Bankura Unnayani Institute of Engineering

NOTICE INVITING TENDER

Ref: BU/ITI/BID -1/2024

Date: 11.12.24

The Bankura Unnayani Society and Bankura Unnayani Institute of Engineering invite open tenders for the supply of various items for the proposed ITI (Industrial Training Institute).

Interested and eligible suppliers are requested to submit their bids in accordance with the terms and conditions outlined below:

1. Details of Items:

A comprehensive list of required items is enclosed with this notice.

2. Eligibility Criteria:

Suppliers must have experience in providing similar items and should submit proof of past performance and credentials along with their bid.

3. Submission of Bids:

Bids must be submitted in sealed envelopes clearly marked with the subject "Tender for Supply of Items for Proposed ITI" to the following address:

General Secretary

Bankura Unnayani Society & Chairman, Bankura Unnayani Institute of Engineering, Pohabagan, Bankura 722146 Or in mail

jyotiabir@gmail.com

- 4. Last Date and Time for Submission: 31.12.2024
- 5. Opening of Bids: Interested bidders or their authorized representatives may be present at the time of opening. Date will be informed later on.
- 6. Terms and Conditions:

All quoted prices should include applicable taxes, transportation, and other charges. Delivery schedule, warranty details, and payment terms must be clearly stated in the bid. The authority reserves the right to accept or reject any or all bids without assigning any reason. For any queries, please contact Prof.J.P.S. Thakur 9434178150 Enclosures:

1. List of required items

SASANKA DUTTA
General Secretary
Bankura Unnayani Society & Chairman,
Bankura Unnayani Institute of Engineering

SI	Name of the tools equipment and machinary as per syllabus	Qty
1	Flux for Brass (in Gram)	500
2	Flux for Copper (in Gram)	500
3	AG4 cutting wheels	100
4	Knife Switch TPDT fitted with fuse terminals 16 Amp/ 440 V	8
5	Caliper hermaphrodite spring type	84
6	Centre Punch	84
7	Chisel cold flat	84
8	Arc welding cables multi cored copper	45
9	Centre punch	42
10	Chipping hammer	42
11	Chisel cold	42
12	Combination Plier Insulated 200 mm	84
13	Divider spring type	84
14	Dot punch	84
15	Electrician screwdriver thin stem insulated handle 4mm X 100 mm	84
16	File flat smooth	84
17	Hacksaw frame fixed type	84
18	File round second cut 200 mm	20
19	Hammer ball peen With handle. 450gms	84
20	Leather Hand Gloves	20
21	Hammer, cross peen with handle 250 grams	84
22	Heavy Duty Screwdriver insulated 5mm X 200 mm	84
23	Knife Double Bladed Electrician 100 mm	84
24	Measuring Steel Tape 5 meter	84
25	Neon Tester 500 V	84
26	Punch Centre 9mm X 150 mm	84
27	Bolt & Nut with washer (May be manufactured in-house)	32
28	Blade Cutter	25
29	Magnifying glass with stand and lamp50 mm dia	25
30	Nose Cutter	25
31	PCB Holder / PCB Stand for mobile	25

	Rework Station	
32	(Hot Air Blowers for mobile)	25
33	Safety goggles.	84
34	Caliper inside spring type.	84
35	Screw driver	84
36	Screwdriver Insulated 6mm X 150 mm	84
37	Scriber	84
38	Caliper outside spring type	84
39	Steel Rule Graduated both in Metric and English Unit 300 mm with precision of 1/4th mm	84
40	Steel Rule with metric & British graduation	84
41	Try Square.	84
42	Arc welding plain glass	68
43	AG 4 Grinding wheels	50
44	Dividers	42
45	File flat	42
46	Gas welding Goggles	34
47	Electrician Screwdriver thin stem insulated handle 4mm X 250 mm	84
48	File half round	42
49	Flat Tongs	42
50	Hack saw frame	42
51	Hammer ball pane 1kg	42
52	Scriber	42
53	Stainless steel rule	42
54	Tip Cleaner	42
55	DC Regulated Variable Programmable DC Power Supply 0-30V/3A	2
56	Digital Multimeter (3 3/4 digit) ,4000 Counts	24
57	File flat - second cut	84
58	Try square	42
59	Welding hand shield fiber	42
60	De-soldering pump electrical heated, manual operators 230 V, 40 W	24
61	Welding helmet fiber	42
62	Vice bench	40
63	Hammer ball peen With handle 250gms	84
64	Safety goggles plain	34
65	Soldering Iron10 watt & 25 watt	25
66	Tweezers6 inch	25

67	Connecting screwdriver 10 X 100 mm	24
68	Arc welding single coloured glasses	34
69	Soldering iron 25 Watt, 240 Volt	24
70	Tweezers 150 mm	24
71	Chisel cold round noze.	20
72	Cotton hand Gloves	20
73	File card. 3"x5"	20
74	Chisel cold cross cut & diamond point.	20
75	File triangular second cut. 200 mm	20
76	Insulated side cutting pliers 150mm	20
77	Leather Apron leather	20
78	Scraper half round	20
79	Screwdriver Insulated 4mm X 150 mm, Diamond Head	84
80	Leather hand sleeves	20
81	Fire buckets.	4
82	File triangular smooth 200 mm	20
83	S.S Wire brush	20
84	Safety boots for welders	20
85	Scraper flat	20
86	Rubber hose clips	20
87	Scraper triangular	20
88	Electrician knife 100 mm	16
89	File flat 200 mm 2nd cut with handle	16
90	Insulated combination pliers 150 mm	16
91	Long se pliers 150mm	16
92	Neon tester 500 V 500 V	16
93	Soldering Iron Changeable bits 15 Watt, 240 Volt	16
94	File flat bastard 200 mm	20
95	Chisel cold flat	20
96	File flat bastard. 300 mm	20
97	Drill twist Taper shank	4
98	Table Vice 100 mm jaw	16
99	Antistatic Apron	12
100	File square second cut 250 mm	20
101	Antistatic Hand Gloves	12
102	De-soldering Wire	12
103	MultimeterDigital	12

