur-2,devdurga-17,KGF-6,Bidar-17
35	9,5,5,2,2,2,9,21,9	NeonTesters:- high quality main testing screw driver suitable for use on 230-300 volts having Neon indicator are sealed to prevent tampering, blade types are hardened & baked crome-vandium steel of length & size 100x3.5mm	EAT-02,EBT-02,03,04,05,06,EAT-02,EBT-01,EAT-02	150 NOS	140	21000	puttur-16,17,17,17,17,17,hadagali-16,puttur-17,bagalkote-16.

36	215,5,9,9,9,N	Resistance ratio bridge setup, reputed company make	EBT-05,05,05,05,05,05	12 NOS	11400	136800	gowribidnur-2,nalatwad-2,madikeri-2,puttur-2,BGK-2,chitradugra-2
37	99,33	R.L.C bridge reputed company make	RACAT-3,RACBT-5	6 NOS	39800	238800	Bidar-6
38	11	Rheostat variable values100 ohms,1k ohms,2k ohms,3kohms ,5k ohms,10k ohms,12kohms,15kohms,ALL2AMPS	EBT-02	8 NOS	12500	100000	tiptur
39	217,11,11,11	Shearing bridge setup reputed company make	EBT-05,05,05,05	8 NOS	14500	116000	gowribidnur-2,puttur-2,tiptur-2,bagalkote-2
Rupees Thirty two lakhs Twenty Seven Thousand Seven hundred Seventy only.						3227770	

Draft approved by the Commissioner)

Joint Director(Trg)
for Commissioner
Dept Of Employment & Training

NS-PKG-44**LIST OF TOOLS & EQUIPMENTS TO BE PROCURED UNDER SHOPPING FOR PROJECT I.T.I's**

SL. NO.	DGET SL. NO.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET	Estimated Cost Per Unit	TOTAL Estimated Cost	Consignee Govt I.T.I
1	2	On-Line UPS with isolation transformer suitable for Single Phase AC input and Singal Phase AC Output, Floor Mounted type, capacity 5 KVA Indicative , Back up time : 120 Minutes	P&M,FAB, RAC,EM, EN,AUTO	48 Nos	83000	3984000	ALL 24 COE ITI's Each 2 Nos
Total Rs. Thirty Nine Lakhs Eightt Four Thousand Only						3984000	

Draft approved by the Commissioner)

Joint Director(Trg)
for Commissioner
Dept Of Employment & Training

NS-PKG-45**LIST OF TOOLS & EQUIPMENTS TO BE PROCURED UNDER SHOPPING FOR PROJECT I.T.I's**

SL. NO.	DGET SL. NO.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET	Estimated Cost Per Unit	TOTAL Estimated Cost	Consignee Govt I.T.I
1		CAD/CAM Software compatible for siemens/Fanuc. Turning Module-8 licenses, Milling module-8 licenses (Cadem/Mastercam/Hypermill/Espirit)	P & M	4 Nos	1000000	4000000	KGF-01, Belgaum-01, Kanakapura-01, Holenarasipura-01
Total Rs. Forty Lakhs Only						4000000	

Draft approved by the Commissioner)

