संस्थान प्रबंधन समिति
औद्योगिक प्रशिक्षण संस्था,परपोड़ी
जिला-बेमेतरा (छ०ग०)

Skill India
कौशल भारत-कुशल भारत

Industrial Training Institute

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क्रमांकः–औप्रस/पर/IMC/भण्डार/क्रय/निविदा/2020/ 67 /परपोड़ी, दिनांक 27-01-2020

निविदा सूचना

शासकीय औद्योगिक प्रशिक्षण संस्था परपोड़ी जिला बेमेतरा (IMC) द्वारा व्यवसाय कोपा, वेल्डर एवं मैकेनिक डीजल, विद्युतकार एवं फिटर के लिए औजार एवं उपकरण क्रय करने हेतु सीलबंद लिफाफे में आवेदन आमंत्रित किया जाता है। निविदा प्रति, संस्था में दिनांक 27/01/2020 से दिनांक 18/02/2020 तक उपलब्ध रहेगा। इच्छुक निविदाकर्ता दिनांक 18/02/2020 दोपहर 1:00 बजे तक निविदा, निविदा राशि 3000/- (तीन हजार रूपये) के साथ जमा कर सकता है, निविदा की प्रति एवं नियम/शर्तें राज्य स्तरीय वेबसाइट www.cgstate.gov.in एवं जिला स्तरीय वेबसाइट www.bemetara.gov.in तथा www.itiparpodi.com से डाउनलोड किया जा सकता है। दिनांक 18/02/2020 दोपहर 1:00 बजे के बाद निविदा स्वीकार नहीं किया जावेगा। निविदा शास. औद्योगिक प्रशिक्षण संस्था परपोड़ी, बेमेतरा में दिनांक 18/02/2020 को 2:00 बजे निविदा/क्रय समिति के समक्ष खोला जावेगा।

(हरीश शर्मा)
प्राचार्य/सचिव
आई.एम.सी. आई.टी.आई.परपोड़ी,
जिला बेमेतरा (छ.ग.)

कार्यालय संस्थान प्रबंधन समिति
औद्योगिक प्रशिक्षण संस्था परपोड़ी
जिला-बेमेतरा (छ0ग0)

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क्रमांकः–औप्रस/पर/IMC/भण्डार/क्रय/निविदा/2020/ 67 /परपोड़ी, दिनांक 27-01-2020

–:: ई-प्रोक्योरमेंट निविदा सूचना ::–

संस्थान प्रबंधन समिति (आईएमसी) औप्रस परपोड़ी के अंतर्गत प्रशिक्षण कार्यक्रम हेतु व्यवसाय कोपा, वेल्डर एवं मैकेनिक डीजल, विद्युतकार एवं फिटर हेतु औजार एवं उपकरण का क्रय किया जाना है। क्रय की जाने वाली सामाग्री का विवरण निम्नानुसार है।

Trade:- COPA

Sl. No.	ITEM CODE	ITEM NAME	Specification	Make	Qty	Rate Per Item	Total Amount
A. Trainees Tools/ Equipment							
1	COPA 8	Laser Printer Colour A4 Size	**LASER COLOR PRINTER :-** **Print Technology- Laser** **Type of printing** - Colour **Paper Size** - A4, Letter, Legal **Print Speed (A4)** - Mono (PPM) Upto 16 **Print Speed (A4)** - Color (PPM) Upto 16 **Print Resolution (Dpi)** - 600 x 600 dpi or Higher **Memory (MB)** - 128 MB NAND Flash or Higher **USB Port** - Hi-Speed USB 2.0 (USB Cable Included) **Paper Tray Capacity** - 150(Mininmum) **Number of Paper Trays** - 2 **Compatible Operating Systems** -Windows 10, 8.1, 8, 7 (32-bit or 64-bit), Vista, Windows XP SP3 or higher. **On site OEM warranty** :- 1 Year	Standard Quaility	1		
2	COPA 13	LCD Projector 3000 lumens or higher	**LCD PROJECTOR -** LCD PROJECTOR WITH REMOTE CONTROL Native Resolution - 800 x 600 (SVGA) or Higher Brightness - 3000 Lumens or Higher Contrast Ratio - (Minimum) (pixels) 15000:1 Aspect Ratio - 4:3/16:9 Keystone Correction Automatic & Manual Both Minimum Life of projection Lamp (In Normal Mode) 20,000 (Hours) Video Compatibility - PAL/NTSE Inbuilt Speaker Ports & Connectors - HDMI In, Audio In, Audio Out, Video In, USB Port , VGA In Power Supply - 210V-240V, 50/60 Hz **Additional** - Wall Mount for Projector Warranty - 1 Year	Standard Quaility	1		
3	COPA 14	Projector Screen matte(antiglare) screen	**Matte Antiglare Screen -** Size - 8' x 6' With Stand Aspect Ratio - 4:3 & 16:9 Type - Antiglare For Text/Multimedia Projection	Standard Quaility	1		

4	COPA 15	Online UPS 3KVA	**On-Line UPS 3.0 KVA**Rating in KVA (KVA) - 3.0 KVATechnology - inbuilt isolation transformerInput Power - single phase 160V - 260V sinewave,50Hz/60HzOutput power - Single phase 230V +/-1% Puresinewave 50 HzDC Voltage 72 V (Battery inside)Charge Current 1.5 AmpsBackup time (Minutes) - 30Overload & Short Circuit ProtectionWarranty for UPS - 2 YearWarranty for Battery - 1 YearOther - Cabling 5 meters for input and out put WithParalleling kit for synchronising Stands for Battery shall be Provided alongwith UPS Installation - Required	Standard Quaility	2		
5	COPA 21	Headphone & mic. set Wired	**Headphone & mic set** Headphone Driver Unit - 40mm, Microphone Driver Unit - 9.0 x 7.0mm (approximate) Headphone frequency response: 20Hz – 20kHz Sensitivity - 110dB (Maximum) , Impedance - 32Ω Output power - 100mW, Controls - Volume control Input/Output plugs - Headphone - 3.5mm Stereo and, Microphone - 3.5mm Stereo Compitability - Product is Compatible with PC / Laptop & Other Audio Devices.	Standard Quaility	5		
6	COPA 22	Sound System 2:1	**Sound System 2.1 Channel -** Speaker Type - 02 Way Speaker/ 2.1 channel Amplification Method - Passive Speaker Power Handling (Watt) - 25 Watt rms (Min) or Above Input Ports - 2 Channel RCA/3.5mm Audio Jack/USB input Frequency Response (Hz) 20-20,000 Hz AC Power Input 230V ~ 50/60 Hz	Standard Quaility	1		
7	COPA 24	Patch Panel 24 Port	**Patch Panel 24 Ports -** AT 6U/UTP No. of ports (RJ 45) - 24 Ports Loaded Cable Management - (Rear side) Material of patch panel - Steel Modular plug fitting (RJ 45) - Individual ports for loaded Dust protection for information outlet	Standard Quaility	2		
8	COPA 26	Punching Tool for punching RJ 45 socket with cat 5 cable	Punching Tool for punching RJ 45 socket with cat 5 cable	Standard Quaility	5		
B. Software							
9	COPA 27	MS Office 2010 (professional) or the latest version available at the time of procurement	**MS Office 2019 Professional** for Academic Purpose Life time license Validity with 01 No Media Support for Each ITI (Against Each 11 License One Media DVD) Certificate of License Shall be provided. (**Must Include - Word, Excel, Powerpoint, Access, Outlook**)	Standard Quaility	11 Licenses		
10	COPA 28	Antivirus for clients / workstations in profile validity of an year or more which should be renewed upon expiry	Antivirus/ Toatl security for – clients / workstations in profile with validity of three year.	Standard Quaility	11 Licenses		
11	COPA 29	Open Office or equivalent Latest version	Open Office or equivalent., Open source software	Standard Quaility	11		
12	COPA 30	GIMP / IrfanView Image editor or equivalent Latest version	GIMP / Irfan View Image editor or equivalent, Open source software	Standard Quaility	11		
13	COPA 31	LINUX OS Latest version	LINUX OS, Open source software	Standard Quaility	11		

14	COPA 32	Web Authoring tool WYSIWYG Web Authoring tool-Dreamweaver or Open Source tools like Kompozer, FrontPage or similar tools along with FTP tools for ex. Filezilla etc.	WYSIWYG Web Authoring tool-Dreamweaver or Opensource tools likeKompozer, FrontPageor similar tools along with FTP tools for ex.Filezillaetc., Proprietary /Open source software	Standard Quaility	11		
15	COPA 33	Tally ERP 9 or Latest	Tally ERP 9 or Latest (Multi User) GST Ready	Standard Quaility	11 Licenses		
16	COPA 34	E Commerce Simulation Software Latest version	E Commerce Simulation Software, Open source software	Standard Quaility	11		
17	COPA 35	Web Server HTTP Web server / XAMPP or any other similar server	Web Server : Any HTTP Web server / XAMPP or any other similar server, Open source software	Standard Quaility	11		
C. List Of Other Items							
18	COPA 43	Air conditioner Split type 1.5 tons	**Air conditioner Split type 1.5 tons -** Type of Air conditioner High wall Split AC with Remote control unit Technology of AC - Inverter Based Technology Nominal cooling capacity in Ton / (kcal/hr) 1.5 Ton / 4500 kcal/hr Coil Material - 100 % Copper Power Supply (Volt/Phase/Hz.) 220-240/Single/50Eco-friendly refrigerant - YES Hot & Cold Cooling, Air Blower with auto air swing(Up-Down) BEE Star Rating - 3 Star(Minimum) WARRANTY Warranty on Machine 1 year Warranty on Compressor 5 year INSTALLATION Installation Required.	Standard Quaility	3		
19	COPA 45	White Board minimum 4X6 feet	**WHITE BOARD -** White / Writing cum Projection Screening / Dry Marker Ink **Size** - 180 L(mm) x 120 (W) mm Normal White board for Classroom Aluminium Beat at corner and 02 Hooks at Top.	Standard Quaility	1		
20	COPA 47	Fire Extinguisher CO2 2 KG	**Fire Extinguisher CO2 2KG -** **Temperature range**: -30ºC to +60ºC. supplied complete with mounting bracket and plastic horn. **Discharge range**: minimum 4 meters. **Discharge time:** minimum 11 seconds. ISO & CE Certified Clear Instruction Label & No for Maintenance	Standard Quaility	2		
21	COPA 48	Fire Buckets Standard size	**Fire Buckets Set Standard Size With Stands -** **No of Buckets** - 04 Nos **Color -** Red Material SS Surface treatment Painted **Application** - Industrial (Workshop)	Standard Quaility	1 Set		

(दर शब्दों में लिखे रू. - .....)

Trade: Welder

S. No.	Item Code	Name of the Tool & Equipments and Specification AS Per Tools List	Detail Specification	Make	Quantity	Rate Per Item	Total Amount
1	W 1	Welding helmet fiber	Welding helmet fiber-light weight,adjustable head frame with coloured glass.(DIN 11 A &12 A).	Standard Quaility	8		
2	W 2	Welding hand shield fiber	Welding hand shield fiber - light weight,consealed handle with coloured glass.(DIN 11 A &12 A)	Standard Quaility	8		
3	W 3	Chipping hammer with metal handle 250 Grams	Chipping hammer 250 Grams-made of high carbon steel with spring handle.	Standard Quaility	42		
4	W 4	Chisel cold flat 19 mm x 150 mm	Chisel cold flat 19 mm x 150 mm , Made of Hardened And Tempered High Carbon steel	Standard Quaility	42		
5	W 5	Centre punch 9 mm x 127 mm	Centre punch 9 mm x 127 mm , Made of Hardened And Tempered High Carbon steel	Standard Quaility	42		
6	W 6	Dividers 200 mm	Dividers 200 mm , Made of Hardened And Tempered High Carbon steel	Standard Quaility	8		
7	W 7	Stainless steel Rule 300 mm	Stainles steel scale Nominal Size - 30 cm, Having Marking of inch, cm & mm. Material - spring Steel Type of Steel Scale (Graduation on both edges) - AA	Standard Quaility	42		
8	W 8	Scriber 150 mm double point	Scriber 150 mm double point-knrulled body made of high carbon steel.	Standard Quaility	8		
9	W 9	Flat Tongs 350 mm long	Flat Tongs 350mm long- made of mild steel.	Standard Quaility	8		
10	W 10	Hack saw frame fixed 300 mm	Hacksaw frame fixed 300 mm with wooden handle. Refer to IS - 5169	Standard Quaility	8		
11	W 11	File half round bastard 300 mm	File half round bastard 300 mm-made of high carbon steel with wooden handle.	Standard Quaility	8		
12	W 12	File flat 350 mm bastard	File flat 350 mm bastard-made of high carbon steel with wooden handle.	Standard Quaility	8		
13	W 13	Hammer Ball pane 1 kg with handle	Hammer ball pane 1 kg with wooden handle Refer to IS - 841	Standard Quaility	42		
14	W 14	Tip Cleaner	Tip Cleaner standard cleaning wire size (No 1 - 5)	Standard Quaility	42		
15	W 15	Try Square 6"	Try square 6", having lenght of blade 6" & having marking on blade in inches, cm & mm, Made of Hardened steel	Standard Quaility	8		
B. Instruments and General Shop Outfit- For 2(1+1) units no additional items are required							
16	W 16	Spindle key	Spindle key - opening cylinder valve made of drop forged steel	Standard Quaility	4		
17	W 17A	Screw Driver 300 mm blade	Screw Driver 300 mm Length of Blade in 300 mm Made of High Grade Silicon Magneaz Steel, Handle is made from High Grade CA Plastic Refer to IS - 444	Standard Quaility	1		
18	W 17B	Screw Driver 250 mm blade	Screw Driver 250 mm Length of Blade in 250 mm Made of High Grade Silicon Magneaz Steel, Handle is made from High Grade CA Plastic Refer to IS - 444	Standard Quaility	1		
19	W 18	Number Punch 6 mm	Number punch 6 mm (set), Hardened steel suitable to punch soft metal and mild steel , number punch set of 0 to 9, face 6mm & length 100mm	Standard Quaility	2		
20	W 21	Universal Weld measuring gauge	Universal Weld measuring gauge for measuring of weld bead in flat and fillet joints available in	Standard Quaility	2		

			standard size.				
21	W 29	Oxygen Gas Pressure regulator double stage	Oxygen Double stage Regulator Pressure High Pressure Stage of Pressure Regulation Double Stage Relief Valve Pressure (Bar) 2 Outlet Pressure to be controlled,Max (Bar) 10 Inlet Pressure to the Regulator,Max (Bar) 300 Material for Pressure Regulators (Must Conforms to ISO 9539) Brass Body.	Standard Quaility	2		
22	W 30	Acetylene Gas Pressure regulator double stage	Acetylene Gas Pressure regulator double stage brass body, heavy duty, inlet pressure 20 bar, max. outlet pressure 1.5 bar and imported safety pressure gauge design for 300 bar service pressure.	Standard Quaility	2		
23	W 31	CO2 Gas Pressure regulator with flow meter	CO_2 Gas Pressure regulator, with flow meter,brass body, heavy duty double stage regulator suitable for inlet pressure 230 bar and imported safety pressure gauge design for 300 bar service pressure.	Standard Quaility	2		
24	W 32	Argon Gas pressure regulator with flow meter	Argon Gas Pressure regulator, with flow meter,brass body, heavy duty, double stage regulator suitable for inlet pressure 230 bar and imported safety pressure gauge design for 300 bar service pressure.	Standard Quaility	2		
25	W 33	Metal rack 182 cm x 152 cm x 45 cm	Metal Rack 182 cm x 152 cm x 45 cm , made of M.S. Angle Iron(35x 35 x3 mm) & M S Sheet Thickness 1.2 mm	Standard Quaility	1		
26	W 34	First Aid Box	First Aid box	Standard Quaility	1		
27	W 35	Steel Lockers with 8 pigeon holes	**PIGEON HOLE CABINET(INDUSTRIAL LOKCER CBINET) (12 LOCKERS)** **Overall Size** - 1800(H) x 900(W) x 380(D) mm **Body** - 1.0mm CR Sheet As per IS Standard **Handle** - Nickel/Chrome plated with key hole & Label Holder on each Locker. **Material Details** - The Locker cabinet having **12 Locker** Shall Saprate locking system in each locker & Legs at the bottom.	Standard Quaility	2		
28	W 36	Steel Almirah/Cupboard	**STEEL ALMIRAH (Big Size) With one Locker :-** **Overall Size -** 2500 (H) x 1200 (W) x 500 (D) made of 1.0 mm CR sheet (Including Padestal) **Materials** - The CR sheet used shall be of prime quality as per IS Standard and thickness for 1.0 mm. **No of Shelves** - 04 (Minimum), Each sshelf shalll be formed such the edges are bend two times at right angle first bend 30 mm and second bend 8 mm. **Door Stiffener** - Inside frame and its full height in top hat section width 100mm. **Lever rod** - Shall be of MS 12 mm round/square bar or 10 mm bright bar. **Brackets** - Shall be made of 1.6 mm CR Sheet, riveted on each side of hinges. **Locking** - For locking brass body Godrej type cabinet lock or cabinet lock 6 leaver die cast zinc alloy body of size 65 (H) x 50 (W) mm fitted on four screws, keys in duplicate with key rings shall provided. Metallic key cover electroplated nickel/chrome on front side of the door shall be provided. **Door Lock** - for door die cast chrome plated handle fitted wih washer and double nut. **Leg Height** - 420 (W) x 254(H) shall be provided	Standard Quaility	2		
29	W 37	Black board and easel with stands	Black board size - 1200 x 1800 mm with Easel stand.	Standard Quaility	1		
GENERAL SHOP OUTFIT							