104	Screwdriver KitScrewdrivers of different shapes and sizes	12
105	Solder Paste	12
106	File half round bastard. 250mm	20
107	Wrist Strap/ Band	12
108	Old/ Used Mobile PCB	10
109	De soldering Gun Heat proof nozzle, PVC type, 250mm	8
110	Different Profile gauges (Plate type) - For demonstration	8
111	Drill hand brace 0-100mm	8
112	Drill S.S. Twist block 2 mm, 5 mm and 6 mm of 3	8
113	File feather edge smooth 150mm	8
114	Digital Multi Meter DC 200mv -1000v,0 $-$ 10A & AC 200mv- 750v , 0-10A, resistance 0-20 $M\Omega$ and 3 1/2 digit	24
115	File flat bastard 250 mm with handle	8
116	Fuses HRC Glass Rewire Type	8
117	Gauge, wire imperial stainlees steel marked in SWG & mm Wire Gauge - Metric	8
118	Leg guards leather	20
119	Hammer Extractor type 250 grams	8
120	Hammer, ball peen With handle 500 grams	8
121	Hand Vice 50 mm jaw	8
122	Indexable boring bar with inserts	8
123	Knife Switch DPDT fitted with fuse terminals 16 Amp	8
124	Lathe tools bit. 6mmX75 mm	8
125	File flat rough 150 mm with handle	8
126	File half round 200 mm 2nd cut with handle	8
127	File knife edge smooth 150mm	8
128	Lathe tools bit. 8mmX75mm	8
129	Lathe tools bit. H.SS TIPPED	8
130	Mallet hard wood 0.50 kg	8
131	Pincer 150 mm	8
132	Pliers flat nose insulated 200 mm	8
133	File half round second cut. 250mm	20
134	Pliers round nose insulated 100 mm	8
135	Scissors blade, SS 200mm	8
136	Series Test Lamp 230V, 60W	8

137	Slip-on Forged steel Flange	8
138	Spindle key	8
139	Steel Rule Graduated both in Metric and English Unit	8
140	Try Square 150 mm blade	8
141	Tweezers 150 mm	8
142	Vernier caliper	8
143	Wire Cutter and Stripper 150 mm	8
144	A.C. Voltmeter M.I. analog, portable box type housed in Bakelite case Multi range 75 V - 150V - 300V - 600V	6
145	Antistatic Mat	6
146	Bus bar with brackets 1 mtr	6
147	Continuity tester	6
148	File half round second cut	84
149	Digital and Analog Bread Board Trainer DC/AC Power Supply, Sine/ Square/ TTL Generator Data Switches, LED indication, LED Display: 8 in s Simulation/Ting Content through software	6
150	Earth clamp	6
151	Electrode holder	6
152	LCD based DPM	6
153	Old/ Used Smartphone	6
154	Seven segment DPM trainer	6
155	Spark lighter	6
156	File round 200 mm 2nd cut with handle	8
157	Anti spatter spray can	5
158	Auto Darkening Welding Helmet	5
159	BrushOnly ESD-Safe cleaning brushes	5
160	File flat smooth 250 mm with handle	8
161	Cleaning Cotton	5
162	GMAW Torch nozzle tip	5
163	Liquid Flux	5
164	Paste Flux	5
165	S.S tape	5
166	Tungsten electrode	5
167	Fire Buckets Standard size	4
168	A.C. Energy Meter Single Phase, 10 A, 240 V induction type	4

169	AC Ammeter MI, analog, portable box type housed in Bakelite case 0 - 1 A, 0-5 A, 0-25 A	4
170	AG 4 Grinder	4
171	Ammeter MC analog, portable box type housed in Bakelite case 0 - 500 mA, 0-5 A, 0-25 A	4
172	Screw driver of 7	24
173	File flat second cut safe edge. 300 mm	20
174	Analog Component Trainer Breadboard for Circuit design with necessary DC /AC power supply: Sine, Square, Triangle Modulating Signal Generator and Simulation Software	4
175	Earth Plate 60cm X 60cm X 3.15mm Copper Plate 60cm X 60cm X 6mm GI Plate	2
176	Analog multimeter	4
177	Angle plate	4
178	Arm strong type tool bit holder.	4
179	File Rasp, half round 200 mm bastard with handle	8
180	Arm strong type tool bit holder.	4
181	Aviation Snips straight Cut	4
182	Blow Lamp	4
183	Bradawl	4
184	Brass filler wire (in Kg)	4
185	C- Clamp 200 mm and 100 mm	4
186	A.C. Energy Meter Three Phase, 15 A , 440 V induction type	4
187	C.I. Sluice / Gate valve (flanged type)	4
188	Capacitors Electrolytic Ceramic Polyester film Variable Dual run	4
189	Caps screws	4
190	Carbide Wear Block.	4
191	Rubber hose oxygen	2
192	Cast Iron Globe Valve (Flanged type)	4
193	Thyristor /IGBT controlled D.C. motor drive with tacho-generator feedback arrangement 1 HP	1
194	CCMS filler wire (in Kg)	4
195	Chisel Cold 25 mm X 200 mm	4
196	Chisel firmer with wooden Handle 6 mm X 200 mm	4
197	Clamp "C" 100mm	4