Joint Director(Trg)
for Commissioner
Dept Of Employment & Training

NS-FUR-PKG-01

LIST OF FURNITURES TO BE PROCURED UNDER SHOPPING FOR PROJECT I.T.I's

SI No	DGET SL NO.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET	Estimated Cost Per Unit	TOTAL Estimated Cost	Consignee Govt I.T.I
1	6,6,6,6,6,6,8,6,6,6,6,9,6,6,6,6,8,9,3,3,4,3,4,9,9,2,9,9,9,9,9,9,6,3,100,68,7,8,8,8,8,68,74,6,6,8,6,9,6,8,6,8,8,9,12,8	STEEL ALMIRAH : Size 78" H x 36"W x 19" D (including legs of 15.24cm) fitted with four sheves making five compartments with double door with three way locking device controlled by implacable six lever lock with non-interchangeable keys in duplicate. Longitudinal rib of 15.24 cm wide including bent to require shape should be provided and fixed to each door at its center. The entire body shall be made using 20G CRCA sheet & door shall be made out of 18G CRCA sheet. The Almirah shall be de-rusted primer coated and finished in two coats of synthetic paint as per indentors choice	EAT-1,2,3, EBT-1,2,3,4,5,6, EAT-3,1,2, FBT & FAT, EBT-1,2,3,4,5,6, EAT-1,2,3, EBT-6, EAT-1&2, EBT-2,3,4,5,6,EAT-1,2,3, EBT-6, EAT-1, BBBT-4,5,6, RACAT-1 & 2, PMBT-1,2,3,4,5,5, PMAT-01, ABT-4,5,6, AAT-1,2, FBT & FAT, ECBT-1,2,3, ECBT-1,2,4,5, EAT-1,3, BBBT-1 to 6, PMBT-1,2,3,4,5,5, PMAT-1, EBT-3,4,5,6, EBT-3,4,5,6, ECBT-1,2,3,4&5	188 Nos	10900	2049200	Bagalkote-20, Kookanur-6, Puttur-13, Mandya-4, Shimoga-10, Tiptur-20, Haliyal-2, Huvinahadagali-1, Karwar-5, Honnavara-5, Nanjangud-5, Malavalli-20, Gurumitkal-17, Madikere-15, Gowribidanur-12, Nalathwad-8. Bijapur-20 Davangere-5
2	1,66,66,83.	STEEL ALMIRAH WITH LOCKERS : Size 78" H x 36"W x 19" D (including legs of 15.24cm) fitted with a locker at the top and sheves below the locker with double door with three way locking device controlled by implacable six lever lock with non-interchangeable keys in duplicate. Longitudinal rib of 15.24 cm wide including bent to require shape should be provided and fixed to each door at its center. The entire body shall be made using 20G CRCA sheet & door shall be made out of 18G CRCA sheet. The Almirah shall be de-rusted primer coated and finished in two coats of synthetic paint as per indentors choice.	ECBT-1, EAT-1,5.	8Nos	11300	90400	Malavalli-3, Gurmitkal-5
Total rupees twenty One lakhs thirty nine thousand six hundred only						2139600	

LIST OF FURNITURES TO BE PROCURED UNDER SHOPPING FOR PROJECT I.T.I's

SI No	DGET SL NO.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET	Estimated Cost Per Unit	TOTAL Estimated Cost	Consignee Govt I.T.I
1	3,3,3,3,3,3,3,3,2,2,2,2,2,2,3,3,3,3,3,3,3,3,2,2,2,2,2,2,2,2,2,2,2	STEEL STOOL WITH LAMINATED TOP : Of size 15" x 15" at Top and 24" height. The top shall be made out of 19mm thick block board laminated with 1mm thick mica sheet. The frame shall be of MS square tubes 25mmx25mmx16G for verticals and 15mm dia MS round tube of 18G for horizontals.	RACAM-1,2,3, RACBT-2,4,5,6, PMAT-1,2,3, FBT-1 to 6, PMAT-1 to 3, PMBT-1 to 6, BBBT-1,2,5,6, RACAT-1,2,3, ABT-1,2,5,6, AAT-1,2,3, FBT & FAT, FBT-1,2,3,4,5,6 & FAT-2,4&5, PMBT-2,5,5, PMAT-1. ABT-1,2,6,	973Nos	1390	1352470	Bidar-170, Belgaum-51, BT Centre-50, KGF-136, Karwar-119, Honnavara-119, Nanjangud-137, Devarayasamudra-137, Kanakpura-68. Mangalore-72, Davangere-51
2	8,8,8,8,8,8,5,5,5,5,8,5,5,5,8,8,9,9,2,2,3,3,10,8,5,5,8,8,8,8,8,8,8,8,8,5,6,6,6,6,5,8,8,8,8,8,8,5,5,7,4,8,8	STEEL SLOTTED ANGLE RACK : Of size 6' H x 3' W x 15"D overall with four upright and five panels, the uprights shall be slotted angles of section 38x38x2mm. The panels should be of 20G fixed to the uprights by means of GI bolts of sizes 8mm x 16 mm by providing 16 nos standard gussets at corners.	RACAM-1,2,3, RACBT-1,2, PMAT-1,2,3, EAT-1,2,3, EBT-4,6, EAT-3,1,2, FBT-1 to 6, FBT & FAT, EAT-1,2,3, PMAT-1 to 3, PMBT-1 to 6, EBT-2,3,4,6, EAT-1,2,3, PMBT-5, EBT-3,5,6, BBBT-1,2,3,5,6, RACAT-1,2,3, ABT-1,2,3,5,6, AAT-1,2,3, FABT & FAT, FBT-1,2,3,4,5,6 & FAT-2,4&5, ECBT-1, ECBT-1,2,4,5, BBBT-1 to 6, EBT-5,6, EBT-3,5,6.	180Nos	4250	765000	Bidar-5, Belgaum-3, Bagalkote-13, BT Centre-16, Kookanur-2, Mandya-3, KGF-18, Tiptur-18, Holenarasipura-5, Haliyal-4, Karwar-14, Honnavara-16, Nanjangud-11, Devarayasamudra-5, Malavalli-8, Gurumitkal-10, Madikere-4, Kanakpura-12, Gowribidanur-2, Nalathwad-6. Davangere-5
Total Rupees twenty one lakhs seventeen thousand four hundred seventy only.						2117470	