30	W 48	Spot gas cutting machine 15 KVA with all accessories	Electrode force in KN 150 kiloNewton Weld current in ampere 8 kiloAmpère Electrical rating in KVA 20 Input supply 3 phase Squeeze time in second 10 second Thickness of material which can be welded in mm 2.8 millimeter Continuous power rating at 100 % duty cycle in KVA 7.5 Vertical arm movement Hydraulic Diameter of electrode in mm 10 millimeter Refer to IS-4804	Standard Quaility	1		
31	W 49	Portable gas cutting machine Capable of cutting Straight & Circular with all accessories	Maximum Current (in amp) 25 Ampère Cutting capability Straight Cut, Bevel Cut, Circle Cut all Size of tip for Blow pipes in mm 3 Cutting capacity (in millimeters) 35 millimeter Cutting speed range (in mm per min) 200-400 Max. Cutting width (in mm) 0-500 Portable under guided (pug Machine) with line and circle attachment	Standard Quaility	1		
32	W 55	Trolley for cylinder (H.P. Unit)	Trolley for cylinder (H.P. Unit) made of M.S. Pipe , with rubber wheel for Two cylinder (Oxygen & Acetylene)	Standard Quaility	2		
33	W 56	Hand shearing machine capacity cut 6 mm sheet and flats	Hand shearing machine capacity up to 6 mm sheets & flats blade made by High Carbon Steel	Standard Quaility	1		
34	W 60B	Bench vice of 150 mm jaw opening	Bench Vice 150 mm jaws openig made out of closed grain cast iron box nut spendal and screw, made by steel.	Standard Quaility	16		
35	W 61	Oxy Acetylene Gas cutting blow pipe	Welding high pressure cutting torch capacity in mm 300 Pressure Rating in kgf/cm 2 - 2.5 kilogram-force Length of Blow Pipe in mm 550 millimeter(Heavy Duty) Refer to IS-7653	Standard Quaility	2		
36	W 62A	Oxygen Cylinders	Oxygen, Cylinders *	Standard Quaility	2		
37	W 62B	Acetylene Cylinders	Acetylene Cylinders *	Standard Quaility	2		
38	W 63	CO2 cylinder	CO2 cylinder *	Standard Quaility	2		
39	W 64	Argon gas cylinder	Argon gas cylinder *	Standard Quaility	2		
40	W 65A	Anvil 12 sq. Inches working area with stand	Anvil 12 sq. inches working area of weight 100 Kgs Refer to IS-510	Standard Quaility	1		
41	W 65B	Anvil stand for 12 sq. Inches working area	Anvil stand made by mild steel	Standard Quaility	1		
42	W 67	Die penetrant testing kit	Die penetrant testing kit- with penetrant, cleanner, developer- 500 ml, aerosol can. (set)	Standard Quaility	1		
43	W 70	Fire buckets with stands	**Fire Buckets Set Standard Size With Stands -** **No of Buckets** - 04 Nos **Color -** Red Material SS Surface treatment Painted **Application** - Industrial (Workshop)	Standard Quaility	4		
44	W 72	Suitable Gas cutting Table	Suitable Gas cutting table- Made of angle iron frame 40x10mm, size 5'x3'x2.5' (in LxWxH) with stool size 12"x12"x8" made of 1"squer pipe wall thickness 16 SWG, stool top 3/4" laminated board.	Standard Quaility	1		
45	W 73	Welding Simulators for SMAW/GTAW/GMAW	Welding Simulators for SMAW/GTAW/GMAW	Standard Quaility	1		

CONSUMABLE							
46	W 74	Leather Hand Gloves 14"	ISI MARKED Leather Hand Gloves 14 inches (approximate) made form chrome leather ISI MARKED	Standard Quaility	17		
47	W 75	Cotton hand Gloves 8"	Cotton hand gloves good quality. Material - 80 percentage wool and 20 percentage Nylon Base Fabric - Plain Knitted on palm &Finger and 2 X 2 rib on cuff. Overall Length - 24 cm for small	Standard Quaility	17		
48	W 76	Leather Apron Leather	Length of Apron 120 centimeter Width of Apron 65 centimeter GSM of Apron material (gm per sq mtrs) 2.2 Material of Apron Leather - soft chrom leather	Standard Quaility	17		
49	W 77A	S.S. Wire brush 5 rows	Material of Stainless Steel Overall width of Brush (mm) 50 Mass of Total Bristle on Brush (gm) 20 Overall Length of Brush with handle (mm) **150** Diameter of Bristle (mm) 0.2 Length of Bristle (mm) 30	Standard Quaility	17		
50	W 77B	S.S. Wire brush 3 rows	Material of Stainless Steel Overall width of Brush (mm) 50 Mass of Total Bristle on Brush (gm) 20 Overall Length of Brush with handle (mm) **120** Diameter of Bristle (mm) 0.2 Length of Bristle (mm) 30	Standard Quaility	17		
51	W 78	Leather hand sleeves 16"	Leather hand sleeves made of chrome leather, size 16"	Standard Quaility	17		
52	W 86	Arc welding plain glass 108 mm x 82 mm x 3 mm	Arc welding plain glass 108 mm x 82 mm x 3 mm	Standard Quaility	68		
53	W 95	LCD Projector	**LCD PROJECTOR -** LCD PROJECTOR WITH REMOTE CONTROL Native Resolution - 800 x 600 (SVGA) or Higher Brightness - 3000 Lumens or Higher Contrast Ratio - (Minimum) (pixels) 15000:1 Aspect Ratio - 4:3/16:9 Keystone Correction Automatic & Manual Both Minimum Life of projection Lamp (In Normal Mode) 20,000 (Hours) Video Compatibility - PAL/NTSE Inbuilt Speaker Ports & Connectors - HDMI In, Audio In, Audio Out, Video In, USB Port , VGA In Power Supply - 210V-240V, 50/60 Hz **Additional** - Wall Mount for Projector Warranty - 1 Year	Standard Quaility	1		
54	W 95	LCD Projector screen	**Matte Antiglare Screen -** Size - 8' x 6' With Stand Aspect Ratio - 4:3 & 16:9 Type - Antiglare For Text/Multimedia Projection	Standard Quaility	1		
55	W 96	Welding Process, Inspection & codes DVD/ CDs	Welding Process, Inspection & Codes DVD/CDs set	Standard Quaility	1		

(दर शब्दों में लिखे रू. - .....)

Trade : Mechanic Diesel

S.No.	Item Code	Item Name	Detailed Specification	Make	Qty	Rate Per Item	Total Amount
1	DM 1	Allen Key set of 12 pieces (2mm to 14mm)	Allen Key, Set of 12 Pieces (2mm to 14mm) Made Venedium Pentaoxide/ Fully hardened carbon steel	Standard Quaility	2		
2	DM 2	Caliper inside 15 cm Spring	Inside Caliper 15 cm Spring joint made of High Quality Polished steel with ground finished points	Standard Quaility	2		
3	DM 3	Calipers outside 15 cm spring	Outside Calipers 15 cm Spring joint made of High Quality Polished steel with ground finished points	Standard Quaility	2		
4	DM 4	Center Punch 10 mm. Dia. x 100 mm.	Centre punch 10 mm Dia. X 100 mm. made of H.C.S.	Standard Quaility	2		
5	DM 5	Dividers 15 cm Spring	Dividers spring type 15cm, made of H.C.S.	Standard Quaility	2		
6	DM 6	Electrician Screw Driver 250mm	SCREW DRIVER 250 MM (6.0X250) MM-FLAT TIP Type of Screw Drivers Engineers Screwdrivers Screw Driver Point Size or Tip Size (a x b) in mm x mm 0.8 x 6.0 Length of Blade in mm 250	Standard Quaility	14		
7	DM 7	Hammer ball peen 0.5 kg with handle	BALL PEEN HAMMER WITH HANDLE Nominal Mass (Grams) 500 Type of Hammers - ball peen hammer Handles Requirement - Yes Material of Handles - Wood Name of the wood -Timber Hickory wood Length Of the Handles (in mm) - 300 - 305 Made of drop forged steel, hardened & tempered with ground & polished faces	Standard Quaility	14		
8	DM 8	Hands file 20 cm. Second cut flat	Hand file flat 20 cm, second cut made of high Carbon Steel	Standard Quaility	2		
9	DM 9	Philips Screw Driver set of 5 pieces (100 mm to 300 mm)	Philips Screw Driver Set of 5 Piece (100mm to 300 mm.) Unbreakable cellulose acetate Transparent Handle & alloy steel Rod.	Standard Quaility	2		
10	DM 10	Pliers combination 20 cm.	Combination Plier/ Made of chrome venadium steel, Double polished head & joint Type of Insulation - Plastic Insulation/Electrical insulation Type of Cutter - Middle Cutter With Induction hardened cuttin edge Type of Gripping Surface - Serrated Shape of Handles- Bowed handle Handle Finish - Plastic coated or with plastic sleeves for non slip comfort grip Length of Hand Tool in mm 200	Standard Quaility	14		
11	DM 11	Screw driver 20cm.X 9mm. Blade	Screw driver 20 cm x 9 mm blade, Unbreakable cellulose acetate Transparent Handle & alloy steel Rod.	Standard Quaility	2		
12	DM 12	Screw driver 30 cm. X 9 mm. Blade	Screw driver 30 cm x 9 mm blade, Unbreakable cellulose acetate Transparent Handle & alloy steel Rod.	Standard Quaility	2		
13	DM 13	Scriber 15 cm	Scriber 15 cm.made of high Carbon Steel & Knurled Head	Standard Quaility	2		
14	DM 14	Spanner D.E. set of 12 pieces (6mm to 32mm)	Spanner D.E. set of 12 size 6 -32 mm (open jaw) drop forged, chromium vanadium steel .	Standard Quaility	14		
15	DM 15	Spanner, ring set of 12 metric sizes 6 to 32 mm.	Ring spanner set of 12, Metric 6 -32 mm drop forged, chromium vanadium steel .	Standard Quaility	2		
16	DM 16	Spanners socket with speed handle, T-bar, ratchet and universal upto 32 mm set of 28 pieces with box		Standard Quaility	2		
17	DM 17	Steel rule 30 cm inch and metric	Steel Ruler Scale (30 cm x 2.5 cm x 0.5 cm, Silver) Material spring Steel	Standard Quaility	2		
18	DM 18	Steel tool box with lock and key (folding type) 400x200x150 mm	Steel tool box with locks and keys Triple Decker. (folding type) 400x200x150 mm	Standard Quaility	2		

19	DM 19	Wire cutter and stripper	Type Of Joint- Lay-on joint Handle Finish- Plastic coated or with plastic sleeves, Tool Finish- Polished. Type Of Gripping Surface- Plain Shape Of Handles- Bowed handle Type Of Cutter- Middle Cutter With Electrical Insulation Type Of Insulation- Plastic Insulation Type Of Hand ToolWire stripping Plier Material - Carbon Steel Length Of Hand Tool In Mm- 154	Standard Quaility	2		
	B. TOOLS INSTRUMENTS & GENERAL SHOP OUTFITS						
20	DM 20	Adjustable spanner (pipe wrench 350 mm)	Adjustable spanner (pipe wrench 350 mm) made out of drop forged from chromium vanadium steel, serrated jaws with knurled adjusting nut Jaw capacity - 50 mm	Standard Quaility	2		
21	DM 22	Allen Key set of 12 pieces (2mm to 14mm)	Allen Key Set of 12 Pieces (2mm to14mm) made of Venedium Pentaoxide	Standard Quaility	4		
22	DM 23A	Ammeter 300A/ 60A DC with external shunt	Ammeter 300 A DC with external shunt	Standard Quaility	2		
23	DM 23B	Ammeter 300A/ 60A DC with external shunt	Ammeter 60 A DC with external shunt	Standard Quaility	2		
24	DM 29	Auto Electrical test bench	Auto Electrical test bench Table top model, Fixed 12V/24V field supply, Fitted with digital ammeter/voltmeter for easy reading, Maximum capacity of alternators that can be tested 75 amps at 12V, 70 amps at 24V, Provision for checking and testing alternators at 2 speeds,Large V/poly - V groove pulley for high speeds, Small V - pulley for low speeds, Starter free spin testing directly from battery, Alternator loading through four rotary switches, Starter short-circuit test facility available, Battery Charging facility available during the alternator testing process, Vehicle simulation of battery charging through alternator, Provided with 12V battery supply for testing a wide range of electrical components like horns, bulbs, relays child parts of starters and alternators, Instrumentation -Alternator output current - Digital Panel meter 0-100 Amps DC,Alternator output current - Digital Panel meter 0-100 V DC, Drive 220V single phase, 2HP, 1440 RPM induction motor, Protected with circuit breakers. Protection -Circuit breakers incase of sudden surges in voltage ,Fuses provided for protection of rectifiers, battery etc. Power Requirements 220V single phase, 15 Amperes, Vice Heavy duty, fast mounting for alternators and starters Dimensions 650 (l) x 725 (b) x 550 (h) mm	Standard Quaility	1		
25	DM 39B	Circlip pliers Expanding and contracting type 15cm and 20cm	Circlip pliers External Type - Straight Material Alloy Steel Length of Hand Tool in mm 200 Handle Finish Plastic coated or with plastic sleeves, Type of Gripping Surface Plain Shape of Handles Straight handle	Standard Quaility	4		
26	DM 39C	Circlip pliers Expanding and contracting type 15cm and 20cm	Circlip pliers Internal Type - Straight Material Alloy Steel Length of Hand Tool in mm 150 - 175 Handle Finish Plastic coated or with plastic sleeves, Type of Gripping Surface Plain Shape of Handles Straight handle	Standard Quaility	4		
27	DM 39D	Circlip pliers Expanding and contracting type 15cm and 20cm	Circlip pliers Internal Type - Straight Material Alloy Steel Length of Hand Tool in mm 200 Handle Finish Plastic coated or with plastic sleeves, Type of Gripping Surface Plain	Standard Quaility	4		

			Shape of Handles Straight handle				
28	DM 48B	Cylinder liner- Dry & wet liner, press fit & slidefit liner	Cylinder liner-Wet Type, slide fit liner ,made out of Cast Iron.	Standard Quaility	1		
29	DM 49	DC Ohmmeter 0 to 300 Ohms	DC Ohmmeter 0 to 300 Ohms, mid scales at 20 Ohms	Standard Quaility	2		
30	DM 58A	Electric Soldering Iron 230 V 60 watts / 230 V 25 watts	Electrician Sodering Iron 25 watts /230 volts with 1.5- 2 meter electrical cord, 16 Amp 3 pin plug, supplied with double flat nickel plated tip Tip size - 3 mm (straight)	Standard Quaility	2		
31	DM 58B	Electric Soldering Iron 230 V 60 watts / 230 V 25 watts	Electrician Sodering Iron 60 watts/230 volts with1.5- 2 meter electrical cord 16 Amp 3 pin plug, supplied with double flat nickel plated tip Tip size - 6 mm (offset)	Standard Quaility	2		
32	DM 60	Engineer's square 15 cm. Blade	Engineer's square 15 cm Blade-made out of Tool steel	Standard Quaility	4		
33	DM 65	File, Square 20 cm second cut	File square 20 cm second cut high carbon steel	Standard Quaility	4		
34	DM 73	Fuel injection pump dismantling tool kit	Fuel injection pump dismantling tool kit/Universal vice	Standard Quaility	1		
35	DM 74B	Fuel injection pump VE pump / Distributor fuel rotary pump (DPC) pumps / along with special tools and accessories.	Fuel injection pump Distributor fuel rotary pump (DPC) pumps/ along with special tools and accessories	Standard Quaility	1		
36	DM 77	Granite surface plate 1600 X 1000 with stand and cover	Granite surface plate 1600 X 1000 with stand and cover	Standard Quaility	1		
37	DM 79	Grease Gun heavy duty trolley type 10 kg capacity	Grease Gun heavy duty trolley type 10 kg capacity with hose & adoptor	Standard Quaility	1		
38	DM 80	Growler	Growler made by using very high quality raw material which ensures high durability at its user end. Armature Dia. : 20 mm to 100 mm.	Standard Quaility	2		
39	DM 82	Hammer ball peen 0.75kg	Hammer ball peen - 0.75kg Nominal Mass (Grams) - 800 Material of Handles - Teak Wood	Standard Quaility	4		
40	DM 87A	Hand operated crimping tool (i) for crimping up to 4mm and (ii) for crimping up to 10 mm	Hand operated crimping tool, for crimping up to 4mm	Standard Quaility	1		
41	DM 87B	Hand operated crimping tool (i) for crimping up to 4mm and (ii) for crimping up to 10 mm	Hand operated crimping tool, for crimping up to 10 mm	Standard Quaility	1		
42	DM 92 (B)	Injector - Pintle type	Injector - Pintle type.	Standard Quaility	4		
43	DM 97	Left cut snips 250 mm	Left cut snips 250 mm made of dropforged chrome vanadium steel, with antislip gaurd coated handle.	Standard Quaility	4		
44	DM 98A	Lifting jack screw type 3 ton capacity	Lifting jack screw type 3 ton capacity Heavy Duty Type	Standard Quaility	1		
45	DM 98B	Lifting jack screw type 5 ton capacity	Lifting jack screw type 5 ton capacity Heavy Duty Type	Standard Quaility	1		
46	DM 98C	Lifting jack screw type 20 ton capacity	Lifting jack screw type 20 ton capacity Heavy Duty Type	Standard Quaility	1		
47	DM 101	Marking out table 90X60X90 cm Cast Iron. With Stand.	Marking out table 90X60X90 cm, made of Cast Iron with Stand.	Standard Quaility	1		
48	DM 104	Oil pump for the dismantling and assembling	Oil pump for the dismantling and assembling Gear type used in automobile engine.	Standard Quaility	2		
49	DM 107	Outside Micrometer 0 to 25 mm	Outside Micrometer 0 to 25 mm made out of Nickel Chromium Steel and frame cast steel with tungusten carbide tipped anvil and fine adjustment ratchet, L.C. 0.01 mm	Standard Quaility	3		
50	DM 110	Outside Micrometer 75 to 100 mm	Outside Micrometer 75 to 100 mm made out of Nickel Chromium Steel andframe cast steel with tungusten carbide tipped anvil and fine adjustment ratchet, L.C. 0.01 mm	Standard Quaility	1		
51	DM 123B	Punch Number 4mm	Number Punch Set- 4mm , made of draw carbon steel nickel plated with chamfered	Standard Quaility	2		