198	Clamp toolmaker	4
199	Combination Set	4
200	Contactor & auxiliary contacts 3 phase, 415 Volt, 25 Amp with 2 NO and 2 NC	4
201	Copper bit soldering iron. 0.25 kg	4
202	Copper filler wire (in Kg)	4
203	Crimping Tool 1.5 sq mm to 16 sq mm and 16 sq mm to 95 sq mm	4
204	Current Transformer 415 V, 50Hz, CT Ratio 25 / 5 A, 5VA	4
205	D.E. metric Spanner Double Ended 6 - 32 mm	4
206	CO2 Gas pressure regulator	2
207	Damaged old spur gear	4
208	DC Power Supply 0 - 30 V, 5 A	4
209	Arm strong type tool bit holder.	4
210	File hand second cut. 150mm	20
211	Digital IC Trainer Breadboard for Circuit design with necessary DC Power Supply, Graphical LCD, Clock Frequency 4 different steps, Data Switches: 8 s, LED Display: 8 (TTL), Seven Segment Display, Ting Simulation Software	4
212	Digital Wattmeter 230 V, 1 KW, 50 Hz	4
213	Discrete Component Trainer Discrete Component (for diode and transistor circuit) with regulated power supply +5,0- 5 V,+12 ,0-12 V	4
214	Divider 150 mm spring type	4
215	Drill Drift (May be manufactured in-house)	4
216	Drill gauges	4
217	Drill twist straight shank	4
218	Drilling machine bench	4
219	Dual DC regulated power supply 30-0-30 V, 2 Amps	4
220	Electrician Helmet Yellow Colour	4
221	File Swiss type needle set of 12 length 150 mm	4
222	Fire buckets with stand	4
223	Flash back arrester (torch mounted)	4
224	Flat headed hammers with handle.	4
225	Frequency Meter 45 to 55 Hz	4
226	Glass magnifying	4
227	Hacksaw frame Adjustable 300 mm Fixed 150 mm	4
228	Hand Drill Machine 0-6 mm capacity	4
229	Hydrometer	4

230	Digital Vernier caliper	2
231	Inside Calliper 150 mm spring type	4
232	Kilo Wattmeter Analog 0-1.5-3KW, pressure coil rating- 240v/440v, current rating-5A/10A Analoge, portable type Housed in Bakelite case	4
233	Laboratory Type Induction Coil 1000 W	4
234	Lapping plate	4
235	Lathe tools H.S.S. tipped set.	4
236	Lifting sling	4
237	Limit Switch Limit Switch, Liver operated 2A 500v,2-contacts	4
238	Lux meter lux meter LCD read out 0.05 to 7000 lumens with battery.	4
239	Machine vice. 100 mm	4
240	Magnetic Flux Meter 0-500 tesla	4
241	Mallet.	4
242	Medium carbon Heat treated alloy steel Metric Studs and bolts along with nuts (for display) of standard length (May be manufactured in-house)	4
243	Megger Analog - 500 V	4
244	Microcontroller kits (8051) along with programming software (Assembly level Programming) Core 8051, ready to run programmer for AT89C51/52 & 55, programming modes Key Pad and PC circuits Detailed learning content through simulation Software	4
245	Micrometer outside. 0-25mm	4
246	Clamp "C" 200 mm	4
247	Bearing Puller (inside and outside) 200 mm	2
248	Micrometer outside. 25-50mm	4
249	Fire Extinguisher CO2 2 KG	4
250	Flash back arrester (cylindermounted)	4
251	Micrometer outside. 50-75mm	4
252	Milli Voltmeter centre zero analog, portable box type housed in Bakelite case $100-0-100\ \text{mV}$	4
253	Miniature Breaker 16 amp	4
254	Ohm Meter; Series Type & Shunt Type, portable box type 50/2000-ohm analog	4
255	Oil Can 250 ml	4
256	File round bastard. 250mm	20

257	Pliers long nose insulated 150 mm	8
258	Oil Can 250ml	4
259	Out Side Micrometer 0 - 25 mm least count 0.01mm	4
260	Outside Calliper 150 mm spring type	4
261	Phase Sequence Indicator 3 Phase, 415 V	4
262	Pin Type, shackle type, egg type & suspension type insulators including hardware fitting	4
263	Pipe threading die with handle	4
264	Pipe vice Cast Iron with hardened jaw open type 100 mm	4
265	Plane cutters 50 mm X 200mm	4
266	Oxygen, Acetylene Cylinders	2
267	Planishing hammer.	4
268	Plier - Flat se 150 mm	4
269	Pliers combination insulated 150mm	4
270	Plug socket Piano Switch Lamp Holder 230 V, 5 A	4
271	Pocker.	4
272	Potential Transformer 415 V, 50Hz, PT Ratio, 440V/110V, 10VA	4
273	POWER ELECTRONICS TRAINER with at least 6 's of application board MOSFET Characteristics SCR Characteristics SCR Lamp Flasher SCR Alarm Circuit Series Inverter Single Phase PWM Inverter	4
274	Power Factor Meter Digital 440 V, 20 A, Three Phase portable box type	4
275	Prick punch	4
276	Fire extinguisher (For 4 Units)	4
277	Relay- a. Cut out Relays b. Reverse current c. Over current d. Under voltage a. 16A, 440V b. 16A, 440V c. 16A, 440V d. 360V-440V	4
278	Rotary Switch 16 A/440v	4