Draft approved by the Commissioner)

Joint Director(Trg)
for Commissioner
Dept Of Employment & Training

LIST OF FURNITURES TO BE PROCURED UNDER SHOPPING FOR PROJECT I.T.I's

Joint Director(Trg)
for Commissioner
Dept Of Employment & Training

NS-FUR-PKG-04
LIST OF FURNITURES TO BE PROCURED UNDER SHOPPING FOR PROJECT I.T.I's

SI No	DGET SL NO.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET	Estimated Cost Per Unit	TOTAL Estimated Cost	Consignee Govt I.T.I
1	2,2,2,2,2,2,4, 2,5,2,2,2,2,2, 4,2,5,2,1,1,2, 2,2,2,2,2,73,1 04,3,4,4,4,4,7 3,78,89,2,2,4, 2,5,2,2,4,2,5.	REVOLVING STOOL: Of standard size. The chair shall have four legs made using 1" dia round MS tube of 18G. The top shall be made out of stainless steel plate of 20G fixed on MS flat frame. The chair shall have a sturdy screw rod system for height adjustment.	EAT-1,2,3, EBT-1,2,3,4,5,6, EAT-3,1,2, EBT-1,2,3,4,5,6, EBT-3, EAT-1,2,3, EBT-1,2,4,5,6, EBT-2,3,4,5,6, EBT-,3,5,6, ECBT-2, ECBT-2,4,5, EAT-1,3,5, EBT-2,3,4,5,6, EBT-2,3,4,5,6.	839Nos	1565	1313035	Bagalkote-151, Puttur-96, Mandya-144, Tiptur-80, Haliyal-48, Malavalli-64, Gurumitkal-96, Gowribidanur-80, Nalathwad-80.
2	11,102,70,76, 1	INSTRUCTOR TABLE-SMALL : Of size 1.22, L x 0.61m W x 0.75m H overall the top shall be made of particle board with 1mm thick decorative laminate, with rounded comers and tea wood beading all-round. The table shall have a steel box containing three drawers unit of size 43cm H x 35cm W x 56cm D made out of 20g MS sheets. The drawers shall have full width recess box type handle with single automatic locking device. The MS tubes used shall be either square or round with 16G, thickness. The table shall be de-rusted primer coated and finished in two coats of synthetic paint as per indentors choice.	EAT-1,2,3, ECBT-1, EAT-1,3, BBBT-1 to 6.	28Nos	7500	210000	Tiptur-3, Malavalli-3, Gurumitkal-2, Madikere-20.
3	3,3,3,3,3,3,10	INSTRUCTOR TABLE-BIG: Of overall size 5' L x 3' W x 30" H with three drawers on the right side with automatic locking device and a cupboard with a shelf on the left side side with square legs of section of 25mm x 25mm 16G. The top shall be of 20m thick width teakwood beading alround. The table shall be derusted, primer coated and painted with synthetic enamel paint as per indentors choice. All components shall be made out of MS sheet of 20G.	<u>EAT-1,2,3,3,1,2, EAT-1,2,3,</u>	12Nos	9000	108000	Bagalkote-6, Mandya-3. Davangere-1, Shivmogga-02

4	103,71,71,77,87,	STUDENT TABLE: Of overall size 2'X3'X30". Steel table with laminated top with one drawer and a cupboard. The frame shall be made out of 25mm square MS tube of 18G. The drawers unit shall be made out of 22 G CRCA sheet. The table top shall be made out of 18mm thick prelaminated block board with teak wood beading.	ECBT-2, EAT-1,3,5,	80Nos	4930	394400	Malavalli-32, Gurumitkal-48.
Total Rupees Twenty Lakhs twenty five thousand four hundred thirty five Only						2025435	