			edges				
52	DM 125	Radiator cut section Down flow	Radiator cut section Down flow For demonstration purpose	Standard Quaility	1		
53	DM 128	Rivet sets snap and Dolly combined (3mm, 4mm, 6mm)	Rivet sets snap and Dolly combined (3mm, 4mm, 6mm each)	Standard Quaility	2		
54	DM 130	Scraper half round 25 cm	Scraper half round 25 cm made of High Speed Steel.	Standard Quaility	2		
55	DM 132	Scriber 15 cm.	Scriber 15 cm. made of High Speed Steel.	Standard Quaility	2		
56	DM 133	Scriber with scribing block universal	Scriber with scribing block universal made of High carbon Steel, pillar height - 230 - 305 mm & base dimension 80x30 mm	Standard Quaility	2		
57	DM 134	Set of stock and dies Metric	Set of stock and dies -Metric size Thread Size Range : M3-M12 Die Stocks -20 x 5, 20 x 7, 25 x 9, 30 x 11, 38 x 14 Material -MS, encased in a suitable rubber /plastic box	Standard Quaility	2		
58	DM 136	Sheet Metal Gauge	Sheet Metal Gauge-Metric type made of Stainless steel	Standard Quaility	2		
59	DM 137	Shear Tinmans 300 mm	Shear Tinmans 300 mm	Standard Quaility	4		
60	DM 138	Solding Copeer Hatchet type 500 gms	Solding Copeer Hatchet type 500 gms (Fire heated)	Standard Quaility	2		
61	DM 141	Spanner D.E set of 12 pieces (6mm to 32mm)	Spanner D.E. set of 12 size 6 -32 mm (open jaw) drop forged, chromium vanadium steel .	Standard Quaility	4		
62	DM 146	Spark Lighter	Spark lighter -Igniting welding blowpipe & cutting blowpipe.	Standard Quaility	2		
63	DM 148(B)	Starter motor Co-Axial Type	Starter motor Co-Axial Type (LMV) for 12 V/ 180 amp/hr, battery capacity, System - Earth return Direction of rotation - clockwise (viewed from pinion end) power o/p - 2.7 KW meshing rpm - 600 - 700 Current - 85 - 100 amps	Standard Quaility	1		
64	DM 148(C)	Starter motor Pre-engagement type	Starter motor Pre Engaement Type (LMV) for 12 V/ 180 amp/hr, battery capacity, System - Earth return Direction of rotation - clockwise (viewed from pinion end) power o/p - 2.7 KW meshing rpm - 600 - 700 Current - 85 - 100 amps	Standard Quaility	1		
65	DM 150	Steel rule 15 cm inch and metric british graduation least count 0.5mm and 1/64 inch made out of stainless steel	Nominal Size (cm) 15 Type of Steel Scale (Graduation on both edges) AA	Standard Quaility	4		
66	DM 152	Straight edge gauge 2 feet made of mild steel with hard chrome platting.	Straight edge gauge 2 feet made of mild steel hardened & chrome platting.	Standard Quaility	2		
67	DM 154	Stud extractors Set of 3	Size (mm): 6,8,10 Made of HCS Type - Spiral flute	Standard Quaility	2		
68	DM 155	Stud remover with socket Handle	Stud remover with socket Handle Range - 5/16 - 3/4" Or 7 - 19 mm size - 58 mm outside dia X 65 mm high Made of chrome alloyed steel	Standard Quaility	1		
69	DM 157	Tachometer (Counting type)	Tachometer (Counting type) Photo Tach-5 to 100,000 RPM autoranging Contact Tach- 0.5 to 20,000 RPM autoranging Surface Speed- 0.2 to 6,560 ft/min, 0.05 to 2,000 m/min Display-5 digit, 0.4" LCD with function enunciator Resolution-0.1 RPM, 0.1 ft/min, 0.01 m/min Power 4 x AA batteries Accessories RPM cone adapter, RPM funnel adapter, surface speed test wheel, reflective tape, carrying case	Standard Quaility	1		
70	DM 159	Tape and dies complete sets (5 types)	Tape and dies complete sets 40-piece metric tap and die set in plastic case types (METRIC, BA, UNF, BSW & BSF)	Standard Quaility	1		

71	DM 160	Tape and wrenches metric	Tape and wrenches metric set-Size Range 8 mm To 19 mm Set of 18 - 20 Piece approx. In suitable Box	Standard Quaility	2		
72	DM 164	Thread pitch gauge Metric	Thread pitch Gauge Metric, 23 blade, Range 0.25 to 6mm. All leaves are clearly marked with the size Features a locking device at both ends to securely lock the leaves Made of high quality polished tool steel	Standard Quaility	2		
73	DM 165	Timing Lighter	Timing Lighter For use on 12 volt ignition system with on/off trigger switch Briliant blue-white xenon tube for daylight use . 1,000,000 flash capability accurate to 8000 RPM . with automotive reverse polarity and overload protection. Sliding clamp-on inductive pick up for easy and safe hookup and 1 meter long power lead inclosed in impact resistant housing	Standard Quaility	2		
74	DM 166 B	Torque wrenches 12-68 Nm,	Torque wrenches 12-68 Nm, made of high quality chrome plated polished steel head with a double-sided, 1/2" square drive, push-through head. having soft grip handle, fitted with a micrometer type mechanism adjustment knob, delivering precise and accurate torquing. Torque wrench individually tested and calibrated to the DIN-ISO 6789 standard of +/- 4% and wrench supplied with a calibration certificate and durable storage case.	Standard Quaility	1		
75	DM 166 C	Torque wrenches 50-225 Nm	Torque wrenches 50-225 Nm made of high quality chrome plated polished steel head with a double-sided, 1/2" square drive, push-through head. having soft grip handle, fitted with a micrometer type mechanism adjustment knob, delivering precise and accurate torquing. Torque wrench individually tested and calibrated to the DIN-ISO 6789 standard of +/- 4% and wrench supplied with a calibration certificate and durable storage case.	Standard Quaility	1		
76	DM 167	Trammel 30 cm	Trammel , 265 mm Size of Beam To Scribe Circles of Diameter around 300mm -Chrome Finished -Arrangement is maintained by trans located on flat face of the beam.	Standard Quaility	2		
77	DM 168	Turbocharger cut sectional view	Tubocharger cut sectional view DEMONSTRATION MODEL OF TURBOCHARGER Model made out of full size original parts, suitably sectioned and to demonstrate the working of turbocharger & mounted on a suitable base.	Standard Quaility	1		
78	DM 169	Tyre pressure gauge with holding nipple	Tyre pressure gauge with holding nipple Size: 50 mm (2 inch) Range: 0 to 120 psi Case: M.S. drawn, protected with soft cover Easy usage , Precise measurement with flexible hose	Standard Quaility	2		
79	DM 170	Universal puller for removing pulleys, bearings	Universal puller Set for removing pulleys & bearing, 3-Jaw reversible, double ended, adjustable puller set of Set – 3”, 4”, and 6” Inch Removal Tool Kit, Constructed from forged and hardened steel for strength and longevity; Steel drive screw is cold-rolled and acme-threaded to give smooth performance even under high stress,	Standard Quaility	1		
80	DM 176	Vice grip pliers	Type Of JointSlip Joint Handle Finish-Smooth finished Shape Of Handles-Straight handle Type Of Hand Tool-Vice Grip Pliers Tool Finish-Polished. Type Of Gripping Surface-serrated Material-Alloy Steel Length Of Hand Tool -255mm jaw opening capacity 45mm	Standard Quaility	2		

81	DM 178	Wire Gauge (metric)	Tool (standard wire gauge),Will measure wire 0-36 gauge (0.19-8.23mm),size- 3.5 inches in diameter, made of tool steel	Standard Quaility	2		
82	DM 179A	Work bench 250 x 120 x 60 cm with 4 vices 12cm Jaw	Hammer ball peen - 0.75kg Nominal Mass (Grams) - 800 Material of Handles - Teak Wood	Standard Quaility	4		
83	DM 179B	vices 12cm Jaw	Bench vices sutable for 120mm jaw width with fixed base directly mounted on workbench made out of closed grain cast iron, Dimensions (L x B x H): 347 mm x 138 mm x 129 mm	Standard Quaility	16		
	C. GENERAL INSTALLATION/MACIHNERIES (GENERAL SHOP OUTFIT)						
84	DM 181	Arbor press hand operated 2 ton capacity	Arbor press hand operated 2 ton capacity Sturdy, cast-iron construction Rugged steel ram is driven by a machined pinion Base drilled for mounting on a bench or Pedestal Includes three piece bit set - 1 pointed, 1 round, and 1 square end bit, and a removable steel anvil The base is machined to hold the three bit set Precision cut steel rams and pinions for accurate operation Tables and slotted table-plates are flat and parallel to provide accurate support Diameter of work (minimum)- 11-3/8 inches Capacity over table (minimum)- 9 Inch Size of ram face (minimum) 1-1/4 x 13 inches Ram bore (minimum) 1/2 inch Height (minimum) 16-1/4 inches Base size (minimum) 6-3/8 x 17 inches	Standard Quaility	1		
85	DM 182	Automotive exhaust 5 gas analyzer (petrol & Diesel) or Diesel Smokemeter	Automotive exhaust 5 gas analyzer (petrol & Diesel) with complete accessories Main Function 1. Used to measure the concentration of HC, CO, CO2, O2, NO in the Automobile Exhaust Gas. 2. Two kinds of test function: General and Two-speed idle 3. Full English Menu Operation 4. LCD (liquid crystal) screen displays 5. Auto-zeroing 6. Automatic calculation and show the air-fuel ratio λ 7. Equipped with RS232 digital serial communication interface to facilitate networking 8. Optional function: rotate speed and oil temperature measurement 9. Equipped with functions of Plate number and time display 10. Can store and search 500 groups of data, built-in printer 11. Measurable with liquefied gas (LG), liquefied natural gas (LNG) and gasoline and other alternative fuel vehicles. Technical Parameters :- Measurement Range CO 0~10×10-2 (%)vol CO2 0~20×10-2 (%)vol HC 0~10000×10-6 (ppm)vol O2 0~25×10-2 (%)vol NO 0~40000×10-6 (ppm)vol Indication Error Absolute error, Relative error CO ±0.06×10-2(%)vol ±5% CO2 ±0.5×10-2(%)vol ±5% HC ±12×10-6 vol ±5% O2 ±0.1×10-2(%)vol ±5% NO ±25×10-6 vol ±4% Preheating Time 10 min.(3 min. warm-up for fast measurement) Environmental condition Temperature -5~40 centigrade Humidity no more than 85% Atmospheric pressure 86~106kPa Power AC 220V±10%; 50 Hz±1Hz	Standard Quaility	1		
86	DM 192B	Hydraulic jack HI-LIFT type - 5 ton capacity	Hydraulic jack HI-LIFT type - 5 ton capacity	Standard	1		

				Quaility			
87	DM 193	Liquid penetrant Inspection kit (set)-Aerosol Type	Liquid penetrant Inspection kit (set)-Aerosol Type		1		
88	DM 194	Multi Scan Tool with oscilloscope	Multi Scan Tool with oscilloscope Display : TFT color display (320 x 240 dpi) Operating temperature : 0 to 60°c (32 to 140 f°) Storage temperature : -20 to 70°c (-4 to 158 f°) Length\width\height : 147 mm (5.79")\96.4 mm (3.80")\37 mm (1.46") with Probe wire	Standard Quaility	1		
89	DM 196	Pneumatic rivet gun with standard accessories	Pneumatic rivet gun with accessories 3X Rivet Gun with Powder Coat Finish & EXCELLENT Teasing Trigger! (3X Rivet Gun has a 3/16" aluminum rivet capacity, 7-5/16" long, weighs 2-1/3 lbs.) Shank Cupped Rivet Sets (3/32",1/8",5/32",& 3/16") Shank Flush (Flat) Rivet Set "Quick Change" Retaining Spring "Beehive" Retaining Spring 2oz Bottle of Air Tool Oil Click Style Brass Air Regulator Standard Male Air Fitting Highly Polished Bucking Bars (Including most popular "Heel&Toe") Sturdy Fitted Storage Case	Standard Quaility	2		
90	DM 199	Trolley type portable air compressor single cylinder with 45 liters capacity Air Tank, along with accessories & with working pressure 6.5 kg/sq.cm.	Trolley type portable air compressor single cylinder with 45 liters capacity Air Tank Horse Power (HP)- 1 HP Compressor Technology - Reciprocating Cooling Method - Air Cooled Size of Receiver (in L)- 45 litre tank Compressor Mounting Configuration - Trolley Mounted Maximum Flow Rate (in cfm) - 200-400 cfm, along with accessories & with working pressure - 6.5 kg/sq cm Air receiver hydraulic tested with automatic unloader, Tank Pressure Gauge & safety valve Nominal voltage 230 V/ 50 Hz with power cord length upto 2 m	Standard Quaility	1		
91	DM 202	Working Condition of Diesel Engine-CRDI-4 stroke Engine Assembly with fault simulation board	Working Condition of Diesel Engine-CRDI-4 stroke Cylinder : 6, Side valve arrangement type Type of engine- Vertical inline, water cooled Bore x Stroke: 104 x 133 min Displacement: 4-5 L No. of Cylinders: 6 (Inline FIP) Power Rating: 180-210 hp @ 2200 rpm Emission: Non Emission Compression Ratio: 17.5:1 Aspiration: Turbocharged Fuel Injection: Mechanical, Inline No.of Valves/Cyl: 2 Valve Engine fault scanner with simulated provision of trouble shooting with complete accessories	Standard Quaility	1		
92	DM 203	Cut section of 4/6 cylinder diesel engine with moving condition to show momentum of internal parts	Cut section model of Four Cylinder Diesel engine (Inline Type, common rail diesel injection system. Fitted on sturdy movabe trolley. Special colour coding for different System and Mechanism for study purpose.	Standard Quaility	1		

93	DM 204	Fuel injection test bench for calibration of fuel pump	Fuel Injection Test Bench Specification: Drive - Hydraulic drive Cylinder - six cylinder Main Motor - up to 5 HP (single phase) Tachometre - Electric Digital 0.9999 RPM Speed Ranges Stage 1 - 0 to 1000 stage 2 - 100 to 3000 RPM in both side Fuel Motor Supply - 1HP DC Power Suply - 12v & 24V MPC unit with Air Compressor A necessary standard attachment and required tools. Aplication : Capable of testingdiesel fuel injection pump singe to multi cylinder (CRDI, EDC -Euro 3,Inline pump, Distributor Rotary Pump)	Standard Quaility	1		
94	DM 205	Electrical test bench	Auto Electrical test bench Table top model, Fixed 12V/24V field supply, Fitted with digital ammeter/voltmeter for easy reading, Maximum capacity of alternators that can be tested 75 amps at 12V, 70 amps at 24V, Provision for checking and testing alternators at 2 speeds,Large V/poly - V groove pulley for high speeds, Small V - pulley for low speeds, Starter free spin testing directly from battery, Alternator loading through four rotary switches, Starter short-circuit test facility available, Battery Charging facility available during the alternator testing process, Vehicle simulation of battery charging through alternator, Provided with 12V battery supply for testing a wide range of electrical components like horns, bulbs, relays child parts of starters and alternators, Instrumentation -Alternator output current - Digital Panel meter 0-100 Amps DC,Alternator output current - Digital Panel meter 0-100 V DC, Drive 220V single phase, 2HP, 1440 RPM induction motor, Protected with circuit breakers. Protection -Circuit breakers incase of sudden surges in voltage ,Fuses provided for protection of rectifiers, battery etc. Power Requirements 220V single phase, 15 Amperes, Vice Heavy duty, fast mounting for alternators and starters Dimensions 650 (l) x 725 (b) x 550 (h) mm	Standard Quaility	1		
95	DM 206	Diesel engine 6 cylinder in running condition	**Diesel engine 6 cylinder in running condition** **Engine** Type - 6 cylinder, inline, water cooled Diesel Engine Compression ratio - 17.6:1 To 19:1 Firing order - 1-5-3-6-2-4 Max. Output - 83.5 to 89 KW Capacity - 5500 -6000 cc **Fuel Injection system** Inline **Electrical System** System Voltage - 12 V Battery - 12 v , 120 to 180 Ah capacity Alternater Capacity - 35 - 65 Amps	Standard Quaility	1		
	D. Cosumable						
96	DM 207	Battery- SMF	Battery- SMF	Standard Quaility	-		
97	DM 208	Brake fluids	Brake fluids	Standard Quaility	-		
98	DM 209	Chalk, Prussian blue	Chalk, Prussian blue	Standard Quaility	-		
99	DM 210	Chemical compound for fasteners	Chemical compound for fasteners	Standard Quaility	-		
100	DM 211	Diesel	Diesel	Standard Quaility	-		
101	DM 212	Different type gasket material	Different type gasket material	Standard Quaility	-		
102	DM 213	Different type of oil seal	Different type of oil seal	Standard Quaility	-		
103	DM 214	Drill Twist (assorted)	Drill Twist (assorted)	Standard	-		

				Quaility			
104	DM 215	Emery paper - 36–60 grit , 80–120	Emery paper - 36–60 grit , 80–120	Standard Quaility	-		
105	DM 216	Engine oil & Engine coolant	Engine oil & Engine coolant	Standard Quaility	-		
106	DM 217	Gear oils	Gear oils	Standard Quaility	-		
107	DM 218	Gloves for Welding (Leather and Asbestos)	Leather Hand Gloves 14 inches approximately 14 inches. ISI MARKED - Yes	Standard Quaility	5		
108	DM 219	Hacksaw blade (consumable)	Hacksaw blade (consumable)	Standard Quaility	-		
109	DM 221	Holders, lamp teakwood boards, plug sockets,	Holders, lamp teakwood boards, plug sockets,	Standard Quaility	-		
110	DM 223	Lapping abrasives	Lapping abrasives	Standard Quaility	-		
111	DM 225	Petrol	Petrol	Standard Quaility	-		
112	DM 226	Power steering oil	Power steering oil	Standard Quaility	-		
113	DM 227	Radiator Coolants	Radiator Coolants	Standard Quaility	-		
114	DM 228	Safety glasses	Safety glasses	Standard Quaility	-		

(दर शब्दों में लिखे रू. - .....)