279	Vernier bevel protractor Blade with Acute Angle Attachment	2
280	Round se pliers 100 mm	4
281	Rubber mat 2' x 4' x 1"	4
282	Safety Belt Standard quality	4
283	Scissors blade, SS 150 mm	4
284	Single Phase Variable Auto Transformer 0 - 270 V, 10Amp (Air cooled)	4
285	Smart phones of different make (android/Windows)	4
286	Smoothing cutters 50 mm X 200mm	4
287	SMPS of different make	4
288	Snip bent Left Cut	4
289	Soldering Iron 25-Watt, 65 Watt and 120-Watt, 230 Volt	4
290	Spanner adjustable	4
291	Spanner Adjustable drop forged, SS 150 mm & 300mm	4
292	Stake grooving.	4
293	Steel almirah / cupboard	4
294	Steel keys (May be manufactured in-house)	4
295	Steel measuring tape 3 meter	4
296	Steel rule graduated both in Metric and English Unit 300 mm,	4
297	Stillson wrenches	4
298	Stop cock	4
299	Straight edge steel	4
300	Stud Extractor EZY - out	4
301	Taps and dies complete set	4
302	Temperature controlled Soldering Iron 50-Watt, 230 Volt	4
303	TIG welding torch ceramic nozzle	4
304	Tong Tester / Clamp Meter 0 - 100 A (Digital Type)	4
305	Universal scribing block.	4
306	V-Block pair with clamps	4
307	Washer, clutch, keys, jib, cotter & circlip	4
308	Wheat Stone Bridge with galvanometer and battery	4
309	Stake hatchet with Leg.	4
310	Wing compass.	4
311	Wooden handle forged Soldering Iron copper bit.	4
312	Old/ Used Tab	3

313	Snip Straight and Bent heavy duty 250 mm	4
314	Single phase Transformer, core type, air cooled 1 KVA, 240/415 V, 50 Hz	3
315	3- point D.C. Starter For 2.5 KW DC motor	2
316	Contactor & auxiliary contacts. 3 phase, 415 volt, 32 Amp with 2 NO and 2 NC	4
317	4- point D.C. Starter For 2.5 KW DC motor	2
318	a. Electric Induction plate a. 1500 Watt, 240V	2
319	AC Starters: - a. Resistance type starter b. Direct online Starter c. Star Delta Starter- Manual d. Star Delta Starter – Semi automatic e. Star Delta Starter – Fully automatic f. Star Delta Starter - Soft starter g. Auto Transformer type For A.C Motors of 2 to 5 H.P.	2
320	Acetylene Gas Pressure	2
321	Adjustable pipe chain tonge to take pipes	2
322	Adjustable pipe die set BSP	2
323	Adjustable spanner.	2
324	Allen Key alloy steel 1.5-10 mm (of 9)	2
325	AM/FM Commercial radio receivers	2
326	Argon gas cylinder	2
327	Argon Gas pressure regulator	2
328	Autotransformer 15 Amps	2
329	b. Electric Kettle b. 1500 Watts, 240V	2
330	Battery Booster	2
331	Battery Charger 0 - 6 - 9 - 12 - 24 - 48 V, 30amp	2
332	Bearing different types	2
333	Bearing extractor	2
334	BGA Kit	2
335	Blow lamp brass 0.5 ltr	2
336	Brake Test arrangement with two spring balance rating 0 to 25 kg	2
337	c. Electric Iron c. Automatic - 750 W, 240 V	2

338	Cables: Twisted Pair Non-Metallic Sheathed Cable Underground Feeder Cable Ribbon Cable Metallic Sheathed Cable Multi-Conductor Cable Coaxial Cable Direct-Buried Cable 1 mtr	2
339	C-Clamps	2
340	Clamp meter 0 - 10 A	2
341	Motor Generator(DC to AC) consisting of - Shunt Motor with starting compensator and switch directly coupled to AC generator with exciter and switch board mounted with regulator, breaker, ammeter, voltmeter frequency meter, knife blade switch and fuses etc. complete with cast iron bed plate, fixing bolts, foundation bolts and flexible coupling. Shunt Motor rating: 5 HP, 440V AC Generator rating: 3-Phase, 4 wire, 3.5 KVA, 400/230 Volts, 0.8 pf, 50cycles	1
342	CO2 cylinder	2
343	Comparators Gauge - Dial Indication with Stand and Bracket.	2
344	Crimping tool (pliers) 7 in 1	2
345	CRO Dual Trace 20 MHz (component testing facilities)	2
346	d. Immersion Heater d. 1500 Watt, 240V	2
347	D.E. pedestal Grinding machine with wheels rough and smooth	2
348	DC Power Supply9 – 15V; 2 Amp	2
349	Depth micrometer. 0-25 mm	2
350	Dial test indicator on stand	2
351	Dial vernier caliper. (Universal type)	2
352	Different types Mobile Opener	2
353	Digital I.C. Trainer Digital I.C. Trainer 7 segment display and bread board	2
354	Digital Micrometer outside. 0-25mm	2
355	Dimmer starter 3 Amps	2
356	Double Ended tubular Box spanner set with Tommy bar.	2
357	Dowel pin (straight)	2
358	Drill chuck with key	2
359	e. A.C. Ceiling Fan and AC Table Fan e. 68-Watt, 230 V	2