Draft approved by the Commissioner)

Joint Director(Trg)
for Commissioner
Dept Of Employment & Training

NS-FUR-PKG-05
LIST OF FURNITURES TO BE PROCURED UNDER SHOPPING FOR PROJECT I.T.I's

SI No	DGET SL NO.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET	Estimated Cost Per Unit	TOTAL Estimated Cost	Consignee Govt I.T.I
1	4,3,2	TOOL CABINET: Of overall size 78"H X 36W X 19" D.with double door. The entire cabinet shall be made using 20G CRCA sheet.	RACAM-2,3, RACBT-1,2,3,4,5,6, PMAT-1,2,3, FBT-1 to 6, PMAT-1 to 3, PMBT-1 to 6, BBBT-1,2,3,4, RACAT-1,2,3, ABT-1,2,3,4, AAT-1,3, FBT&FAT, FBT-1,2,3,4,5,6 & FAT-2,4&5, PMBT-2,3,4,5,5, PMAT 01,	120Nos	13000	1560000	Bidar-9, Belgaum-6, BT Centre-14, KGF-20, Karwar-14, Honnavara-14, Nanjangud-12, Devarayasamudra-12, Kanakpura-12. Davangre-7
2	8,6	SHOE RACK: Of standard dimension made out of 1/2" MS tubular structure with five shelves.	BBBT-5, ABT-6.	6Nos	1300	7800	Karwar-2, Honnavara-2, Davangere-2
Total Rupees fifteen lakhs sixty seven thousand eight hundred only						1567800	

Draft approved by the Commissioner)

Joint Director(Trg)
for Commissioner
Dept Of Employment & Training

NS-FUR-PKG-06
LIST OF FURNITURES TO BE PROCURED UNDER SHOPPING FOR PROJECT I.T.I's

SI No	DGET SL NO.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET	Estimated Cost Per Unit	TOTAL Estimated Cost	Consignee Govt I.T.I
1	5,5,5,5,5,5,5,7,7,7,7,9,7,7,7,5,5,5,7,7,10,5,5,5,5,6,7,7,7,7,7,5,5,5,3	TRAINEES LOCKERS : Industrial type locker cup board size Of 78"H x 36" W x 17" D with 18 doors having external locking arrangement for each compartment. Each door shall be provided with handle and name plate. The locker shall be made out of 20G x 22G CRCA Sheet.	RACAM-1,2,3, RACBT-6, PMAT-1,2,3, EAT-1,2,3, EBT-1,4, EAT-2,3,1, FBT-1 to 6, FBT & FAT, EAT-1,2,3, PMAT-1 to 3, PMBT-1 to 6, EBT-3,5,6, RACAT-2,3, FBT & FAT, FBT-1,2,3,4,5,6 & FAT-2,4&5, ECBT-1, ECBT-1,2,4,5, BBBT-1 to 6, PMBT-1,5, PMAT-1. ABT-3	124 Nos	15000	1860000	Bidar-6, Belgaum-6, Bagalkote-14, BT Centre-12, Kookanur-4, Mandya-3, KGF-14, Haliyal-3, Karwar-4, Nanjangud-12, Devarayasamudra-12, Malavalli-4, Gurumitkal-12, Madikere-2, Kanakpura-4. Davangere-7, Mangalore-2, shivmogga-03
Total Rupees Eighteen lakhs sixty thousand only						1860000	

Draft approved by the Commissioner)