Trade: Electrician

Sno	Name of the Tool & Equipments and Specification AS Per Tools List	Detail Specification	Make	Quantity	Rate Per Item	Total Amount
	A. TRAINEES TOOL KIT (16 + 1)					
	(For each additional unit trainees tool kit sl. 1-12 is required additionally)					
1	Measuring Steel Tape	5 meter	Standard Quaility	08 Nos.		
2	Combination Plier Insulated	200 mm	Standard Quaility	08 Nos.		
3	Screw Driver Insulated	4mm X 150 mm, Diamond Head	Standard Quaility	42 Nos.		
4	Screw Driver Insulated	6mm X 150 mm	Standard Quaility	08 Nos.		
5	Electrician screw driver thin stem insulated handle	4mm X 100 mm	Standard Quaility	08 Nos.		
6	Heavy Duty Screw Driver insulated	5mm X 200 mm	Standard Quaility	08 Nos.		
7	Electrician Screw Driver thin stem insulated handle	4mm X 250 mm	Standard Quaility	08 Nos.		
8	Punch Centre	9mm X 150 mm	Standard Quaility	08 Nos.		
9	Knife Double Bladed Electrician	100 mm	Standard Quaility	08 Nos.		
10	Neon Tester	500 V	Standard Quaility	42 Nos.		
11	Hammer, cross peen with handle	250 grams	Standard Quaility	08 Nos.		
B. SHOP TOOLS & EQUIPMENT – For 2 (1+1) units no additional items are required						
(i) List of Tools & Accessories						
12	Spanner Adjustable drop forged, SS	300mm	Standard Quaility	2 Nos.		
13	Chisel firmer with wooden Handle	6 mm X 200 mm	Standard Quaility	2 Nos.		
14	Scissors blade, SS	150 mm	Standard Quaility	2 Nos.		
15	Crimping Tool	1.5 sq mm to 16 sq mm	Standard Quaility	2 Nos.		
16		16 sq mm to 95 sq mm	Standard Quaility	2 Nos.		
17	Wire Cutter and Stripper	150 mm	Standard Quaility	2 Nos.		
18	Pliers long nose insulated	150 mm	Standard Quaility	4 Nos.		
19	Gauge, wire imperial stainlees steel marked in SWG & mm	Wire Gauge - Metric	Standard Quaility	2 Nos.		
20	Contactor & auxiliary contacts	3 phase, 415 Volt, 25 Amp with 2 NO and 2 NC	Standard Quaility	2 Nos. each		
21	Contactor & auxiliary contacts.	3 phase, 415 volt, 32 Amp with 2 NO and 2 NC	Standard Quaility	1 No. each		
22	Limit Switch	Limit Switch, Liver operated 2A 500v, 2-contacts	Standard Quaility	1 no		
23	Rotary Switch	16 A/440v	Standard Quaility	1 no		
24	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	Standard Quaility	1 No. each		

25	Pin Type, shackle type, egg type & suspension type insulators including hardware fitting		Standard Quaility	2 Nos. each		
26	Hydrometer		Standard Quaility	2 Nos.		
27	Load Bank (Lamp / heater Type)	6 KW, 3Ph	Standard Quaility	1 No.		
28	Laboratory Type Induction Coil	1000 W	Standard Quaility	1 No.		
29	Thermometer Digital	0° C - 150° C	Standard Quaility	1 No.		
30	Miniature Breaker	16 amp	Standard Quaility	1 Nos.		
31	Earth Plate	60cm X 60cm X 3.15mm Copper Plate 60cm X 60cm X 6mm GI Plate	Standard Quaility	1 Each		
32	Earth Electrode	Primary Electrode 2100x28x3.25mm Secondary Cu Strip 20x5mm	Standard Quaility	1 No.		
33	MCCB	100Amps, Triple pole	Standard Quaility	1 No.		
34	ELCB and RCCB	25Amps, double pole and 25Amps, double pole, IΔn 30 mA	Standard Quaility	1 Each		
35	Fuses	HRC Glass Rewire Type	Standard Quaility	4 Each		
36	Capacitors	Electrolytic Ceramic Polyester film Variable Dual run	Standard Quaility	2 Each		
37	Various Electronic components	Resistors, Diode, Transistor, UJT, FET, SCR, DIAC, TRAIC, IGBT, Small transformer etc.	Standard Quaility	As required		
38	Various Lamps	Halogen Incandescent Lamp Fluorescent tube HP mercury vapor Lamp High-pressure sodium Lamp Low-pressure sodium Lamp LED	Standard Quaility	1 Each		
39	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 each	Standard Quaility	1 Each		
40	Bus bar with brackets	1 mtr each	Standard Quaility	3 Nos.		
41	Electrician Helmet	Yellow Colour	Standard Quaility	2 Nos.		
42	RCC Pole with accessories (MS angle iron, 'C' clamp, stay insulator etc.) and materials	6 Mtr	Standard Quaility	1 No.		
43	Safety Belt	Standard quality	Standard Quaility	2 Nos.		
44			Standard Quaility			
45	Digital Multi Meter	DC 200mv -1000v,0 – 10A & AC 200mv- 750v , 0-10A, resistance 0-20 MΩ and 3 1/2 digit	Standard Quaility	12 Nos.		
(ii) List of Equipment						

46	A.C. Voltmeter M.I. analog, portable box type housed in Bakelite case	Multi range 75 V - 150V - 300V - 600V	Standard Quaility	3 Nos.		
47	Milli Voltmeter centre zero analog, portable box type housed in Bakelite case	100 – 0 – 100 mV	Standard Quaility	1 no		
48	Ammeter MC analog, portable box type housed in Bakelite case	0 - 500 mA, 0-5 A, 0-25 A	Standard Quaility	2 Nos. each		
49	AC Ammeter MI, analog, portable box type housed in Bakelite case	0 - 1 A, 0-5 A, 0-25 A	Standard Quaility	2 Nos. each		
50	Kilo Wattmeter Analog	0-1.5-3KW, pressure coil rating- 240v/440v, current rating- 5A/10A Analoge, portable type Housed in bakelite case	Standard Quaility	1 no		
51	Digital Wattmeter	230 V, 1 KW, 50 Hz	Standard Quaility	2 Nos.		
52	A.C. Energy Meter	Single Phase, 10 A, 240 V induction type	Standard Quaility	1 no		
53	A.C. Energy Meter	Three Phase, 15 A , 440 V induction type	Standard Quaility	1 no		
54	Power Factor Meter Digital	440 V, 20 A, Three Phase portable box type	Standard Quaility	2 Nos.		
55	Frequency Meter	45 to 55 Hz	Standard Quaility	1 no		
56	Magnetic Flux Meter	0-500 tesla	Standard Quaility	1 no		
57	Lux meter	lux meter LCD read out 0.05 to 7000 lumens with battery.	Standard Quaility	1 no		
58	Tachometer	Analog Type - 10000 RPM	Standard Quaility	1 no		
59	Tachometer	Digital Photo Sensor Type - 10000 RPM	Standard Quaility	Nill		
60	Tong Tester / Clamp Meter	0 - 100 A (Digital Type)	Standard Quaility	2 Nos.		
61	Megger	Analog - 500 V	Standard Quaility	1 no		
62	3- point D.C. Starter	For 2.5 KW DC motor	Standard Quaility	1 no		
63	4- point D.C. Starter	For 2.5 KW DC motor	Standard Quaility	1 no		
64	Wheat Stone Bridge with galvanometer and battery		Standard Quaility	1 no		
65	Single Phase Variable Auto Transformer	0 - 270 V, 10Amp (Air cooled)	Standard Quaility	1 no		
66	Phase Sequence Indicator	3 Phase, 415 V	Standard Quaility	2 Nos.		
67	Growler	230 V, 50 Hz, Single Phase, Adjustable jaws, Testing armature with ampere meter and testing probes.	Standard Quaility	Nill		
68	AC Starters: - a. Resistance type starter b. Direct on line 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.	Standard Quaility	1 No. each		
69	Oscilloscope Dual Trace	20 MHz	Standard Quaility	Nill		

70	Function Generator	2 to 200 KHz, Sine, Square, Triangular 220 V, 50 Hz, Single Phase	Standard Quaility	Nill		
71	Temperature controlled Soldering Iron	50 Watt, 230 Volt	Standard Quaility	2 Nos.		
72	Discrete Component Trainer		Standard Quaility	1 No.		
73	Voltage Stabilizer	AC Input - 150 - 250 V, 600 VA AC Output - 240 V, 10 A	Standard Quaility	1 No.		
74	DC Power Supply	0 - 30 V, 5 A	Standard Quaility	1 No.		
75	Battery Charger	0 - 6 - 9 - 12 - 24 - 48 V, 30amp	Standard Quaility	1 No.		
76	Current Transformer	415 V, 50Hz, CT Ratio 25 / 5 A, 5VA	Standard Quaility	2 Nos.		
77	Potential Transformer	415 V, 50Hz, PT Ratio, 440V/110V, 10VA	Standard Quaility	2 Nos.		
78	Solar panel with Battery	18 Watt	Standard Quaility	1 Set		
79	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, set complete with case iron and plate, fixing bolts, foundation bolts and flexible coupling. Induction Motor rating: 7.5 HP, 415V, 50 cycles, 3 phase. DC Shunt Generator rating: 5 KW, 440V (Output voltage varies 110-440v)	Standard Quaility	1 No.		
C. Shop Machinery - For 4 (2+2) units no additional items are required						
80	DC Series Motor coupled with spring balance load	2.5 KW, 220 Volts	Standard Quaility	1 No.		
81	Single phase Transformer, core type, air cooled	1 KVA , 240/415 V, 50 Hz	Standard Quaility	3 Nos.		
82	Three phase transformer, shell type oil cooled with Delta/ Star	3 KVA , 415/240 V, 50 Hz 2	Standard Quaility	2 Nos.		
83	A.C. Series type Motor	1 HP, 240 V, 50 Hz	Standard Quaility	1 No.		
84	Manual Motor coil Winding Machine	With step arbor	Standard Quaility	1 No.		
85	Ceiling fan coil Winding Machine	250V, 50 Hz, 1-Φ, with speed control	Standard Quaility	1 No.		
86	Primary current injection set	220V, 50 Hz, 1-Φ, output current - 200 A (min) with timer	Standard Quaility	1 No.		

(दर शब्दों में लिखे रू. - .....)

Trade : Fitter

Sno	Name of the Tool & Equipments and Specification AS Per Tools List	Detail Specification	Make	Quantity	Rate Per Item	Total Amount
1	Vernier caliper	150 mm	Standard Quaility	3 nos.		
2	Drill twist straight shank	3 mm to 12 mm by 0.5 mm H.S.S.	Standard Quaility	1set		
3	Drill twist Taper shank	8 mm to 20 mm by 0.5 mm H.S.S.	Standard Quaility	1set		
4	File triangular smooth	200 mm	Standard Quaility	7 nos.		
5	File square second cut	250 mm	Standard Quaility	6 nos.		
6	File triangular second cut.	200 mm	Standard Quaility	2 nos.		
7	File flat second cut safe edge.	300 mm	Standard Quaility	10 nos.		
8	File flat bastard	200 mm	Standard Quaility	2 nos.		
9	File flat bastard	300 mm	Standard Quaility	2 nos.		
10	File round bastard.	250 mm	Standard Quaility	10 nos.		
11	File hand second cut.	150 mm	Standard Quaility	2 nos.		
12	Hand Reamer set (Tapar pin straight flute)	Nominal Dia 6, 8, 10, 12, 16mm	Standard Quaility	1 set		
14	Scraper flat	150 mm	Standard Quaility	2		
15	Scraper triangular	150 mm	Standard Quaility	2		
16	Scraper half round	150 mm	Standard Quaility	2		
17	Chisel cold cross cut & diamond point.	9 mm X 150 mm	Standard Quaility	2		
18	Chisel cold flat	9 mm X 100 mm	Standard Quaility	2		
19	Chisel cold round noze.	9 mm X 100 mm	Standard Quaility	2		
20	Sleeve drill Morse	No. 0 - 1, 1 - 2, 2 - 3, 3 - 4, 4 - 5	Standard Quaility	1 Set 3 - 4, 4 - 5		
21	Pow er tools for fastening	Capacity 10-18mm	Standard Quaility	1 no.		
22	Different Profile gauges (Plate type) - For demonstration	Metric standard	Standard Quaility	4 nos		
23	Knurling tool (Diamond, straight & Diagonal)		Standard Quaility	1 each		
24	Inde xable boring bar with inserts	1" shank	Standard Quaility	4 nos.		
25	Machine maintenance mannual for Lathe, Pedestal grinder, Drill machine, Power saw		Standard Quaility	1 no.		
26	Tem perature gauge	Range 0 - 150°C	Standard Quaility	1 each		
27	Dowel pin (straight)	Dia. -1" Length -4" (Mat: Stainless Steel)	Standard Quaility	1 each		
28	Standard Tap screws	M3, M4, M5, M6, M8, M10, M12, M14, M16	Standard Quaility	1 each		
29	Lapp ing plate	Dia. -6"	Standard Quaility	2 each		
30	Medium carbon Heat treated alloy steel Metric Studs and bolts along with nuts (for display) of standard length (May be manufactured in-house)	M6, M8, M10, M12, M14, M16 (Standard)	Standard Quaility	2 each		
31	Caps screws	M6, M8, M10, M12	Standard Quaility	2 each		

32	Drill gauges	Letter drill gauge (A to Z) , Number drill gauge (1 to 60) , Metric drill gauge (1.5mm to 12.5mm, 30 holes)	Standard Quaility	2 nos.		
33	Cast Iron Globe Valve (Flanged type)	150NB, Class# 150 Flange:ANSI125-B16.1	Standard Quaility	2 nos.		
34	C.I. Sluice / Gate valve (flanged type)	150NB, Class# 150 Flange:ANSI125-B16.1	Standard Quaility	2 nos.		
35	Stop cock	25NB (2-way, Threaded end)	Standard Quaility	2 nos.		
36	M.S . Pipe	150NB, Sch.40, ERW, IS:1239	Standard Quaility	as required		
37	Slip- on Forged steel Flange	150NB, ANSI-B16.5, Class#150	Standard Quaility	4 nos		
38	Bolt & Nut with washer (May be manufactured in-house)	M20x2.5x90Long (part thread - Hex. Head)	Standard Quaility	20 nos.		
39	Jigs & Fixture (sample)-For demonstration (May be manufactured in-house)			1 no.		
40	M. S . Shaft (May be manufactured in-house)	Bright M.S. round bar f80mm, 600mm long, Stepped ff0mm on 300mm one end	Standard Quaility	2 nos.		
41	Pulle ys (for V-belt or Flat belt)	to fit on 50mm dia. Shaft with key slot	Standard Quaility	1 no.		
42	Steel keys (May be manufactured in-house)	to fit with keyslot of shaft & pulley	Standard Quaility	2 nos.		
43	Dam aged old spur gear	to fit 50mm dia. Shaft	Standard Quaility	2 nos.		
44	V-be lt and Flat belt	to fit on pulley	Standard Quaility	1 each		
45	Pack ing gasket	PTFE gasket roll small size	Standard Quaility	1 no.		
46	Washer, clutch, keys, jib, cotter & circlip	minimum 25mm size, carbon steel material	Standard Quaility	2 each		
47	Hollow punch	Straight Shank Hollow Punch Sets 5-12mm	Standard Quaility	1 set		
48	Drill Drift (May be manufactured in-house)	200mm hardened and black finish	Standard Quaility	1 no.		
49	Bearing different types	each type of diameter 25mm (min.)	Standard Quaility	1 each		
50	Lifting sling	8mm Nominal Dia. Single leg sling	Standard Quaility	2 nos.		
51	Bearing extractor	Universal gear puller 2 or 3 jaws adjustable	Standard Quaility	1 no.		
52	Pulle y extractor	Universal gear puller 2 or 3 jaws adjustable	Standard Quaility	1 no.		
53	Lathe tools bit.	6 mm x 75 mm HSS/Carbide	Standard Quaility	1 no.		
54	Compressor unit	suitable for Pressure: 8 bar, Delivery: 50 lpm (or more), Reservoir capacity: 24 Litres (or more), 230V, 50 Hz, with pressure regulator and water separator	Standard Quaility	1 No.		
55	Pneumatic Trainer Kit, each consisting of the following matching components and accessories:		Standard Quaility	1 Sets.		
56	I. Single acting cylinder	Max. stroke length 50 mm, Bore dia 20 mm	Standard Quaility	1 No.		
57	II. Double acting cylinder	Max. stroke length 100 mm, Bore dia 20 mm, magnetic type	Standard Quaility	1 No.		
58	III. 3/2-way valve	manually-actuated, Normally Closed	Standard Quaility	2 Nos.		
59	IV. 3/2-way valve	pneumatically-actuated, spring return	Standard Quaility	1 No.		

60	V. One-way flow control valve		Standard Quaility	2 Nos.		
61	VI. 5/2-way valve	with manually-operated switch	Standard Quaility	1 No.		
62	VII. 5/2-way valve	pneumatically-actuated, spring return	Standard Quaility	1 No.		
63	VIII. 5/2-way pneumatic actuated valve	double pilot	Standard Quaility	1 No.		
64	IX. 3/2-way roller lever valve	direct actuation Normally Closed	Standard Quaility	2 Nos.		
65	X. Shuttle valve (OR)		Standard Quaility	1 No.		
66	XI. Two-pressure valve (AND)		Standard Quaility	1 No.		
67	XII. Pressure gauge	0-16 bar	Standard Quaility	1 No.		
68	XIII. Manifold with self-closing	NRV, 6-way	Standard Quaility	1 No.		
69	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	Standard Quaility	1 No.		
70	XV. Relay station	with 3 ralays each with 4 contact sets (3NO+1NC or Change-over type), 5 A	Standard Quaility	1 No.		
71	XVI. 3/2-way single solenoid valve	with LED	Standard Quaility	1 No.		
72	XVII. 5/2-way single solenoid valve	with manual override and LED	Standard Quaility	1 No.		
73	XVIII. 5/2-way double solenoid valve	with manual override and LED	Standard Quaility	1 No.		
74	XIX. Power supply unit,	Input voltage 85 – 265 V AC, Output voltage: 24 V DC, Output current: max. 4.5 A, short-circuit-proof.	Standard Quaility	1 No.		
75	XX. Profile plate,	1100x700 mm, with carriers, mounting frames and mounting accessories (To be fitted onto the pneumatic workstation)	Standard Quaility	1 Sets.		
76	Pneumatic Workstation with 40 square mm aluminium profile legs, wooden work surface, and one pedestal drawer unit having 5 drawers, each with handles and individual cks, on metallic full panel drawer slide:	(1) Work Table – Size(Approx.) L1200mmXW900mmXH900mm, with four castor wheels including two lockable wheels at the front side, (2) Drawer – Size (Approx.) – L460mmxW495mm xH158mm each, and overall size of Drawer unit (Approx.) - L470mmxW495mmxH825mm and (3) Drawer slide height (Approx.) 85mm.	Standard Quaility	1 No.		
77	Carrier for mounting components, such as PB & relay boxes.		Standard Quaility	1 No.		
78	Cut section model for pneumatic components		Standard Quaility	1 Sets.		
79	Hydraulic Trainer Kit, each consisting of the following matching components and accessories:		Standard Quaility	1 Sets.		
80	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.	Standard Quaility	1 No.		
81	II. Pressure relief valve	pilot-operated	Standard Quaility	1 No.		