360	Earth Electrode Primary Electrode 2100x28x3.25mm Secondary Cu Strip 20x5mm	2
361	Engineer's try square (knife-edge)	2
362	f. Geyser (Storage type) f. 10 litre	2
363	Feeler gauge	2
364	Fiber optic communication trainer Full Duplex Analog & Digital Trans- receiver with 660nm & 950nm, ise Generator with variable gain, Four Seven Segment Display BER Counter, Eye Pattern	2
365	File flat bastard 200 mm	2
366	Fire Extinguisher	2
367	Frequency modulator and Demodulator trainer kit FM Modulator Type: Reactance Modulator, Varactor Modulator, VCO Based Modulator FM Demodulator type All 5 demodulation techniques Detailed ting and learning contents through software	2
368	Function generator (DDS Techlogy (Sine, Square, Triangle, Ramp, Pulse, Serial Data, TTL and Modulation) 1 mHz -10 MHz Function- Pulse – Modulation Generator with Built in 40MHz Frequency Counter	2
369	Function Generator 2 to 200 KHz, Sine, Square, Triangular 220 V, 50 Hz, Single Phase	2
370	g. Mixture & Grinder g. 750 W, 240 V	2
371	G.I. Pipe	2
372	Gauge plug	2
373	Gauge snap Go and Not Go	2
374	Gauge telescopic set.	2
375	Grease Gun 0.5 ltr. Capacity	2
376	Growler 230 V, 50 Hz, Single Phase, Adjustable jaws, Testing armature with ampere meter and testing probes.	2
377	h. Washing Machine Semi-Automatic h. 5 Kg,	2
378	H.P. Welding torch	2
379	Hacksaw frame adjustable 300 mm	2
380	Hammer sledge	2
381	AC phase-wound slip ring Motor with starter switch 5 HP, 440 V, 3 Phase, 50 Hz	1

382	Hand Drill Machine Electric with Hammer Action 13 mm	2
383	Hand hammer with handle.	2
384	Hand Reamer set (Tapar pin straight flute)	2
385	Hollow punch	2
386	D.C. Shunt Generator with control panel D.C. Shunt Generator with control panel, 2.5 KW, 220V & 3phase Squirrel cage Induction Motor, 5HP, 440V with control panel & star delta starter	1
387	i. Motor Pump i. 1 HP, 1 Phase, 240 V	2
388	Interchangeable ratchet socket set	2
389	File flat second cut 200 mm	2
390	Inverter with Battery 1 KVA with 12 V Battery Input- 12 volt DC, Output- 220 volt AC	2
391	Jigs & Fixture (sample)-For demonstration (May be manufactured in-house)	2
392	Knurling tool (Diamond, straight & Diagonal)	2
393	LCD TV (21")	2
394	LED lighting system Measurement of Power, Voltage, Current, Power Factor and Light output performance of different lighting products like LED, CFL at variable input voltages 0 to 245V variable AC	2
395	LED TV (21")	2
396	File flat smooth 200 mm	2
397	Linear I.C. Trainer Linear I.C. Trainer with regulated power supply 1.2V to 15V PIC socket 16pin and 20 pins with bread board	2
398	Cut-section models for hydraulic components	1
399	Load Bank (Lamp / heater Type) 6 KW, 3Ph	2
400	M.S. Pipe	2
401	Machine maintenance mannual for Lathe, Pedestal grinder, Drill machine, Power saw	2
402	Machine Reamer parallel (Helical flute)	2
403	Machine vice - Swivel Base 100 mm	2
404	Magneto spanner 8 Spanners	2
405	Magnifying glass	2
406	Letter punch	2
407	Magnifying lenses 75 mm	2
408	MCCB 100Amps, Triple pole	2
409	Micrometer inside with extension rods.	2

410	MicroscopeMax 24 megapixel	2
411	Milli Ammeter (AC) 0 – 200 mA	2
412	Number punch	2
413	Oil Testing Kit Oil Testing Kit 230 V, single phase 50 Hz 60 VA output 0-60 KV Variable	2
414	Op Amp trainer	2
415	Oscilloscope Dual Trace 20 MHz	2
416	Oxy Acetylene Gas cutting blow pipe	2
417	Portable Electric Drill Machine 0-12 mm capacity 750w, 240v with chuck and key	2
418	Oxygen Gas Pressure	2
419	Packing gasket	2
420	PAM, PPM,PWM trainer kit	2
421	Pedestal grinder fitted with coarse and medium grain size grinding wheels	2
422	Pillar Type Drilling machine	2
423	Pipe bender machine spool type with stand manually operated.	2
424	Pipe cutter wheel type.	2
425	Pipe vice	2
426	Pipe wrench	2
427	Portable hand drill (Electric)	2
428	Power tools for fastening	2
429	Precision of screw drivers T5, T6, T7	2
430	Pulley extractor	2
431	Pulleys (for V-belt or Flat belt)	2
432	Pully Puller with 3 legs 150 mm & 300mm	2
433	Punch letter set.	2
434	Machine vice - Swivel Base 125 mm	2
435	Punch number set.	2
436	RCC Pole with accessories (MS angle iron, 'C' clamp, stay insulator etc.) and materials 6 Mtr	2
437	Rheostat (Sliding type) 0 - 25 Ohm, 2 Amp 0 - 300 Ohm, 2 Amp 0 -1 Ohm, 10Amp 0 -10 Ohm, 5 Amp	2
438	Rheostats various values and ratings	2
439	Rubber hose acetylene	2
440	Screw pitch gauge Metric	2