Joint Director(Trg)
for Commissioner
Dept Of Employment & Training

NS-FUR-PKG-07

LIST OF FURNITURES TO BE PROCURED UNDER SHOPPING FOR PROJECT I.T.I's

SI No	DGET SL NO.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET	Estimated Cost Per Unit	TOTAL Estimated Cost	Consignee Govt I.T.I
1	10,10,10,2,10,10,10,1,1,1,2,4,2,2,1	COMPUTER TABLE: Of overall size 4'L x 2'W x 30"H. The table shall be made out of 19mm thick prelaminated particle board. All the exposed edges shall be neatly edge binded 2mm thick PVC tape machiune pressed using UVA hot melt glue. The table shall be provided with one drawer and a pull ou keyboard tray. The table shall be provided with twin wheel castors with brakes.	EAT-1,2,3,EBT-4, EAT-2,3,1, FBT & FAT, EBT-4, PMBT-3, EBT-6, EAT-1, EBT-6, EBT-6.	70 Nos.	7000	490000	Bagalkote-11, Kookanur-9, Mandya-3, KGF-8, haliyal-8, Huvinahadagali-5, Gowribidanur-3, Nalathwad-3.Davangere-20
2	3,3,3,3,3,3,3,3,3,3,3,3	DISCUSSION TABLE (as per drawing enclosed)	PMAT-1,2,3, FBT-1 to 6, PMBT-1 to 6, PMAT-1 to 3, RACAT-2, AAT-2,3, FBT & FAT, PMBT-2,3,4,5,5, PMAT-1,3. ABT-2,3	38 Nos.	10000	380000	Belgaum-3, BT Centre-2, KGF-9, Karwar-2, Honnavara-2, Nanjangud- 9, Kanakpura-8. Davangere-1, Mangalore-2
3	1,4,9,4,4.	TABLE FOR PRINTERS AND SCANNERS: Of overall size 2'X3'X30" The table shall be made out of 19mm thick prelaminated particle board. All the exposed edges shall be neatly edge binded 2mm thick PVC tape machiune pressed using UVA hot melt glue. The table shall be provided with one shelf below to store papers.	EBT-6, EBT-6, EBT-6, ECBT-1, EBT-6, EBT-6.	12 Nos.	4350	52200	Mandya-2, Tiptur-3, Haliyal-2, Malavalli-1, Gowribidanur-2, Nalathwad-2.
4	6,4,105,9.	White Board with Aluminium frame size = 8' X 4'	EAT-1,2,3, FBT & FAT, ECBT-1.	14 Nos.	11895	166530	Tptur-8, Nanjangud-3, Malavalli-3
5	5,3,	MAGNETIC WHITE BOARD WITH ALUMINIUM FRAME: Of Size = 8" X 4"	EAT-1,23, ECBT-1, ECBT-1, FBT & FAT.	15 Nos.	7850	117750	Tiptur-4, Karwar-3, Honnavara-3, Nanjangud-5
6	1,	DRAWING BOARD (as per drawing enclosed)	FBT & FAT	17 Nos.	3000	51000	Nanjangud- 17
8	5,5,	Green Ceramic Board with an aluminium frame size = 8' X 4'	ECBT-1, ECBT-5	2 Nos.	12150	24000	Malavalli-1, Gurumitkal-1
Total Rupees twelve lakhs eighty one thousand four hundred eighty onl						1281480	

Draft approved by the Commissioner)

Joint Director(Trg)
for Commissioner
Dept Of Employment & Training

NS-FUR-PKG-08
LIST OF FURNITURES TO BE PROCURED UNDER SHOPPING FOR PROJECT I.T.I's

SI No	DGET SL NO.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET	Estimated Cost Per Unit	TOTAL Estimated Cost	Consignee Govt I.T.I
1	10,10,10,2,10,10,10,1,1,1,2,4,2,2,2	COMPUTER CHAIR: The seat and back shall be made using high-density moulded foam. The seat and back shall have ABS back. The chair shall have PU armrest. The base shall be strong five pronged nylon base fitted with twin wheel castors for smooth movement. The base shall have pneumatic gas lift for height adjustment.	EAT-1,2,3,EBT-4, EAT-2,3,1, FBT & FAT, EBT-4, PMBT-3, EAT-1, EBT-6.	68 Nos.	3000	204000	Bagalkote-11, Kookanur-9, Mandya-3, KGF-17, Huvinahadagali-5, Gowribidanur-3.Davangere-20
2	8,	CUSHION CHAIR WITH ARMS: The frame shall be made out of 25mm dia round MS tube of 18G. The entire frame shall be neatly powder coated. The seat & back shall be made out of hot pressed ply provided with high density moulded foam upholstered with good quality fabric. The arm rests shall be of mpolyeurathane material.	EAT-1,2,3	12 Nos.	3600	43200	Tiptur-12
3	103,71,71,77,87,	STUDENT CHAIR: The chair shall made using 3/4" dia MS tubular frame with 18G CRCA sheet perforated sheet for the seat and back. The entire chair shall be neatly powder coated.	ECBT-2, EAT-1,3,5,	80 Nos.	1660	132800	Malavalli-32, Gurumitkal-48.
4	4,4,4,4,4,4,4,7,4,5,4,4,4,4,6.11,	EXECUTIVE REVOLVING CHAIR: Executive revolving chair with PU armrests & tilting and revolving arrangement of standard size with high density moulded foam for the seat and back upholstered with good quality fabric. The chair shall be with full high back with head rest and to be fitted on the Nylon revolving base with 5 prongs fitted with twin wheel castors. .	EAT-1,2,3,3,1, EAT-1,2,3, EBT-1,2,3,4,5,6, EBT-3,5,6, EAT-1, BBBT-1 to 6, EBT-1,2,3,4,5,6.	50 Nos.	7800	390000	Bagalkote-5, Mandya-45, Haliyal-3, Huvinahadagali-1, Madikere-20, Nalathwad-6. Davangere-1