82	III. Drip tray, steel	size 1160 mm x 760 mm.	Standard Quaility	1 No.		
83	IV. Pressure Gauge	Glycerin-damped, Indication range of: 0 – 100 bar	Standard Quaility	1 No.		
84	V. Four-Way distributor	with five ports, equipped with a pressure gauge	Standard Quaility	1 No.		
85	VI. Double acting hydraulic cylinder	with a control cam, Piston diameter16 mm, Piston rod diameter10 mm, Stroke length 200 mm.	Standard Quaility	1 No.		
86	VII. Suitable Weight	for vertical loading of hydraulic cylinder	Standard Quaility	1 No.		
87	VIII. Mounting kit for weight	for realizing pulling and pushing load	Standard Quaility	1 No.		
88	IX. 3/2-way directional control valve	with hand lever actuation.	Standard Quaility	1 No.		
89	X. 4/2-way directional control valve	with hand lever actuation.	Standard Quaility	1 No.		
90	XI. 4/3-way directional control valve	closed-centre position, with hand lever actuation.	Standard Quaility	1 No.		
91	XII. Non-return valve.		Standard Quaility	1 No.		
92	XIII. Pilot-operated check valve	pilot to open.	Standard Quaility	1 No.		
93	XIV. One-way flow control valve	with integrated check valve.	Standard Quaility	1 No.		
94	XV. T-Connector with self sealing coupling nipples (2 Nos.) and quick coupling socket (1 No.).		Standard Quaility	2 Nos.		
95	XVI. Profile plate,	Anodised Aluminium, 1100x700 mm, with carriers, mounting frames and mounting accessories (To be fitted onto the Hydraulic workstation)	Standard Quaility	1 set		
96	Hydraulic Workstation with 40 square mm aluminium profile legs, wooden work surface, and one pedestal drawer unit having 5 drawers, each with handles and individual locks, on metallic full panel drawer slide:	(1) Work Table – Size(Approx.) L1200mmXW900mmXH900mm, with four castor wheels including two lockable wheels at the front side, (2) Drawer – Size (Approx.) – L460mmxW495mm xH158mm each, and overall size of Drawer unit (Approx.) - L470mmxW495mmxH825mm and (3) Drawer slide height (Approx.) 85mm.	Standard Quaility	1 No		
97	Cut-section models for hydraulic components		Standard Quaility	1 Sets.		

(दर शब्दों में लिखे रू. - .....)

अतः उक्त सामाग्री की आपूर्ति करने हेतु निर्माताओं तथा उनके अधिकृत विक्रेताओं/विक्रेताओं से मोहरबंद निविदायें आमंत्रित की जाती है। इच्छुक निविदाकर्ता **कार्यालय संस्थान प्रबंधन समिति औद्योगिक प्रशिक्षण संस्था.परपोड़ी जिला-बेमेतरा (छ0ग0)** के लेखा शाखा में **3000 रू. (रू. तीन हजार मात्र) नगद जमा कर कार्यालयीन दिवस में निविदा प्रपत्र, विस्तृत शर्तें एवं अन्य विवरण प्राप्त कर सकते हैं। निविदा की शर्तें राज्य स्तरीय वेबसाइट www.cgstate.gov.in एवं जिला स्तरीय वेबसाइट www-bemetara.gov.in** तथा **www.itiparpodi.com** में देखे जा सकते हैं

निविदा प्रपत्र बिक्री की अंतिम तिथि - 18/02/2020- समय 12:00 बजे दोपहर।
निविदा जमा करने की अंतिम तिथि - 18/02/2020- समय 01:00 बजे दोपहर।
निविदा खोलने की तिथि - 18/02/2020- समय 02:00 बजे दोपहर।

स्थानः- **कार्यालय संस्थान प्रबंधन समिति औद्योगिक प्रशिक्षण संस्था.परपोड़ी जिला-बेमेतरा (छ0ग0)**

प्राचार्य/सचिव
संस्थान प्रबंधन समिति
औद्योगिक प्रशिक्षण संस्था
परपोड़ी जिला बेमेतरा(छ.ग.)

निविदा एवं शर्तें

कार्यालयीन निविदा सूचना क्रमांकः- क्रमांकः-औप्रस/पर/IMC/भण्डार/क्रय/निविदा/2020/ **67** /परपोड़ी, दिनांक **27/01/2020** के अनुक्रम में **कार्यालय संस्थान प्रबंधन समिति औद्योगिक प्रशिक्षण संस्था.परपोड़ी जिला-बेमेतरा (छ0ग0)** हेतु व्यवसाय कोपा, वेल्डर एवं मैकेनिक डीजल, विद्युतकार एवं फिटर हेतु औजार एवं उपकरण की आपूर्ति करने हेतु निर्माताओं तथा उनके अधिकृत विक्रेताओं/विक्रेताओं से मोहरबंद निविदायें निविदा लिफाफों में दिनांक 18/02/2020 समय 01:00 बजे अपरान्ह तक आमंत्रित की जाती है।

निविदा की शर्तें निम्नानुसार हैः-

1. निविदादाता को बंद लिफाफा(अ, ब एवं स) में निविदा प्रस्तुत करना होगा।
2. अ. लिफाफा "अ" में शासन के वाणिज्यिकर विभाग से पंजीयन प्रमाण पत्र, सामाग्रियों के निर्माताओं/अधिकृत विक्रेताओं/विक्रेताओं का पंजीयन प्रमाण पत्र, पिछले वर्ष का वाणिज्यिकर विभाग से "चूकता प्रमाण पत्र" पेन नंबर की छायाप्रति, पिछले तीन वर्ष का आयकर रिटर्न के अभिप्रमाणित प्रति एवं अमानत राशि का ड्राफ्ट प्रस्तुत करना अनिवार्य होगा।
   ब. पूर्व तीन वर्षों का आडिट किया हुआ बैलेंस सीट पूर्व हस्ताक्षरित जमा करना अनिवार्य है।
3. लिफाफा "ब" में दर सूची प्रस्तुत करना होगा। लिफाफा "अ" और "ब" को बंदकर लिफाफा "स" में प्रस्तुत करना होगा।
4. निविदा का लिफाफा "अ" पहले खोला जावेगा, जिसमें निविदा के निहित शर्तों को पूर्ण करने एवं वैध पाये जाने पर ही लिफाफा "ब" खोला जावेगा।
5. सभी "कर" सम्मिलित करके निविदा दर प्रस्तुत करना होगा, निविदा में उल्लेखित दर के अतिरिक्त अन्य कोई स्वत्व देय नहीं होगा।
6. एक निविदाकार का एक ही निविदा स्वीकार किया जावेगा।
7. निविदादाता को अमानत राशि के रूप में 100000 रू. (शब्दों में रू. एक लाख मात्र), (प्रत्येक व्यवसाय हेतु अलग-अलग) का किसी राष्ट्रीयकृत बैंक से जारी डिमांड ड्राफ्ट जो कि PRINCIPAL/SECRETARY, INSTITUTE MANAGEMENT COMMITTTEE OF IND.TRG.INST. PARPODI ITI के पक्ष में जारी हुआ हो (प्रत्येक व्यवसाय हेतु अलग-अलग) को लिफाफा "अ" के साथ प्रस्तुत करना अनिवार्य है।
8. निविदा मोहरबंद लिफाफे में दिनांक 18/02/2020 अपरान्ह 01:00 बजे तक कार्यालयीन दिवस में प्रस्तुत किया जा सकता है।
9. निविदा पंजीकृत डाक द्वारा प्रेषित की जा सकती है। निविदा खोलने के दिनांक व समय से पूर्व संस्था में पहूंच जाना चाहिये। निर्धारित दिनांक व समय पर नहीं पहूंचने पर निविदा शामिल नहीं किया जाएगा।
9. निविदादाता को निविदा स्वीकृत होने की स्थिति में तत्काल रू. 50 (पचास रू.) के स्टाम्प पर सामाग्री आपूर्ति करने बावत सहमति पत्र/अनुबंध संपादित करना होगा तथा सामाग्री के आपूर्ति क्रय आदेश जारी होने के दिनांक से 20 दिवस के अंदर क्रयादेश में निर्धारित किये गये स्थल तक पहूंचा कर देना होगा। निर्धारित अवधि में सामाग्री प्रदाय नहीं करने पर भुगतान राशि में 0.5 प्रतिशत प्रति सप्ताह या अधिकतम 5 प्रतिशत प्रतिमाह की अनुपातिक कटौती की जावेगी अथवा क्रय आदेश निरस्त किया जाकर अमानत राशि आईएमसी आईटीआई परपोड़ी के पक्ष में राजसात किया जा सकेगा।
10. निविदादाता फर्म द्वारा प्रदाय की गई सामाग्रियों का भौतिक सत्यापन आईएमसी की क्रय समिति/गुणवत्ता समिति द्वारा दिये गये भौतिक सत्यापन गुणवत्ता प्रमाण पत्र के बाद ही भुगतान की कार्यवाही की जावेगी। भौतिक सत्यापन में मिलान नहीं होने पर नियमानुसार कटौती की जावेगी या निरस्त किया जावेगा।
11. आपूर्ति होने पर सामाग्री के कमी, क्षति या हानि के लिए कार्यालय/विभाग जिम्मेदार नहीं रहेगा।
12. सामाग्री की एक वर्ष की गुणवत्ता/संचालन की गारण्टी आपूर्तिकर्ता के लेटर हेड में देनी होगी।
13. मशीन, औजार उपकरण का एक नमूना सामाग्री प्रदान करने के पूर्व संस्था में दिखाना होगा।
14. निविदादाता को सामाग्री के साथ दो प्रतियों में देयक **प्राचार्य/सचिव, संस्थान प्रबंधन समिति औद्योगिक प्रशिक्षण संस्था.परपोड़ी जिला-बेमेतरा (छ0ग0)** को प्रस्तुत करना होगा, जिसका परीक्षण उपरान्त नियमानुसार राशि का भुगतान किया जावेगा।
15. CD, PDF File, या Excel File में निविदा प्रस्तुत करना होगा।
16. निविदा प्रस्तुत करने पर यह माना जाएगा कि निविदादाता को निविदा की सभी शर्तें मान्य व स्वीकार्य है।
17. निविदा खोलने, निरस्त करने का सर्वाधिकार समिति के पास सुरक्षित रहेगा।
18. निविदा में यह आवश्यक नहीं है कि दर्शित सभी सामाग्रियों का क्रय किया जावेगा।
19. इस निविदा में छ.ग. शासन द्वारा जारी सत्यनिष्ठा संधि लागू होगी।
20. विवाद की स्थिति में जिला कलेक्टर बेमेतरा का निर्णय अंतिम व सभी पक्षों को मान्य होगा।

प्राचार्य/सचिव
संस्थान प्रबंधन समिति
औद्योगिक प्रशिक्षण संस्था
परपोडी जिला बेमेतरा(छ.ग.)

विषयः- व्यवसाय कोपा, वेल्डर एवं मैकेनिक डीजल, विद्युतकार एवं फिटर हेतु औजार एवं उपकरण की आपूर्ति करने बावत्

प्रपत्र भाग "अ" तकनीकी आर्हता एवं धरोहर राशि

01.	निविदादाता फर्म का नाम एवं पता	:	.....
			.....
02.	निविदादाता का नाम	:	.....
			.....
	मोबाईल नंबर	:	.....
03.	पेन नंबर	:	.....
05	निविदादाता फर्म का पंजीयन क्रमांक एवं दिनांक	:	.....
06	यदि फर्म उत्पादन करता है तो उद्योग विभाग का पंजीयन क्रमांक/दिनांक	:	.....
07	निविदादाता का व्यवपारिक संस्थान जहां से सामाग्री प्रदान किया जाएगा	:	.....
08	वाणिज्यकर विभाग का पंजीयन क्रमांक/दिनांक	:	.....
09	आयकर चूकता प्रमाण पत्र की छायाप्रति(वर्ष, 2016-17 एवं 2017-18, 2018-19)	:	.....
10	वाणिज्यकर चूकता प्रमाण पत्र की छायाप्रति (वर्ष 2018-19)	:	.....
11	धरोहर की राशि का धनादेश क्रमांक, दिनांक, बैंक का नाम (मूलतः संलग्न करें)	:	.....
12	पूर्व तीन वर्षों का आडिट किया हुआ बैलेंस सीट पूर्व हस्ताक्षरित	:	.....

निविदादाता का नाम - .....

हस्ताक्षर सहित -.....

नोटः- उपरोक्त कंडिका 03 से 10 तक के सभी प्रमाण पत्र की छायाप्रति स्वसत्यापित संलग्न करना अनिवार्य होगा तथा कंडिका 10 धरोहर राशि का धनादेश मूलतः संलग्न करें। उपरोक्त प्रपत्र में किसी प्रकार के उपरी लेखन होने की दशा में निविदादाता स्वयं जवाबदार होगा।

विषयः- व्यवसाय कोपा, वेल्डर, मैकेनिक डीजल, विद्युतकार एवं फिटर हेतु औजार एवं उपकरण की आपूर्ति करने बावत्

<u>प्रपत्र भाग "ब" दर संबंधी विवरण</u>

1. निविदादाता संस्था का पूरा नाम एवं पता : .....
2. निविदादाता का नाम एवं मोबाईल/फोननंबर नंबर : .....

Trade:- COPA

Sl. No.	ITEM CODE	ITEM NAME	Specification	Make	Qty	Rate Per Item	Total Amount
A. Trainees Tools/ Equipment							
1	COPA 8	Laser Printer Colour A4 Size	**LASER COLOR PRINTER :-** **Print Technology- Laser** **Type of printing** - Colour **Paper Size** - A4, Letter, Legal **Print Speed (A4)** - Mono (PPM) Upto 16 **Print Speed (A4)** - Color (PPM) Upto 16 **Print Resolution (Dpi)** - 600 x 600 dpi or Higher **Memory (MB)** - 128 MB NAND Flash or Higher **USB Port** - Hi-Speed USB 2.0 (USB Cable Included) **Paper Tray Capacity** - 150(Mininmum) **Number of Paper Trays** - 2 **Compatible Operating Systems -**Windows 10, 8.1, 8, 7 (32-bit or 64-bit), Vista, Windows XP SP3 or higher. **On site OEM warranty** :- 1 Year	Standard Quaility	1		
2	COPA 13	LCD Projector 3000 lumens or higher	**<u>LCD PROJECTOR -</u>** LCD PROJECTOR WITH REMOTE CONTROL Native Resolution - 800 x 600 (SVGA) or Higher Brightness - 3000 Lumens or Higher Contrast Ratio - (Minimum) (pixels) 15000:1 Aspect Ratio - 4:3/16:9 Keystone Correction Automatic & Manual Both Minimum Life of projection Lamp (In Normal Mode) 20,000 (Hours) Video Compatibility - PAL/NTSE Inbuilt Speaker Ports & Connectors - HDMI In, Audio In, Audio Out, Video In, USB Port , VGA In Power Supply - 210V-240V, 50/60 Hz **Additional** - Wall Mount for Projector Warranty - 1 Year	Standard Quaility	1		
3	COPA 14	Projector Screen matte(antiglare) screen	**Matte Antiglare Screen -** Size - 8' x 6' With Stand Aspect Ratio - 4:3 & 16:9 Type - Antiglare For Text/Multimedia Projection	Standard Quaility	1		

4	COPA 15	Online UPS 3KVA	**On-Line UPS 3.0 KVA**Rating in KVA (KVA) - 3.0 KVATechnology - inbuilt isolation transformerInput Power - single phase 160V - 260V sinewave,50Hz/60HzOutput power - Single phase 230V +/-1% Puresinewave 50 HzDC Voltage 72 V (Battery inside)Charge Current 1.5 AmpsBackup time (Minutes) - 30Overload & Short Circuit ProtectionWarranty for UPS - 2 YearWarranty for Battery - 1 YearOther - Cabling 5 meters for input and out put WithParalleling kit for synchronising Stands for Battery shall be Provided alongwith UPS Installation - Required	Standard Quaility	2		
5	COPA 21	Headphone & mic. set Wired	**Headphone & mic set** Headphone Driver Unit - 40mm, Microphone Driver Unit - 9.0 x 7.0mm (approximate) Headphone frequency response: 20Hz – 20kHz Sensitivity - 110dB (Maximum) , Impedance - 32Ω Output power - 100mW, Controls - Volume control Input/Output plugs - Headphone - 3.5mm Stereo and, Microphone - 3.5mm Stereo Compitability - Product is Compatible with PC / Laptop & Other Audio Devices.	Standard Quaility	5		
6	COPA 22	Sound System 2:1	**Sound System 2.1 Channel -** Speaker Type - 02 Way Speaker/ 2.1 channel Amplification Method - Passive Speaker Power Handling (Watt) - 25 Watt rms (Min) or Above Input Ports - 2 Channel RCA/3.5mm Audio Jack/USB input Frequency Response (Hz) 20-20,000 Hz AC Power Input 230V ~ 50/60 Hz	Standard Quaility	1		
7	COPA 24	Patch Panel 24 Port	**Patch Panel 24 Ports -** AT 6U/UTP No. of ports (RJ 45) - 24 Ports Loaded Cable Management - (Rear side) Material of patch panel - Steel Modular plug fitting (RJ 45) - Individual ports for loaded Dust protection for information outlet	Standard Quaility	2		
8	COPA 26	Punching Tool for punching RJ 45 socket with cat 5 cable	Punching Tool for punching RJ 45 socket with cat 5 cable	Standard Quaility	5		
B. Software							
9	COPA 27	MS Office 2010 (professional) or the latest version available at the time of procurement	**MS Office 2019 Professional** for Academic Purpose Life time license Validity with 01 No Media Support for Each ITI (Against Each 11 License One Media DVD) Certificate of License Shall be provided. (**Must Include - Word, Excel, Powerpoint, Access, Outlook**)	Standard Quaility	11 Licenses		
10	COPA 28	Antivirus for clients / workstations in profile validity of an year or more which should be renewed upon expiry	Antivirus/ Toatl security for – clients / workstations in profile with validity of three year.	Standard Quaility	11 Licenses		
11	COPA 29	Open Office or equivalent Latest version	Open Office or equivalent., Open source software	Standard Quaility	11		
12	COPA 30	GIMP / IrfanView Image editor or equivalent Latest version	GIMP / Irfan View Image editor or equivalent, Open source software	Standard Quaility	11		
13	COPA 31	LINUX OS Latest version	LINUX OS, Open source software	Standard Quaility	11		

14	COPA 32	Web Authoring tool WYSIWYG Web Authoring tool-Dreamweaver or Open Source tools like Kompozer, FrontPage or similar tools along with FTP tools for ex. Filezilla etc.	WYSIWYG Web Authoring tool-Dreamweaver or Opensource tools likeKompozer, FrontPageor similar tools along with FTP tools for ex.Filezillaetc., Proprietary /Open source software	Standard Quaility	11		
15	COPA 33	Tally ERP 9 or Latest	Tally ERP 9 or Latest (Multi User) GST Ready	Standard Quaility	11 Licenses		
16	COPA 34	E Commerce Simulation Software Latest version	E Commerce Simulation Software, Open source software	Standard Quaility	11		
17	COPA 35	Web Server HTTP Web server / XAMPP or any other similar server	Web Server : Any HTTP Web server / XAMPP or any other similar server, Open source software	Standard Quaility	11		
C. List Of Other Items							
18	COPA 43	Air conditioner Split type 1.5 tons	**Air conditioner Split type 1.5 tons -** Type of Air conditioner High wall Split AC with Remote control unit Technology of AC - Inverter Based Technology Nominal cooling capacity in Ton / (kcal/hr) 1.5 Ton / 4500 kcal/hr Coil Material - 100 % Copper Power Supply (Volt/Phase/Hz.) 220-240/Single/50Eco-friendly refrigerant - YES Hot & Cold Cooling, Air Blower with auto air swing(Up-Down) BEE Star Rating - 3 Star(Minimum) WARRANTY Warranty on Machine 1 year Warranty on Compressor 5 year INSTALLATION Installation Required.	Standard Quaility	3		
19	COPA 45	White Board minimum 4X6 feet	**WHITE BOARD -** White / Writing cum Projection Screening / Dry Marker Ink **Size** - 180 L(mm) x 120 (W) mm Normal White board for Classroom Aluminium Beat at corner and 02 Hooks at Top.	Standard Quaility	1		
20	COPA 47	Fire Extinguisher CO2 2 KG	**Fire Extinguisher CO2 2KG -** **Temperature range**: -30ºC to +60ºC. supplied complete with mounting bracket and plastic horn. **Discharge range**: minimum 4 meters. **Discharge time:** minimum 11 seconds. ISO & CE Certified Clear Instruction Label & No for Maintenance	Standard Quaility	2		
21	COPA 48	Fire Buckets Standard size	**Fire Buckets Set Standard Size With Stands -** **No of Buckets** - 04 Nos **Color -** Red Material SS Surface treatment Painted **Application** - Industrial (Workshop)	Standard Quaility	1 Set		

(दर शब्दों में लिखे रू. - .....)