441	Screw thread micrometer with interchangeable. Pitch anvils for checking metric threads 60.	2
442	Scriber straight 150 mm	2
443	Sensor Trainer Kit Containing following Sensors 1 Thermocouple 2 RTD 3 Load Cell/ Strain Gauge 4 LVDT Graphical touch LCD with inbuilt processor for viewing the output waveforms, In built DAQ, and standard processing circuits like Inverting, n – Inverting, Power, Current, 5 Smoke Detector Sensors 6 Speed Sensor 7 Limit Switch 8 Photo sensors 9 Optocouplor 10 Proximity Sensor Instrumentation Differential Amplifier, F/V,V/F,V/I,I/V Converter, Sensors:RTD,NTC Thermistor,LM35 Thermocouple, Gas(Smoke) Sensor, Load cell, LVDT Sensor, Speed Sensor	2
444	Signal Generator with Digital Display for Frequency Amplitude 10 Hz to 100 Khz, 50/600 Ohms (output impedance)	2
445	Sine bar	2
446	Sleeve drill Morse	2
447	Slip Gauge as Johnson metric set.	2
448	SMD Soldering & De soldering Station with necessary accessories	2
449	Solar panel with Battery 18 Watt	2
450	Spanner D.E.	2
451	Spirit Level metal Type - 2	2
452	SS and SC centre lathe (all geared) with 3 and 4 Jaw Chuck	2
453	Standard Tap screws	2
454	Steel lockers	2
455	Milli Ammeter (DC) 0 – 500 mA	2
456	Surface plate C.I/Granite with Stand and Cover	2
457	Surface roughness comparison plates	2

458	Tachometer Analog Type - 10000 RPM	2
459	ELCB and RCCB 25Amps, double pole and 25Amps, double pole, IΔn 30 mA	2
460	Spanner- Double Ended	2
461	Tachometer Digital Photo Sensor Type - 10000 RPM	2
462	Taps and dies complete set in box.	2
463	Temperature gauge	2
464	Thermometer Digital 0° C - 150° C	2
465	Three phase transformer, shell type oil cooled with Delta/ Star 3 KVA , 415/240 V, 50 Hz	2
466	Torque wrench (Standard/Ratchet type)	2
467	Trammel	2
468	Trolley for cylinder (H.P. Unit)	2
469	Tweezers – Bend tip	2
470	Ultrasonic Cleaner	2
471	Universal Weld measuring gauge	2
472	Various Lamps Halogen Incandescent Lamp Fluorescent tube HP mercury vapor Lamp High-pressure sodium Lamp Low-pressure sodium Lamp LED	2
473	V-belt and Flat belt	2
474	Vernier Bevel protector	2
475	Vernier caliper.	2
476	Voltage Stabilizer AC Input - 150 - 250 V, 600 VA AC Output - 240 V, 10 A	2
477	Wheel dresser (One for 4 units) Star/Dresser with Holder	2
478	Wire gauge, metric standard.	2
479	Bench Vice - 100 mm	1
480	DC compound Motor with starter and switch 2.5 KW ,220 volts	1
481	Bench Vice - 50 mm	1
482	A.C. Series type Motor 1 HP, 240 V, 50 Hz	1
483	Vernier height gauges	2
484	AC Squirrel Cage Motor with star delta starter and triple pole iron clad switch fuse with Mechanical Load. 5 HP, 3-Phase, 415 V, 50 Hz	1
485	AC/DC GTAW welding machine	1
486	Air compressor suitable for above air plasma cutting system.	1

488	Air Plasma cutting equipment	1
489	Allen key (Hexagonal - of 9) 1 - 12 mm, of 24 Keys	1
490	Anvil 24 sq. inches working area with stand	1
491	Application kits for Microcontrollers 6 different applications 1 Input Interface: 4x4 Matrix Keypad, ASCII Key PAD, Four Input Switch 2 Display Module 16X2 LCD, Seven Segment, LED Bar Graph 3 ADC/DAC Module with most popular DC/DAC0808 4 PC Interface: RS232 & USB 5 Motor Drive: DC, Servo, Stepper 6 DAQ: Data Acquisition to sense different sensors signals	1
492	Battery Charger 0 - 6 - 9 - 12 - 24 - 48 V, 30 Amp	1
493	Bench grinder fitted with fine grain size silicon carbide green grinding wheel	1
494	Bench Vice Bench Vice - 125 mm	1
495	Black board and easel with stand	1
496	Brass filler wire	1
497	Carrier for mounting components, such as PB & relay boxes.	1
498	Ceiling fan coil Winding Machine 250V, 50 Hz, 1-Ф, with speed control	1
499	Cell phone power source with charger chords for different cell phones	1
500	Chisel - Cold - Flat 10 mm X 150 mm	1
501	Compressor unit	1
502	Cut section model for pneumatic components	1
503	D.C Arc welding rectifiers set with all accessories	1
504	D.C. Compound Generator with control panel including fitted rheostat, voltmeter, ammeter and breaker D.C. Compound Generator with control panel including fitted rheostat, voltmeter, ammeter and breaker, 2.5 KW, 220V &3phase Squirrel cage Induction Motor, 5HP, 440V, with control panel & star delta starter	1
505	DC Shunt Motor 2.5 KW, 220 V	1
506	Die penetrant testing kit	1
507	Diesel Generator with changeover switch, over current breaker and water/air-cooled with armature, star-delta connections AC 3 phase 7.5 KVA, 415 volt or higher rating	1