5	12,75,	INSTRUCTOR CHAIR: 'S' type continuous Armed chair, the seat & back knitted with nylon cane. The Tubular frame should be of 25mm dia 16 gauge MS tube & Steel table size 48"x 24"x 30". The top shall be made of 19mm thick block board with rounded corners and Teak wood beading all-round & with 3 drawers unit of size 17" X 14" X 22 made out of 20g	EAT-1,2,3, EAT-3.	5 Nos.	2500	12500	Tiptur-3, Gurumitkal-2.
6	2,2,2,2,2.	DUEL DESK: of size 60"L made out MS tubular frame. The table top and the seat shall be made out of 18mm thick plywood laminated with 1mm thick decorative laminate. The desk shall be provided with a shelf (As per the drawing).	RACAM-1,2,3, RACBT-1,2.	34 Nos.	9000	306000	Bldar-34
7	2,2	Z' TYPE DESK : Of size 6' length with fabricated in tubular steel pipe with wooden plank (As per drawing enclosed).	EAT-1,2,3, EAT-1.	96 Nos.	7440	714240	Tptur-45, Huvinahadagali-51
8	2,	REVERSIBLE DESKS: (Honne/Salwood). Specifications: Cast iron folding legs of 26kgs for 2Nos. The writing plank is of size 182.88cmL X 30.0cmB X 2.5cm thickness. The sitting plank is of size 182.88cmL X 25.4cmB X 3.048cm thickness. The writing and sitting planks are fixed using bolts nuts and washers and planks are neatly polished.	FBT & FAT,	30 Nos.	6995	209850	Kookanur-30.
Total Rupees twenty lakhs twelve thousand five hundred ninety only						2012590	

Draft approved by the Commissioner)

Joint Director(Trg)
for Commissioner
Dept Of Employment & Training

NS-FUR-PKG-09**LIST OF FURNITURES TO BE PROCURED UNDER SHOPPING FOR PROJECT I.T.I's**

SI No	DGET SL NO.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET	Estimated Cost Per Unit	TOTAL Estimated Cost	Consignee Govt I.T.I
1	1,1,1,1,11,2,9,9,67,67,73,84,1,10,75,3,3,75,55,54,44,1	WORK BENCH: Suitable Practical work tables of size (2.5 x1.20x0.9m) with M.S. Angle (As per Drawing enclosed)	EBT-1, PMBT-3, EBT-5,6, EAT-1, ECBT-1, EAT-1,3,5, EBT-1,ECBT-1, ECBT-5,4, EAT-1,AAT-01,02,ABT-05, ABT-1	58Nos.	32000	1856000	Bagalkote-2, KGF-4, Haliyal-4, Huvinahadagali-2, Malavalli-13, Gurumitkal-14, Gowribidanur-2, Honnavara-10, Davangere-5, Mangalore-2
Total Rupees Eighteen lakhs fifty six thousand only						1856000	

Draft approved by the Commissioner)