Trade: Welder

S. No.	Item Code	Name of the Tool & Equipments and Specification AS Per Tools List	Detail Specification	Make	Quantity	Rate Per Item	Total Amount
1	W 1	Welding helmet fiber	Welding helmet fiber-light weight,adjustable head frame with coloured glass.(DIN 11 A &12 A).	Standard Quaility	8		
2	W 2	Welding hand shield fiber	Welding hand shield fiber - light weight,consealed handle with coloured glass.(DIN 11 A &12 A)	Standard Quaility	8		
3	W 3	Chipping hammer with metal handle 250 Grams	Chipping hammer 250 Grams-made of high carbon steel with spring handle.	Standard Quaility	42		
4	W 4	Chisel cold flat 19 mm x 150 mm	Chisel cold flat 19 mm x 150 mm , Made of Hardened And Tempered High Carbon steel	Standard Quaility	42		
5	W 5	Centre punch 9 mm x 127 mm	Centre punch 9 mm x 127 mm , Made of Hardened And Tempered High Carbon steel	Standard Quaility	42		
6	W 6	Dividers 200 mm	Dividers 200 mm , Made of Hardened And Tempered High Carbon steel	Standard Quaility	8		
7	W 7	Stainless steel Rule 300 mm	Stainles steel scale Nominal Size - 30 cm, Having Marking of inch, cm & mm. Material - spring Steel Type of Steel Scale (Graduation on both edges) - AA	Standard Quaility	42		
8	W 8	Scriber 150 mm double point	Scriber 150 mm double point-knrulled body made of high carbon steel.	Standard Quaility	8		
9	W 9	Flat Tongs 350 mm long	Flat Tongs 350mm long- made of mild steel.	Standard Quaility	8		
10	W 10	Hack saw frame fixed 300 mm	Hacksaw frame fixed 300 mm with wooden handle. Refer to IS - 5169	Standard Quaility	8		
11	W 11	File half round bastard 300 mm	File half round bastard 300 mm-made of high carbon steel with wooden handle.	Standard Quaility	8		
12	W 12	File flat 350 mm bastard	File flat 350 mm bastard-made of high carbon steel with wooden handle.	Standard Quaility	8		
13	W 13	Hammer Ball pane 1 kg with handle	Hammer ball pane 1 kg with wooden handle Refer to IS - 841	Standard Quaility	42		
14	W 14	Tip Cleaner	Tip Cleaner standard cleaning wire size (No 1 - 5)	Standard Quaility	42		
15	W 15	Try Square 6"	Try square 6", having lenght of blade 6" & having marking on blade in inches, cm & mm, Made of Hardened steel	Standard Quaility	8		
B. Instruments and General Shop Outfit- For 2(1+1) units no additional items are required							
16	W 16	Spindle key	Spindle key - opening cylinder valve made of drop forged steel	Standard Quaility	4		
17	W 17A	Screw Driver 300 mm blade	Screw Driver 300 mm Length of Blade in 300 mm Made of High Grade Silicon Magneaz Steel, Handle is made from High Grade CA Plastic Refer to IS - 444	Standard Quaility	1		
18	W 17B	Screw Driver 250 mm blade	Screw Driver 250 mm Length of Blade in 250 mm Made of High Grade Silicon Magneaz Steel, Handle is made from High Grade CA Plastic Refer to IS - 444	Standard Quaility	1		
19	W 18	Number Punch 6 mm	Number punch 6 mm (set), Hardened steel suitable to punch soft metal and mild steel , number punch set of 0 to 9, face 6mm & length 100mm	Standard Quaility	2		
20	W 21	Universal Weld measuring gauge	Universal Weld measuring gauge for measuring of weld bead in flat and fillet joints available in	Standard Quaility	2		

			standard size.				
21	W 29	Oxygen Gas Pressure regulator double stage	Oxygen Double stage Regulator Pressure High Pressure Stage of Pressure Regulation Double Stage Relief Valve Pressure (Bar) 2 Outlet Pressure to be controlled,Max (Bar) 10 Inlet Pressure to the Regulator,Max (Bar) 300 Material for Pressure Regulators (Must Conforms to ISO 9539) Brass Body.	Standard Quaility	2		
22	W 30	Acetylene Gas Pressure regulator double stage	Acetylene Gas Pressure regulator double stage brass body, heavy duty, inlet pressure 20 bar, max. outlet pressure 1.5 bar and imported safety pressure gauge design for 300 bar service pressure.	Standard Quaility	2		
23	W 31	CO2 Gas Pressure regulator with flow meter	CO_2 Gas Pressure regulator, with flow meter,brass body, heavy duty double stage regulator suitable for inlet pressure 230 bar and imported safety pressure gauge design for 300 bar service pressure.	Standard Quaility	2		
24	W 32	Argon Gas pressure regulator with flow meter	Argon Gas Pressure regulator, with flow meter,brass body, heavy duty, double stage regulator suitable for inlet pressure 230 bar and imported safety pressure gauge design for 300 bar service pressure.	Standard Quaility	2		
25	W 33	Metal rack 182 cm x 152 cm x 45 cm	Metal Rack 182 cm x 152 cm x 45 cm , made of M.S. Angle Iron(35x 35 x3 mm) & M S Sheet Thickness 1.2 mm	Standard Quaility	1		
26	W 34	First Aid Box	First Aid box	Standard Quaility	1		
27	W 35	Steel Lockers with 8 pigeon holes	**PIGEON HOLE CABINET(INDUSTRIAL LOKCER CBINET) (12 LOCKERS)** **Overall Size** - 1800(H) x 900(W) x 380(D) mm **Body** - 1.0mm CR Sheet As per IS Standard **Handle** - Nickel/Chrome plated with key hole & Label Holder on each Locker. **Material Details** - The Locker cabinet having **12 Locker** Shall Saprate locking system in each locker & Legs at the bottom.	Standard Quaility	2		
28	W 36	Steel Almirah/Cupboard	**STEEL ALMIRAH (Big Size) With one Locker :-** **Overall Size -** 2500 (H) x 1200 (W) x 500 (D) made of 1.0 mm CR sheet (Including Padestal) **Materials** - The CR sheet used shall be of prime quality as per IS Standard and thickness for 1.0 mm. **No of Shelves** - 04 (Minimum), Each sshelf shalll be formed such the edges are bend two times at right angle first bend 30 mm and second bend 8 mm. **Door Stiffener** - Inside frame and its full height in top hat section width 100mm. **Lever rod** - Shall be of MS 12 mm round/square bar or 10 mm bright bar. **Brackets** - Shall be made of 1.6 mm CR Sheet, riveted on each side of hinges. **Locking** - For locking brass body Godrej type cabinet lock or cabinet lock 6 leaver die cast zinc alloy body of size 65 (H) x 50 (W) mm fitted on four screws, keys in duplicate with key rings shall provided. Metallic key cover electroplated nickel/chrome on front side of the door shall be provided. **Door Lock** - for door die cast chrome plated handle fitted wih washer and double nut. **Leg Height** - 420 (W) x 254(H) shall be provided	Standard Quaility	2		
29	W 37	Black board and easel with stands	Black board size - 1200 x 1800 mm with Easel stand.	Standard Quaility	1		
GENERAL SHOP OUTFIT							

30	W 48	Spot gas cutting machine 15 KVA with all accessories	Electrode force in KN 150 kiloNewton Weld current in ampere 8 kiloAmpère Electrical rating in KVA 20 Input supply 3 phase Squeeze time in second 10 second Thickness of material which can be welded in mm 2.8 millimeter Continuous power rating at 100 % duty cycle in KVA 7.5 Vertical arm movement Hydraulic Diameter of electrode in mm 10 millimeter Refer to IS-4804	Standard Quaility	1		
31	W 49	Portable gas cutting machine Capable of cutting Straight & Circular with all accessories	Maximum Current (in amp) 25 Ampère Cutting capability Straight Cut, Bevel Cut, Circle Cut all Size of tip for Blow pipes in mm 3 Cutting capacity (in millimeters) 35 millimeter Cutting speed range (in mm per min) 200-400 Max. Cutting width (in mm) 0-500 Portable under guided (pug Machine) with line and circle attachment	Standard Quaility	1		
32	W 55	Trolley for cylinder (H.P. Unit)	Trolley for cylinder (H.P. Unit) made of M.S. Pipe , with rubber wheel for Two cylinder (Oxygen & Acetylene)	Standard Quaility	2		
33	W 56	Hand shearing machine capacity cut 6 mm sheet and flats	Hand shearing machine capacity up to 6 mm sheets & flats blade made by High Carbon Steel	Standard Quaility	1		
34	W 60B	Bench vice of 150 mm jaw opening	Bench Vice 150 mm jaws openig made out of closed grain cast iron box nut spendal and screw, made by steel.	Standard Quaility	16		
35	W 61	Oxy Acetylene Gas cutting blow pipe	Welding high pressure cutting torch capacity in mm 300 Pressure Rating in kgf/cm 2 - 2.5 kilogram-force Length of Blow Pipe in mm 550 millimeter(Heavy Duty) Refer to IS-7653	Standard Quaility	2		
36	W 62A	Oxygen Cylinders	Oxygen, Cylinders *	Standard Quaility	2		
37	W 62B	Acetylene Cylinders	Acetylene Cylinders *	Standard Quaility	2		
38	W 63	CO2 cylinder	CO2 cylinder *	Standard Quaility	2		
39	W 64	Argon gas cylinder	Argon gas cylinder *	Standard Quaility	2		
40	W 65A	Anvil 12 sq. Inches working area with stand	Anvil 12 sq. inches working area of weight 100 Kgs Refer to IS-510	Standard Quaility	1		
41	W 65B	Anvil stand for 12 sq. Inches working area	Anvil stand made by mild steel	Standard Quaility	1		
42	W 67	Die penetrant testing kit	Die penetrant testing kit- with penetrant, cleanner, developer- 500 ml, aerosol can. (set)	Standard Quaility	1		
43	W 70	Fire buckets with stands	**Fire Buckets Set Standard Size With Stands -** **No of Buckets** - 04 Nos **Color -** Red Material SS Surface treatment Painted **Application** - Industrial (Workshop)	Standard Quaility	4		
44	W 72	Suitable Gas cutting Table	Suitable Gas cutting table- Made of angle iron frame 40x10mm, size 5'x3'x2.5' (in LxWxH) with stool size 12"x12"x8" made of 1"squer pipe wall thickness 16 SWG, stool top 3/4" laminated board.	Standard Quaility	1		
45	W 73	Welding Simulators for SMAW/GTAW/GMAW	Welding Simulators for SMAW/GTAW/GMAW	Standard Quaility	1		

CONSUMABLE							
46	W 74	Leather Hand Gloves 14"	ISI MARKED Leather Hand Gloves 14 inches (approximate) made form chrome leather ISI MARKED	Standard Quaility	17		
47	W 75	Cotton hand Gloves 8"	Cotton hand gloves good quality. Material - 80 percentage wool and 20 percentage Nylon Base Fabric - Plain Knitted on palm &Finger and 2 X 2 rib on cuff. Overall Length - 24 cm for small	Standard Quaility	17		
48	W 76	Leather Apron Leather	Length of Apron 120 centimeter Width of Apron 65 centimeter GSM of Apron material (gm per sq mtrs) 2.2 Material of Apron Leather - soft chrom leather	Standard Quaility	17		
49	W 77A	S.S. Wire brush 5 rows	Material of Stainless Steel Overall width of Brush (mm) 50 Mass of Total Bristle on Brush (gm) 20 Overall Length of Brush with handle (mm) **150** Diameter of Bristle (mm) 0.2 Length of Bristle (mm) 30	Standard Quaility	17		
50	W 77B	S.S. Wire brush 3 rows	Material of Stainless Steel Overall width of Brush (mm) 50 Mass of Total Bristle on Brush (gm) 20 Overall Length of Brush with handle (mm) **120** Diameter of Bristle (mm) 0.2 Length of Bristle (mm) 30	Standard Quaility	17		
51	W 78	Leather hand sleeves 16"	Leather hand sleeves made of chrome leather, size 16"	Standard Quaility	17		
52	W 86	Arc welding plain glass 108 mm x 82 mm x 3 mm	Arc welding plain glass 108 mm x 82 mm x 3 mm	Standard Quaility	68		
53	W 95	LCD Projector	**LCD PROJECTOR -** LCD PROJECTOR WITH REMOTE CONTROL Native Resolution - 800 x 600 (SVGA) or Higher Brightness - 3000 Lumens or Higher Contrast Ratio - (Minimum) (pixels) 15000:1 Aspect Ratio - 4:3/16:9 Keystone Correction Automatic & Manual Both Minimum Life of projection Lamp (In Normal Mode) 20,000 (Hours) Video Compatibility - PAL/NTSE Inbuilt Speaker Ports & Connectors - HDMI In, Audio In, Audio Out, Video In, USB Port , VGA In Power Supply - 210V-240V, 50/60 Hz **Additional** - Wall Mount for Projector Warranty - 1 Year	Standard Quaility	1		
54	W 95	LCD Projector screen	**Matte Antiglare Screen -** Size - 8' x 6' With Stand Aspect Ratio - 4:3 & 16:9 Type - Antiglare For Text/Multimedia Projection	Standard Quaility	1		
55	W 96	Welding Process, Inspection & codes DVD/ CDs	Welding Process, Inspection & Codes DVD/CDs set	Standard Quaility	1		

(दर शब्दों में लिखे रू. - .....)