508	Different types of Analog electronic components, digital ICs, power electronic components, general purpose PCBs, bread board, MCB, ELCB	1
509	Different types of electronic and electrical cables, connectors, sockets, terminations	1
510	EV Charger 3 phase input	1
511	Different types of electronic and electrical cables, connectors, sockets, terminations	1
512	Different types of test JIG Box (04 types)Pre heater platform up to 1200C	1
513	Digital IC Tester	1
514	Digitized touch screen glass separator machineup to 1200C	1
515	DSO (colour) 4 Channel , 50MHz Real Time Sampling 1G Samples/Sec, 12 Mpts Memory with PC Interface USB, LAN and math function includes +, -, FFT, differential, integral, abs, log etc	1
516	Electrical Machine Trainer – Suitable for demonstrating the construction and functioning of different types of DC machines and AC machines (single phase and three phase). Should be fitted with friction brake arrangement, dynamo meter, instrument panel and power supply unit	1
517	EV Charger (Home) 1 Phase input	1
518	Fire extinguishers (foam type and CO2type)	1
519	First Aid box	1
520	DC Series Motor coupled with spring balance load 2.5 KW, 220 Volts	1
521	First aid kit	1
522	GMAW welding machine	1
523	Hammer ball pen 500 grams	1
524	Hand shearing machine capacity	1
525	LED TV (Trainer kit) 20-inch full HD LED Color Television, PAL/ NTSC video formats, complete block diagram of a LED TV system, Study board indicating various sections of LED TV along with the test points and switch faults Trouble shooting in different sections	1
526	Handsaw 450mm Hand Saw - 450 mm	1

527	Home theatre system	1
528	Hydraulic Trainer Kit, each consisting of the following matching components and accessories: I.Hydraulic Power pack with (1) external gear pump having a delivery rate of 2.5 lpm, (approx.) @ 1400 rpm operating pressure 60 bar, coupled to a single-phase AC motor (230 V AC) having start capacitor and ON/OFF switch and overload protection, (2) pressure relief valve adjustable from 0−60 bar, (3) oil reservoir, ≥5 litres capacity having sight glass, drain screw, air filter,and P and T ports.II.Pressure relief valve pilot-operatedIII.Drip tray, steel size 1160 mm x 760 mm.IV.Pressure Gauge Glycerin-damped, Indication range of: 0 − 100 bars V. Four-Way distributor with five ports, equipped with a pressure gaugeVI. Double acting hydraulic cylinder with a control cam, Piston diameter16 mm, Piston rod diameter10 mm, Stroke length 200 mm.VII. Suitable Weight for vertical loading of hydraulic cylinder VIII. Mounting kit for weight for realizing pulling and pushing load. IX. 3/2-way directional control valve with hand lever actuation.XI. 4/3-way directional control valve with hand lever actuation.XII. Non-return valve. XIII. Pilot-operated check valve Pilotto open.XIV. One-way flow control valve Withintegrated check valve Pilotto open.XIV. One-way flow control valve Withintegrated check valve.XV. T-Connector with self-sealing coupling nipples (2 Nos.) and quick coupling socket (1 No.). XVI. Profile plate, Anodised Aluminium, 1100x700 mm, with carriers, mounting frames and mounting accessories	1
529	Internet of Things Explorer:- Processor: 64bit ARMv7 with 1GB RAM, Memory 32GB, OS: Open source Linux, Connectivity: Wireless LAN, Bluetooth, Zigbee, USB & Ethernet, HDMI interface, 1.77" Colour TFT LCD, Driver for Stepper and DC Motor, six 16 bit Analog Input, RTC and 4- 20mA input. Zigbee: 2.4GHz, Sensors: Temperature and Humidity, Air Quality, Soil Moisture, Ambient Light, Soil/Water temperature, PIR Sensor. GSM IoT Gateway - Quad- Band 850/900/1800/1900 MHz - GPRS multi-slot class, Control via AT commands. Explore physical and application layer protocols like RS232, RS485, GSM, Ethernet and MQTT, CoAP, HTTP, FTP. Cloud/server configuration includes HTML, Java, php and mySQL. IoT Node: Wireless 2.4GHz Zigbee, 5 Analog Inputs and at least 3 Digital Outputs, At least oneI2C Channel, support OTA. Online Cloud/Server Services for 2 years. Battery 3.7V/4400mAH with Solar Panel, USB interface.	1
530	Jumper Wire	1

531	LCD TV (Trainer kit) 21-inch full HD LCD Color Television should support PAL/ NTSC video formats Complete block diagram of a LCD TV system, Study board indicating various sections of LCD TV along with the test points and switch faults	1
532	LCR meter (Digital) Handheld	1
533	Magnetic particle testing Kit #	1
534	Manual Motor coil Winding Machine With step arbor	1
535	Metal rack	1
536	Mobile phone Trainer 2G /3G/4G Dual SIM GSM Hand Frequency measurement and band verification Real time Mobile Operation	1
537	Motor-Generator (AC to DC) Squirrel Cage Induction Motor with star delta starter and directly coupled to DC shunt generator and switch board mounted with regulator, air breaker, ammeter, voltmeter, knife blade switches and fuses, complete with case iron and plate, fixing bolts, foundation bolts and flexible coupling. Induction Motor rating: 7.5 HP, 415V, 50 cycles, 3 phases. DC Shunt Generator rating: 5 KW, 440V (Output voltage varies 110-440v)	1
538	Motorised Bench Grinder 1 HP. 3 phase, 440V with DOL starter, Double side with smooth and rough wheel with Tool Base	1
539	Multiangle magnetic clamp set	1
540	Oven, electrode drying	1
541	Pillar Electric Drill Machine Motorized 12-20 mm Capacity, 1HP, 440V, 3 phase, Induction Motor with DOL starter, Bench Type	1
542	Plastic welding machine with hot air gun	1