Joint Director(Trg)
for Commissioner,
Employment & Training

NS-FUR-PKG-10**LIST OF FURNITURES TO BE PROCURED UNDER SHOPPING FOR PROJECT I.T.I's**

SI No	DGET SL NO.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET	Estimated Cost Per Unit	TOTAL Estimated Cost	Consignee Govt I.T.I
1	1,1,1,4,1,1,1,1,1,2,2,2,2,1,	WORK BENCH : of size (2.5 x1.20x0.9m) with M.S. Angle on top 1 mm MS Sheet(As per Drawing enclosed)	PMAT-1,2,3, FBT & FAT, PMBT-2,4,5,6, PMAT-1to3, RACAT-3, AAT-3, FBT & FAT, FBT-1,2,3,4,5,6 & FAT-2,4&5, ECBT-1, ECBT-5,4,3, EBT-1, PMBT-2,5,5, PMAT-1.	64 Nos.	30200	1932800	Belgaum-6, Kookanur-10, KGF-11, Karwar-2, Honnavara-2, Nanjangud-11, Devarayasamudra-11, Malavalli-1, Gurumitkal-3, Madikere-3, Kanakpura-4.
Total Rupees Nineteen Lakhs Thirty Two Thousand Eight Hundred Only						1932800	

Draft approved by the Commissioner)

Joint Director(Trg)
for Commissioner,
Employment & Training

NS-FUR-PKG-11

LIST OF FURNITURES TO BE PROCURED UNDER SHOPPING FOR PROJECT I.T.I's

SI No	DGET SL NO.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET	Estimated Cost Per Unit	TOTAL Estimated Cost	Consignee Govt I.T.I
1	1,1,1,1,1,1,1,1,1,1,1,3,3,3,1,1,1,1,1,1,1,1,	ELECTRONIC WORK BENCH (as per drawing enclosed)	EAT-1,2,3, EBT-2,3,4,5,6, EAT-3,1,2, FBT-6, EAT-1,2,3, EBT-2, ECBT-1, ECBT-3,2, BBBT-2 to 5, EBT-2,3,4,5, EBT-2,5,6.	72 Nos.	16300	1173600	Bagalkote-12, BT Centre-4, Mandya-4, Malavalli-2, Gurumitkal-8, Madikere-16, Gowribidanur-24, Nalathwad-2.
Total Eleven Lakhs Seventy Three Thousand Six Hundred Onl						1173600	

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Joint Director(Trg)
for**Commissioner,**
Employment & Training

NS-FUR-PKG-12**LIST OF FURNITURES TO BE PROCURED UNDER SHOPPING FOR PROJECT I.T.I's**

SI No	DGET SL NO.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET	Estimated Cost Per Unit	TOTAL Estimated Cost	Consignee Govt I.T.I
1	62	Arc welding table 822x92x60 cm all metal with positioner (appox)(As per Drawing enclosed)	FBT-04,FAT-04	48 Nos	24600	1180800	BT Centre,B-22-12, Devraysamudra-12, Kooknur-12, Nanjangud-12
2	16	Metal stand table for surface plate 900x500x750mm (As per Drawing enclosed)	PMBT-01, FBT-01	32 Nos.	21500	688000	KGF-04, Belgaum-04, Kanakapura-04, Holenarasipura-04,BT Centre,B-22-04, Devraysamudra-04, Kooknur-04, Nanjangud-04
3	16	Metal stand table for surface plate 650 x 650 x 1200mm.(As per Drawing enclosed)	RACBT-I	4 Nos.	21600	86400	Bidar-02, Karwar-02
Total Rupees Nineteen Lakhs Fifty Five Thousand Two Hundred Only						1955200	

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NS-FUR-PKG-13**LIST OF FURNITURES TO BE PROCURED UNDER SHOPPING FOR PROJECT I.T.I's**

SI No	DGET SL NO.	DESCRIPTION OF THE ITEMS	Module Code	QTY REQD AS PER DGET	Estimated Cost Per Unit	TOTAL Estimated Cost	Consignee Govt I.T.I
1	62,64,64,61	Gas welding table 82cm x 92 cm x 60 cm fire bricks on stand (As per Drawing enclosed)	FAT-01,03,04, FBT-04	48 Nos	28300	1358400	BT Centre,B-22-12, Devraysamudra-12, Kooknur-12, Nanjangud-12
2	15,15	Marking table 1200 x 1200 x 900 mm(As per Drawing enclosed)	FBT-03,03	2Nos	25600	51200	BT Centre,B-22-01 Nanja,ngud-01
3	5	Marking table 90x90x90 cm(As per Drawing enclosed)	EBT-01	20 Nos.	22500	450000	Haliyala-2,Hadagali-2,Tiptur-02, Chitradurga-02, Gowribidnur-02, Puttur-02 Nalathwad-02, Bagalkot-02, Mandya-02, Madikeri-02
Total Rupees Eighteen Lakhs Fifty Nine Thousand Six Hundred On						1859600	

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