Trade : Mechanic Diesel

S.No.	Item Code	Item Name	Detailed Specification	Make	Qty	Rate Per Item	Total Amount
1	DM 1	Allen Key set of 12 pieces (2mm to 14mm)	Allen Key, Set of 12 Pieces (2mm to 14mm) Made Venedium Pentaoxide/ Fully hardened carbon steel	Standard Quaility	2		
2	DM 2	Caliper inside 15 cm Spring	Inside Caliper 15 cm Spring joint made of High Quality Polished steel with ground finished points	Standard Quaility	2		
3	DM 3	Calipers outside 15 cm spring	Outside Calipers 15 cm Spring joint made of High Quality Polished steel with ground finished points	Standard Quaility	2		
4	DM 4	Center Punch 10 mm. Dia. x 100 mm.	Centre punch 10 mm Dia. X 100 mm. made of H.C.S.	Standard Quaility	2		
5	DM 5	Dividers 15 cm Spring	Dividers spring type 15cm, made of H.C.S.	Standard Quaility	2		
6	DM 6	Electrician Screw Driver 250mm	SCREW DRIVER 250 MM (6.0X250) MM-FLAT TIP Type of Screw Drivers Engineers Screwdrivers Screw Driver Point Size or Tip Size (a x b) in mm x mm 0.8 x 6.0 Length of Blade in mm 250	Standard Quaility	14		
7	DM 7	Hammer ball peen 0.5 kg with handle	BALL PEEN HAMMER WITH HANDLE Nominal Mass (Grams) 500 Type of Hammers - ball peen hammer Handles Requirement - Yes Material of Handles - Wood Name of the wood -Timber Hickory wood Length Of the Handles (in mm) - 300 - 305 Made of drop forged steel, hardened & tempered with ground & polished faces	Standard Quaility	14		
8	DM 8	Hands file 20 cm. Second cut flat	Hand file flat 20 cm, second cut made of high Carbon Steel	Standard Quaility	2		
9	DM 9	Philips Screw Driver set of 5 pieces (100 mm to 300 mm)	Philips Screw Driver Set of 5 Piece (100mm to 300 mm.) Unbreakable cellulose acetate Transparent Handle & alloy steel Rod.	Standard Quaility	2		
10	DM 10	Pliers combination 20 cm.	Combination Plier/ Made of chrome venadium steel, Double polished head & joint Type of Insulation - Plastic Insulation/Electrical insulation Type of Cutter - Middle Cutter With Induction hardened cuttin edge Type of Gripping Surface - Serrated Shape of Handles- Bowed handle Handle Finish - Plastic coated or with plastic sleeves for non slip comfort grip Length of Hand Tool in mm 200	Standard Quaility	14		
11	DM 11	Screw driver 20cm.X 9mm. Blade	Screw driver 20 cm x 9 mm blade, Unbreakable cellulose acetate Transparent Handle & alloy steel Rod.	Standard Quaility	2		
12	DM 12	Screw driver 30 cm. X 9 mm. Blade	Screw driver 30 cm x 9 mm blade, Unbreakable cellulose acetate Transparent Handle & alloy steel Rod.	Standard Quaility	2		
13	DM 13	Scriber 15 cm	Scriber 15 cm.made of high Carbon Steel & Knurled Head	Standard Quaility	2		
14	DM 14	Spanner D.E. set of 12 pieces (6mm to 32mm)	Spanner D.E. set of 12 size 6 -32 mm (open jaw) drop forged, chromium vanadium steel .	Standard Quaility	14		
15	DM 15	Spanner, ring set of 12 metric sizes 6 to 32 mm.	Ring spanner set of 12, Metric 6 -32 mm drop forged, chromium vanadium steel .	Standard Quaility	2		
16	DM 16	Spanners socket with speed handle, T-bar, ratchet and universal upto 32 mm set of 28 pieces with box		Standard Quaility	2		
17	DM 17	Steel rule 30 cm inch and metric	Steel Ruler Scale (30 cm x 2.5 cm x 0.5 cm, Silver) Material spring Steel	Standard Quaility	2		
18	DM 18	Steel tool box with lock and key (folding type) 400x200x150 mm	Steel tool box with locks and keys Triple Decker. (folding type) 400x200x150 mm	Standard Quaility	2		

19	DM 19	Wire cutter and stripper	Type Of Joint- Lay-on joint Handle Finish- Plastic coated or with plastic sleeves, Tool Finish- Polished. Type Of Gripping Surface- Plain Shape Of Handles- Bowed handle Type Of Cutter- Middle Cutter With Electrical Insulation Type Of Insulation- Plastic Insulation Type Of Hand ToolWire stripping Plier Material - Carbon Steel Length Of Hand Tool In Mm- 154	Standard Quaility	2		
	B. TOOLS INSTRUMENTS & GENERAL SHOP OUTFITS						
20	DM 20	Adjustable spanner (pipe wrench 350 mm)	Adjustable spanner (pipe wrench 350 mm) made out of drop forged from chromium vanadium steel, serrated jaws with knurled adjusting nut Jaw capacity - 50 mm	Standard Quaility	2		
21	DM 22	Allen Key set of 12 pieces (2mm to 14mm)	Allen Key Set of 12 Pieces (2mm to14mm) made of Venedium Pentaoxide	Standard Quaility	4		
22	DM 23A	Ammeter 300A/ 60A DC with external shunt	Ammeter 300 A DC with external shunt	Standard Quaility	2		
23	DM 23B	Ammeter 300A/ 60A DC with external shunt	Ammeter 60 A DC with external shunt	Standard Quaility	2		
24	DM 29	Auto Electrical test bench	Auto Electrical test bench Table top model, Fixed 12V/24V field supply, Fitted with digital ammeter/voltmeter for easy reading, Maximum capacity of alternators that can be tested 75 amps at 12V, 70 amps at 24V, Provision for checking and testing alternators at 2 speeds,Large V/poly - V groove pulley for high speeds, Small V - pulley for low speeds, Starter free spin testing directly from battery, Alternator loading through four rotary switches, Starter short-circuit test facility available, Battery Charging facility available during the alternator testing process, Vehicle simulation of battery charging through alternator, Provided with 12V battery supply for testing a wide range of electrical components like horns, bulbs, relays child parts of starters and alternators, Instrumentation -Alternator output current - Digital Panel meter 0-100 Amps DC,Alternator output current - Digital Panel meter 0-100 V DC, Drive 220V single phase, 2HP, 1440 RPM induction motor, Protected with circuit breakers. Protection -Circuit breakers incase of sudden surges in voltage ,Fuses provided for protection of rectifiers, battery etc. Power Requirements 220V single phase, 15 Amperes, Vice Heavy duty, fast mounting for alternators and starters Dimensions 650 (l) x 725 (b) x 550 (h) mm	Standard Quaility	1		
25	DM 39B	Circlip pliers Expanding and contracting type 15cm and 20cm	Circlip pliers External Type - Straight Material Alloy Steel Length of Hand Tool in mm 200 Handle Finish Plastic coated or with plastic sleeves, Type of Gripping Surface Plain Shape of Handles Straight handle	Standard Quaility	4		
26	DM 39C	Circlip pliers Expanding and contracting type 15cm and 20cm	Circlip pliers Internal Type - Straight Material Alloy Steel Length of Hand Tool in mm 150 - 175 Handle Finish Plastic coated or with plastic sleeves, Type of Gripping Surface Plain Shape of Handles Straight handle	Standard Quaility	4		
27	DM 39D	Circlip pliers Expanding and contracting type 15cm and 20cm	Circlip pliers Internal Type - Straight Material Alloy Steel Length of Hand Tool in mm 200 Handle Finish Plastic coated or with plastic sleeves, Type of Gripping Surface Plain	Standard Quaility	4		

			Shape of Handles Straight handle				
28	DM 48B	Cylinder liner- Dry & wet liner, press fit & slidefit liner	Cylinder liner-Wet Type, slide fit liner ,made out of Cast Iron.	Standard Quaility	1		
29	DM 49	DC Ohmmeter 0 to 300 Ohms	DC Ohmmeter 0 to 300 Ohms, mid scales at 20 Ohms	Standard Quaility	2		
30	DM 58A	Electric Soldering Iron 230 V 60 watts / 230 V 25 watts	Electrician Sodering Iron 25 watts /230 volts with 1.5- 2 meter electrical cord, 16 Amp 3 pin plug, supplied with double flat nickel plated tip Tip size - 3 mm (straight)	Standard Quaility	2		
31	DM 58B	Electric Soldering Iron 230 V 60 watts / 230 V 25 watts	Electrician Sodering Iron 60 watts/230 volts with1.5- 2 meter electrical cord 16 Amp 3 pin plug, supplied with double flat nickel plated tip Tip size - 6 mm (offset)	Standard Quaility	2		
32	DM 60	Engineer's square 15 cm. Blade	Engineer's square 15 cm Blade-made out of Tool steel	Standard Quaility	4		
33	DM 65	File, Square 20 cm second cut	File square 20 cm second cut high carbon steel	Standard Quaility	4		
34	DM 73	Fuel injection pump dismantling tool kit	Fuel injection pump dismantling tool kit/Universal vice	Standard Quaility	1		
35	DM 74B	Fuel injection pump VE pump / Distributor fuel rotary pump (DPC) pumps / along with special tools and accessories.	Fuel injection pump Distributor fuel rotary pump (DPC) pumps/ along with special tools and accessories	Standard Quaility	1		
36	DM 77	Granite surface plate 1600 X 1000 with stand and cover	Granite surface plate 1600 X 1000 with stand and cover	Standard Quaility	1		
37	DM 79	Grease Gun heavy duty trolley type 10 kg capacity	Grease Gun heavy duty trolley type 10 kg capacity with hose & adoptor	Standard Quaility	1		
38	DM 80	Growler	Growler made by using very high quality raw material which ensures high durability at its user end. Armature Dia. : 20 mm to 100 mm.	Standard Quaility	2		
39	DM 82	Hammer ball peen 0.75kg	Hammer ball peen - 0.75kg Nominal Mass (Grams) - 800 Material of Handles - Teak Wood	Standard Quaility	4		
40	DM 87A	Hand operated crimping tool (i) for crimping up to 4mm and (ii) for crimping up to 10 mm	Hand operated crimping tool, for crimping up to 4mm	Standard Quaility	1		
41	DM 87B	Hand operated crimping tool (i) for crimping up to 4mm and (ii) for crimping up to 10 mm	Hand operated crimping tool, for crimping up to 10 mm	Standard Quaility	1		
42	DM 92 (B)	Injector - Pintle type	Injector - Pintle type.	Standard Quaility	4		
43	DM 97	Left cut snips 250 mm	Left cut snips 250 mm made of dropforged chrome vanadium steel, with antislip gaurd coated handle.	Standard Quaility	4		
44	DM 98A	Lifting jack screw type 3 ton capacity	Lifting jack screw type 3 ton capacity Heavy Duty Type	Standard Quaility	1		
45	DM 98B	Lifting jack screw type 5 ton capacity	Lifting jack screw type 5 ton capacity Heavy Duty Type	Standard Quaility	1		
46	DM 98C	Lifting jack screw type 20 ton capacity	Lifting jack screw type 20 ton capacity Heavy Duty Type	Standard Quaility	1		
47	DM 101	Marking out table 90X60X90 cm Cast Iron. With Stand.	Marking out table 90X60X90 cm, made of Cast Iron with Stand.	Standard Quaility	1		
48	DM 104	Oil pump for the dismantling and assembling	Oil pump for the dismantling and assembling Gear type used in automobile engine.	Standard Quaility	2		
49	DM 107	Outside Micrometer 0 to 25 mm	Outside Micrometer 0 to 25 mm made out of Nickel Chromium Steel and frame cast steel with tungusten carbide tipped anvil and fine adjustment ratchet, L.C. 0.01 mm	Standard Quaility	3		
50	DM 110	Outside Micrometer 75 to 100 mm	Outside Micrometer 75 to 100 mm made out of Nickel Chromium Steel andframe cast steel with tungusten carbide tipped anvil and fine adjustment ratchet, L.C. 0.01 mm	Standard Quaility	1		
51	DM 123B	Punch Number 4mm	Number Punch Set- 4mm , made of draw carbon steel nickel plated with chamfered	Standard Quaility	2		

			edges				
52	DM 125	Radiator cut section Down flow	Radiator cut section Down flow For demonstration purpose	Standard Quaility	1		
53	DM 128	Rivet sets snap and Dolly combined (3mm, 4mm, 6mm)	Rivet sets snap and Dolly combined (3mm, 4mm, 6mm each)	Standard Quaility	2		
54	DM 130	Scraper half round 25 cm	Scraper half round 25 cm made of High Speed Steel.	Standard Quaility	2		
55	DM 132	Scriber 15 cm.	Scriber 15 cm. made of High Speed Steel.	Standard Quaility	2		
56	DM 133	Scriber with scribing block universal	Scriber with scribing block universal made of High carbon Steel, pillar height - 230 - 305 mm & base dimension 80x30 mm	Standard Quaility	2		
57	DM 134	Set of stock and dies Metric	Set of stock and dies -Metric size Thread Size Range : M3-M12 Die Stocks -20 x 5, 20 x 7, 25 x 9, 30 x 11, 38 x 14 Material -MS, encased in a suitable rubber /plastic box	Standard Quaility	2		
58	DM 136	Sheet Metal Gauge	Sheet Metal Gauge-Metric type made of Stainless steel	Standard Quaility	2		
59	DM 137	Shear Tinmans 300 mm	Shear Tinmans 300 mm	Standard Quaility	4		
60	DM 138	Solding Copeer Hatchet type 500 gms	Solding Copeer Hatchet type 500 gms (Fire heated)	Standard Quaility	2		
61	DM 141	Spanner D.E set of 12 pieces (6mm to 32mm)	Spanner D.E. set of 12 size 6 -32 mm (open jaw) drop forged, chromium vanadium steel .	Standard Quaility	4		
62	DM 146	Spark Lighter	Spark lighter -Igniting welding blowpipe & cutting blowpipe.	Standard Quaility	2		
63	DM 148(B)	Starter motor Co-Axial Type	Starter motor Co-Axial Type (LMV) for 12 V/ 180 amp/hr, battery capacity, System - Earth return Direction of rotation - clockwise (viewed from pinion end) power o/p - 2.7 KW meshing rpm - 600 - 700 Current - 85 - 100 amps	Standard Quaility	1		
64	DM 148(C)	Starter motor Pre-engagement type	Starter motor Pre Engaement Type (LMV) for 12 V/ 180 amp/hr, battery capacity, System - Earth return Direction of rotation - clockwise (viewed from pinion end) power o/p - 2.7 KW meshing rpm - 600 - 700 Current - 85 - 100 amps	Standard Quaility	1		
65	DM 150	Steel rule 15 cm inch and metric british graduation least count 0.5mm and 1/64 inch made out of stainless steel	Nominal Size (cm) 15 Type of Steel Scale (Graduation on both edges) AA	Standard Quaility	4		
66	DM 152	Straight edge gauge 2 feet made of mild steel with hard chrome platting.	Straight edge gauge 2 feet made of mild steel hardened & chrome platting.	Standard Quaility	2		
67	DM 154	Stud extractors Set of 3	Size (mm): 6,8,10 Made of HCS Type - Spiral flute	Standard Quaility	2		
68	DM 155	Stud remover with socket Handle	Stud remover with socket Handle Range - 5/16 - 3/4" Or 7 - 19 mm size - 58 mm outside dia X 65 mm high Made of chrome alloyed steel	Standard Quaility	1		
69	DM 157	Tachometer (Counting type)	Tachometer (Counting type) Photo Tach-5 to 100,000 RPM autoranging Contact Tach- 0.5 to 20,000 RPM autoranging Surface Speed- 0.2 to 6,560 ft/min, 0.05 to 2,000 m/min Display-5 digit, 0.4" LCD with function enunciator Resolution-0.1 RPM, 0.1 ft/min, 0.01 m/min Power 4 x AA batteries Accessories RPM cone adapter, RPM funnel adapter, surface speed test wheel, reflective tape, carrying case	Standard Quaility	1		
70	DM 159	Tape and dies complete sets (5 types)	Tape and dies complete sets 40-piece metric tap and die set in plastic case types (METRIC, BA, UNF, BSW & BSF)	Standard Quaility	1		

71	DM 160	Tape and wrenches metric	Tape and wrenches metric set-Size Range 8 mm To 19 mm Set of 18 - 20 Piece approx. In suitable Box	Standard Quaility	2		
72	DM 164	Thread pitch gauge Metric	Thread pitch Gauge Metric, 23 blade, Range 0.25 to 6mm. All leaves are clearly marked with the size Features a locking device at both ends to securely lock the leaves Made of high quality polished tool steel	Standard Quaility	2		
73	DM 165	Timing Lighter	Timing Lighter For use on 12 volt ignition system with on/off trigger switch Briliant blue-white xenon tube for daylight use . 1,000,000 flash capability accurate to 8000 RPM . with automotive reverse polarity and overload protection. Sliding clamp-on inductive pick up for easy and safe hookup and 1 meter long power lead inclosed in impact resistant housing	Standard Quaility	2		
74	DM 166 B	Torque wrenches 12-68 Nm,	Torque wrenches 12-68 Nm, made of high quality chrome plated polished steel head with a double-sided, 1/2" square drive, push-through head. having soft grip handle, fitted with a micrometer type mechanism adjustment knob, delivering precise and accurate torquing. Torque wrench individually tested and calibrated to the DIN-ISO 6789 standard of +/- 4% and wrench supplied with a calibration certificate and durable storage case.	Standard Quaility	1		
75	DM 166 C	Torque wrenches 50-225 Nm	Torque wrenches 50-225 Nm made of high quality chrome plated polished steel head with a double-sided, 1/2" square drive, push-through head. having soft grip handle, fitted with a micrometer type mechanism adjustment knob, delivering precise and accurate torquing. Torque wrench individually tested and calibrated to the DIN-ISO 6789 standard of +/- 4% and wrench supplied with a calibration certificate and durable storage case.	Standard Quaility	1		
76	DM 167	Trammel 30 cm	Trammel , 265 mm Size of Beam To Scribe Circles of Diameter around 300mm -Chrome Finished -Arrangement is maintained by trans located on flat face of the beam.	Standard Quaility	2		
77	DM 168	Turbocharger cut sectional view	Tubocharger cut sectional view DEMONSTRATION MODEL OF TURBOCHARGER Model made out of full size original parts, suitably sectioned and to demonstrate the working of turbocharger & mounted on a suitable base.	Standard Quaility	1		
78	DM 169	Tyre pressure gauge with holding nipple	Tyre pressure gauge with holding nipple Size: 50 mm (2 inch) Range: 0 to 120 psi Case: M.S. drawn, protected with soft cover Easy usage , Precise measurement with flexible hose	Standard Quaility	2		
79	DM 170	Universal puller for removing pulleys, bearings	Universal puller Set for removing pulleys & bearing, 3-Jaw reversible, double ended, adjustable puller set of Set – 3", 4", and 6" Inch Removal Tool Kit, Constructed from forged and hardened steel for strength and longevity; Steel drive screw is cold-rolled and acme-threaded to give smooth performance even under high stress,	Standard Quaility	1		
80	DM 176	Vice grip pliers	Type Of JointSlip Joint Handle Finish-Smooth finished Shape Of Handles-Straight handle Type Of Hand Tool-Vice Grip Pliers Tool Finish-Polished. Type Of Gripping Surface-serrated Material-Alloy Steel Length Of Hand Tool -255mm jaw opening capacity 45mm	Standard Quaility	2		