543	Pneumatic Trainer Kit, each consisting of the following matching components and accessories: I. Single acting cylinder Max. stroke length 50 mm, Bore dia. 20 mmII. Double acting cylinder Max. stroke length 100 mm, Bore dia 20 mm, magnetic typeIII. 3/2-way valve manually-actuated, Normally ClosedIV. 3/2-way valve pneumatically-actuated, spring returnV. One-way flow control valve VI. 5/2-way valve with manually-operated switch VII. 5/2-way valve pneumatically-actuated, spring return,VIII. 5/2-way pneumatic actuated valve double pilot IX. 3/2-way roller lever valve direct actuation Normally Closed X. Shuttle valve (OR) XI. Two-pressure valve (AND) XII. Pressure gauge 0-16 bar XIII.Manifold with self-closing NRV, 6-way XIV.Pushbutton station for electrical signal input with 3 illuminated momentary-contact switches (1 NO + 1 NC) and 1 illuminated maintained- contact switch (1 NO + 1 NC), Contact load 2A XV.Relay station with 3 relays each with 4 contact sets (3NO+1NC or Change-over type), 5 A XVI.3/2-way single solenoid valve with LED XVII. 5/2-way single solenoid valve with manual override and LED XVIII. 5/2-way double solenoid valve with manual override and LED XIX.Power supply unit, Input voltage 85 – 265 V AC, Output voltage: 24 V DC, Output current: max. 4.5 A, short-circuit-proof.XX. Profile plate, Anodised Aluminium 1100x700 mm, with carriers, mounting frames and mounting accessories	1
544	Portable abrasive cut-off machine	1
545	Portable drilling machine	1
546	Portable gas cutting machine (PUG)	1
547	Power saw machine	1
548	Primary current injection 220V, 50 Hz, 1-Φ, output current -200 A (min) with timer	1
549	Scissors 200mm	1
550	Screw Driver	1
551	Shaded Pole Motor Fractional HP, 240 V, 50 Hz	1
552	Single Phase Capacitor Motor with starter switch 1 HP, 240 V, 50 Hz	1
553	Smart Meter 1 Phase - Smart Energy Meter 3 Phase - Smart Energy Meter	1
554	Smoke Absorber (Mouth Mask)	1
555	Solar Training Kit/ Simulator With built in meters for DCV, DCA, AC multifunction Meter (for ACI, ACV, Power, Frequency), Protection Circuits, BS-10 terminals for making the connection, Single/ Dual axis tracking system Charge Controller: PWM based MPPT, Charging Stage: Bulk, Absorptions and Float	1
556	Solder WireThe composition of most solder wire is Tin/ Lead in the ratio 60:40 or 63:37	1

557	Soldering & De soldering Station	1
558	Spot welding machine	1
559	Stepper Motor with Digital Controller	1
560	Suitable Gas cutting table	1
561	Swage block 5048	1
562	Swaging and flooring tool kit 450 tubing	1
563	Synchronous motor with accessories like starter, excitation arrangements. 3 Phase, 3 HP, 440V, 50Hz, 4 Pole	1
564	Thinner or PCB Cleaner	1
565	Thyristor/IGBT controlled A.C. motor drive with VVVF control 3 Phase, 2 HP	1
566	Tools maker vice 50mm (clamp)	1
567	Tubular box spanner - 6 - 32 mm	1
568	Universal Motor with starter/switch 240 V, 50 Hz, 1 HP	1
569	UPS	1
570	UPS trainer PWM switching techlogy, Test points to measures the voltages of different sections Overall functioning of UPS Trainer, AVR transformer, UPS with load condition	1
571	Used DC Generators-series, shunt and compound type for overhauling practice	1
572	Various analog and digital ICs useful for doing project works mentioned in the digital and analog IC applications modules	1
573	Various Electronic components Resistors, Diode, Transistor, UJT, FET, SCR, DIAC, TRAIC, IGBT, Small transformer etc.	1
574	Water cooled induction welding/ Brazing machine	1
575	Welding Transformer 400A	1
576	Tools makers vice 100mm (clamp)	1
577	Welding Transformer (or) Inverter based welding machine (IGBT) 300A	1

578	Wireless Communication modules for interfacing with microcontrollers a) RFID Card Reader b) Finger Print c) Zigbee d) GPS e) GSM f) Bluetooth g) WiFi Core 8051 MCU clocked at 11.0592 MHz, supporting both programming modes Key Pad and PC, LCD for both programming mode and run mode, ready to run programmer to support family of controllers AT89C51/52 & 55, DC Power Supplies +12V, -12V, +5V & -5V, Breadboard to make circuits, detailed learning content through simulation Software and following application modules: RFID Card Reader, Finger Print, Zigbee, GPS, GSM, Bluetooth and WiFi	1
-----	---	---