81	DM 178	Wire Gauge (metric)	Tool (standard wire gauge),Will measure wire 0-36 gauge (0.19-8.23mm),size- 3.5 inches in diameter, made of tool steel	Standard Quaility	2		
82	DM 179A	Work bench 250 x 120 x 60 cm with 4 vices 12cm Jaw	Hammer ball peen - 0.75kg Nominal Mass (Grams) - 800 Material of Handles - Teak Wood	Standard Quaility	4		
83	DM 179B	vices 12cm Jaw	Bench vices sutable for 120mm jaw width with fixed base directly mounted on workbench made out of closed grain cast iron, Dimensions (L x B x H): 347 mm x 138 mm x 129 mm	Standard Quaility	16		
	C. GENERAL INSTALLATION/MACIHNERIES (GENERAL SHOP OUTFIT)						
84	DM 181	Arbor press hand operated 2 ton capacity	Arbor press hand operated 2 ton capacity Sturdy, cast-iron construction Rugged steel ram is driven by a machined pinion Base drilled for mounting on a bench or Pedestal Includes three piece bit set - 1 pointed, 1 round, and 1 square end bit, and a removable steel anvil The base is machined to hold the three bit set Precision cut steel rams and pinions for accurate operation Tables and slotted table-plates are flat and parallel to provide accurate support Diameter of work (minimum)- 11-3/8 inches Capacity over table (minimum)- 9 Inch Size of ram face (minimum) 1-1/4 x 13 inches Ram bore (minimum) 1/2 inch Height (minimum) 16-1/4 inches Base size (minimum) 6-3/8 x 17 inches	Standard Quaility	1		
85	DM 182	Automotive exhaust 5 gas analyzer (petrol & Diesel) or Diesel Smokemeter	Automotive exhaust 5 gas analyzer (petrol & Diesel) with complete accessories Main Function 1. Used to measure the concentration of HC, CO, CO2, O2, NO in the Automobile Exhaust Gas. 2. Two kinds of test function: General and Two-speed idle 3. Full English Menu Operation 4. LCD (liquid crystal) screen displays 5. Auto-zeroing 6. Automatic calculation and show the air-fuel ratio λ 7. Equipped with RS232 digital serial communication interface to facilitate networking 8. Optional function: rotate speed and oil temperature measurement 9. Equipped with functions of Plate number and time display 10. Can store and search 500 groups of data, built-in printer 11. Measurable with liquefied gas (LG), liquefied natural gas (LNG) and gasoline and other alternative fuel vehicles. Technical Parameters :- Measurement Range CO 0~10×10-2 (%)vol CO2 0~20×10-2 (%)vol HC 0~10000×10-6 (ppm)vol O2 0~25×10-2 (%)vol NO 0~40000×10-6 (ppm)vol Indication Error Absolute error, Relative error CO ±0.06×10-2(%)vol ±5% CO2 ±0.5×10-2(%)vol ±5% HC ±12×10-6 vol ±5% O2 ±0.1×10-2(%)vol ±5% NO ±25×10-6 vol ±4% Preheating Time 10 min.(3 min. warm-up for fast measurement) Environmental condition Temperature -5~40 centigrade Humidity no more than 85% Atmospheric pressure 86~106kPa Power AC 220V±10%; 50 Hz±1Hz	Standard Quaility	1		
86	DM 192B	Hydraulic jack HI-LIFT type - 5 ton capacity	Hydraulic jack HI-LIFT type - 5 ton capacity	Standard	1		

				Quaility			
87	DM 193	Liquid penetrant Inspection kit (set)-Aerosol Type	Liquid penetrant Inspection kit (set)-Aerosol Type		1		
88	DM 194	Multi Scan Tool with oscilloscope	Multi Scan Tool with oscilloscope Display : TFT color display (320 x 240 dpi) Operating temperature : 0 to 60°c (32 to 140 f°) Storage temperature : -20 to 70°c (-4 to 158 f°) Length\width\height : 147 mm (5.79")\96.4 mm (3.80")\37 mm (1.46") with Probe wire	Standard Quaility	1		
89	DM 196	Pneumatic rivet gun with standard accessories	Pneumatic rivet gun with accessories 3X Rivet Gun with Powder Coat Finish & EXCELLENT Teasing Trigger! (3X Rivet Gun has a 3/16" aluminum rivet capacity, 7-5/16" long, weighs 2-1/3 lbs.) Shank Cupped Rivet Sets (3/32",1/8",5/32",& 3/16") Shank Flush (Flat) Rivet Set "Quick Change" Retaining Spring "Beehive" Retaining Spring 2oz Bottle of Air Tool Oil Click Style Brass Air Regulator Standard Male Air Fitting Highly Polished Bucking Bars (Including most popular "Heel&Toe") Sturdy Fitted Storage Case	Standard Quaility	2		
90	DM 199	Trolley type portable air compressor single cylinder with 45 liters capacity Air Tank, along with accessories & with working pressure 6.5 kg/sq.cm.	Trolley type portable air compressor single cylinder with 45 liters capacity Air Tank Horse Power (HP)- 1 HP Compressor Technology - Reciprocating Cooling Method - Air Cooled Size of Receiver (in L)- 45 litre tank Compressor Mounting Configuration - Trolley Mounted Maximum Flow Rate (in cfm) - 200-400 cfm, along with accessories & with working pressure - 6.5 kg/sq cm Air receiver hydraulic tested with automatic unloader, Tank Pressure Gauge & safety valve Nominal voltage 230 V/ 50 Hz with power cord length upto 2 m	Standard Quaility	1		
91	DM 202	Working Condition of Diesel Engine-CRDI-4 stroke Engine Assembly with fault simulation board	Working Condition of Diesel Engine-CRDI-4 stroke Cylinder : 6, Side valve arrangement type Type of engine- Vertical inline, water cooled Bore x Stroke: 104 x 133 min Displacement: 4-5 L No. of Cylinders: 6 (Inline FIP) Power Rating: 180-210 hp @ 2200 rpm Emission: Non Emission Compression Ratio: 17.5:1 Aspiration: Turbocharged Fuel Injection: Mechanical, Inline No.of Valves/Cyl: 2 Valve Engine fault scanner with simulated provision of trouble shooting with complete accessories	Standard Quaility	1		
92	DM 203	Cut section of 4/6 cylinder diesel engine with moving condition to show momentum of internal parts	Cut section model of Four Cylinder Diesel engine (Inline Type, common rail diesel injection system. Fitted on sturdy movabe trolley. Special colour coding for different System and Mechanism for study purpose.	Standard Quaility	1		

93	DM 204	Fuel injection test bench for calibration of fuel pump	Fuel Injection Test Bench Specification: Drive - Hydraulic drive Cylinder - six cylinder Main Motor - up to 5 HP (single phase) Tachometre - Electric Digital 0.9999 RPM Speed Ranges Stage 1 - 0 to 1000 stage 2 - 100 to 3000 RPM in both side Fuel Motor Supply - 1HP DC Power Suply - 12v & 24V MPC unit with Air Compressor A necessary standard attachment and required tools. Aplication : Capable of testingdiesel fuel injection pump singe to multi cylinder (CRDI, EDC -Euro 3,Inline pump, Distributor Rotary Pump)	Standard Quaility	1		
94	DM 205	Electrical test bench	Auto Electrical test bench Table top model, Fixed 12V/24V field supply, Fitted with digital ammeter/voltmeter for easy reading, Maximum capacity of alternators that can be tested 75 amps at 12V, 70 amps at 24V, Provision for checking and testing alternators at 2 speeds,Large V/poly - V groove pulley for high speeds, Small V - pulley for low speeds, Starter free spin testing directly from battery, Alternator loading through four rotary switches, Starter short-circuit test facility available, Battery Charging facility available during the alternator testing process, Vehicle simulation of battery charging through alternator, Provided with 12V battery supply for testing a wide range of electrical components like horns, bulbs, relays child parts of starters and alternators, Instrumentation -Alternator output current - Digital Panel meter 0-100 Amps DC,Alternator output current - Digital Panel meter 0-100 V DC, Drive 220V single phase, 2HP, 1440 RPM induction motor, Protected with circuit breakers. Protection -Circuit breakers incase of sudden surges in voltage ,Fuses provided for protection of rectifiers, battery etc. Power Requirements 220V single phase, 15 Amperes, Vice Heavy duty, fast mounting for alternators and starters Dimensions 650 (l) x 725 (b) x 550 (h) mm	Standard Quaility	1		
95	DM 206	Diesel engine 6 cylinder in running condition	**Diesel engine 6 cylinder in running condition** **Engine** Type - 6 cylinder, inline, water cooled Diesel Engine Compression ratio - 17.6:1 To 19:1 Firing order - 1-5-3-6-2-4 Max. Output - 83.5 to 89 KW Capacity - 5500 -6000 cc **Fuel Injection system** Inline **Electrical System** System Voltage - 12 V Battery - 12 v , 120 to 180 Ah capacity Alternater Capacity - 35 - 65 Amps	Standard Quaility	1		
	D. Cosumable						
96	DM 207	Battery- SMF	Battery- SMF	Standard Quaility	-		
97	DM 208	Brake fluids	Brake fluids	Standard Quaility	-		
98	DM 209	Chalk, Prussian blue	Chalk, Prussian blue	Standard Quaility	-		
99	DM 210	Chemical compound for fasteners	Chemical compound for fasteners	Standard Quaility	-		
100	DM 211	Diesel	Diesel	Standard Quaility	-		
101	DM 212	Different type gasket material	Different type gasket material	Standard Quaility	-		
102	DM 213	Different type of oil seal	Different type of oil seal	Standard Quaility	-		
103	DM 214	Drill Twist (assorted)	Drill Twist (assorted)	Standard	-		

				Quaility			
104	DM 215	Emery paper - 36–60 grit , 80–120	Emery paper - 36–60 grit , 80–120	Standard Quaility	-		
105	DM 216	Engine oil & Engine coolant	Engine oil & Engine coolant	Standard Quaility	-		
106	DM 217	Gear oils	Gear oils	Standard Quaility	-		
107	DM 218	Gloves for Welding (Leather and Asbestos)	Leather Hand Gloves 14 inches approximately 14 inches. ISI MARKED - Yes	Standard Quaility	5		
108	DM 219	Hacksaw blade (consumable)	Hacksaw blade (consumable)	Standard Quaility	-		
109	DM 221	Holders, lamp teakwood boards, plug sockets,	Holders, lamp teakwood boards, plug sockets,	Standard Quaility	-		
110	DM 223	Lapping abrasives	Lapping abrasives	Standard Quaility	-		
111	DM 225	Petrol	Petrol	Standard Quaility	-		
112	DM 226	Power steering oil	Power steering oil	Standard Quaility	-		
113	DM 227	Radiator Coolants	Radiator Coolants	Standard Quaility	-		
114	DM 228	Safety glasses	Safety glasses	Standard Quaility	-		

(दर शब्दों में लिखे रू. - .....)

Trade: Electrician

Sno	Name of the Tool & Equipments and Specification AS Per Tools List	Detail Specification	Make	Quantity	Rate Per Item	Total Amount
	A. TRAINEES TOOL KIT (16 + 1)					
	(For each additional unit trainees tool kit sl. 1-12 is required additionally)					
1	Measuring Steel Tape	5 meter	Standard Quaility	08 Nos.		
2	Combination Plier Insulated	200 mm	Standard Quaility	08 Nos.		
3	Screw Driver Insulated	4mm X 150 mm, Diamond Head	Standard Quaility	42 Nos.		
4	Screw Driver Insulated	6mm X 150 mm	Standard Quaility	08 Nos.		
5	Electrician screw driver thin stem insulated handle	4mm X 100 mm	Standard Quaility	08 Nos.		
6	Heavy Duty Screw Driver insulated	5mm X 200 mm	Standard Quaility	08 Nos.		
7	Electrician Screw Driver thin stem insulated handle	4mm X 250 mm	Standard Quaility	08 Nos.		
8	Punch Centre	9mm X 150 mm	Standard Quaility	08 Nos.		
9	Knife Double Bladed Electrician	100 mm	Standard Quaility	08 Nos.		
10	Neon Tester	500 V	Standard Quaility	42 Nos.		
11	Hammer, cross peen with handle	250 grams	Standard Quaility	08 Nos.		
B. SHOP TOOLS & EQUIPMENT – For 2 (1+1) units no additional items are required						
(i) List of Tools & Accessories						
12	Spanner Adjustable drop forged, SS	300mm	Standard Quaility	2 Nos.		
13	Chisel firmer with wooden Handle	6 mm X 200 mm	Standard Quaility	2 Nos.		
14	Scissors blade, SS	150 mm	Standard Quaility	2 Nos.		
15	Crimping Tool	1.5 sq mm to 16 sq mm	Standard Quaility	2 Nos.		
16		16 sq mm to 95 sq mm	Standard Quaility	2 Nos.		
17	Wire Cutter and Stripper	150 mm	Standard Quaility	2 Nos.		
18	Pliers long nose insulated	150 mm	Standard Quaility	4 Nos.		
19	Gauge, wire imperial stainlees steel marked in SWG & mm	Wire Gauge - Metric	Standard Quaility	2 Nos.		
20	Contactor & auxiliary contacts	3 phase, 415 Volt, 25 Amp with 2 NO and 2 NC	Standard Quaility	2 Nos. each		
21	Contactor & auxiliary contacts.	3 phase, 415 volt, 32 Amp with 2 NO and 2 NC	Standard Quaility	1 No. each		
22	Limit Switch	Limit Switch, Liver operated 2A 500v, 2-contacts	Standard Quaility	1 no		
23	Rotary Switch	16 A/440v	Standard Quaility	1 no		
24	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	Standard Quaility	1 No. each		

25	Pin Type, shackle type, egg type & suspension type insulators including hardware fitting		Standard Quaility	2 Nos. each		
26	Hydrometer		Standard Quaility	2 Nos.		
27	Load Bank (Lamp / heater Type)	6 KW, 3Ph	Standard Quaility	1 No.		
28	Laboratory Type Induction Coil	1000 W	Standard Quaility	1 No.		
29	Thermometer Digital	0° C - 150° C	Standard Quaility	1 No.		
30	Miniature Breaker	16 amp	Standard Quaility	1 Nos.		
31	Earth Plate	60cm X 60cm X 3.15mm Copper Plate 60cm X 60cm X 6mm GI Plate	Standard Quaility	1 Each		
32	Earth Electrode	Primary Electrode 2100x28x3.25mm Secondary Cu Strip 20x5mm	Standard Quaility	1 No.		
33	MCCB	100Amps, Triple pole	Standard Quaility	1 No.		
34	ELCB and RCCB	25Amps, double pole and 25Amps, double pole, IΔn 30 mA	Standard Quaility	1 Each		
35	Fuses	HRC Glass Rewire Type	Standard Quaility	4 Each		
36	Capacitors	Electrolytic Ceramic Polyester film Variable Dual run	Standard Quaility	2 Each		
37	Various Electronic components	Resistors, Diode, Transistor, UJT, FET, SCR, DIAC, TRAIC, IGBT, Small transformer etc.	Standard Quaility	As required		
38	Various Lamps	Halogen Incandescent Lamp Fluorescent tube HP mercury vapor Lamp High-pressure sodium Lamp Low-pressure sodium Lamp LED	Standard Quaility	1 Each		
39	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 each	Standard Quaility	1 Each		
40	Bus bar with brackets	1 mtr each	Standard Quaility	3 Nos.		
41	Electrician Helmet	Yellow Colour	Standard Quaility	2 Nos.		
42	RCC Pole with accessories (MS angle iron, 'C' clamp, stay insulator etc.) and materials	6 Mtr	Standard Quaility	1 No.		
43	Safety Belt	Standard quality	Standard Quaility	2 Nos.		
44			Standard Quaility			
45	Digital Multi Meter	DC 200mv -1000v,0 – 10A & AC 200mv- 750v , 0-10A, resistance 0-20 MΩ and 3 1/2 digit	Standard Quaility	12 Nos.		
(ii) List of Equipment						

46	A.C. Voltmeter M.I. analog, portable box type housed in Bakelite case	Multi range 75 V - 150V - 300V - 600V	Standard Quaility	3 Nos.		
47	Milli Voltmeter centre zero analog, portable box type housed in Bakelite case	100 – 0 – 100 mV	Standard Quaility	1 no		
48	Ammeter MC analog, portable box type housed in Bakelite case	0 - 500 mA, 0-5 A, 0-25 A	Standard Quaility	2 Nos. each		
49	AC Ammeter MI, analog, portable box type housed in Bakelite case	0 - 1 A, 0-5 A, 0-25 A	Standard Quaility	2 Nos. each		
50	Kilo Wattmeter Analog	0-1.5-3KW, pressure coil rating- 240v/440v, current rating- 5A/10A Analoge, portable type Housed in bakelite case	Standard Quaility	1 no		
51	Digital Wattmeter	230 V, 1 KW, 50 Hz	Standard Quaility	2 Nos.		
52	A.C. Energy Meter	Single Phase, 10 A, 240 V induction type	Standard Quaility	1 no		
53	A.C. Energy Meter	Three Phase, 15 A , 440 V induction type	Standard Quaility	1 no		
54	Power Factor Meter Digital	440 V, 20 A, Three Phase portable box type	Standard Quaility	2 Nos.		
55	Frequency Meter	45 to 55 Hz	Standard Quaility	1 no		
56	Magnetic Flux Meter	0-500 tesla	Standard Quaility	1 no		
57	Lux meter	lux meter LCD read out 0.05 to 7000 lumens with battery.	Standard Quaility	1 no		
58	Tachometer	Analog Type - 10000 RPM	Standard Quaility	1 no		
59	Tachometer	Digital Photo Sensor Type - 10000 RPM	Standard Quaility	Nill		
60	Tong Tester / Clamp Meter	0 - 100 A (Digital Type)	Standard Quaility	2 Nos.		
61	Megger	Analog - 500 V	Standard Quaility	1 no		
62	3- point D.C. Starter	For 2.5 KW DC motor	Standard Quaility	1 no		
63	4- point D.C. Starter	For 2.5 KW DC motor	Standard Quaility	1 no		
64	Wheat Stone Bridge with galvanometer and battery		Standard Quaility	1 no		
65	Single Phase Variable Auto Transformer	0 - 270 V, 10Amp (Air cooled)	Standard Quaility	1 no		
66	Phase Sequence Indicator	3 Phase, 415 V	Standard Quaility	2 Nos.		
67	Growler	230 V, 50 Hz, Single Phase, Adjustable jaws, Testing armature with ampere meter and testing probes.	Standard Quaility	Nill		
68	AC Starters: - a. Resistance type starter b. Direct on line 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.	Standard Quaility	1 No. each		
69	Oscilloscope Dual Trace	20 MHz	Standard Quaility	Nill		

70	Function Generator	2 to 200 KHz, Sine, Square, Triangular 220 V, 50 Hz, Single Phase	Standard Quaility	Nill		
71	Temperature controlled Soldering Iron	50 Watt, 230 Volt	Standard Quaility	2 Nos.		
72	Discrete Component Trainer		Standard Quaility	1 No.		
73	Voltage Stabilizer	AC Input - 150 - 250 V, 600 VA AC Output - 240 V, 10 A	Standard Quaility	1 No.		
74	DC Power Supply	0 - 30 V, 5 A	Standard Quaility	1 No.		
75	Battery Charger	0 - 6 - 9 - 12 - 24 - 48 V, 30amp	Standard Quaility	1 No.		
76	Current Transformer	415 V, 50Hz, CT Ratio 25 / 5 A, 5VA	Standard Quaility	2 Nos.		
77	Potential Transformer	415 V, 50Hz, PT Ratio, 440V/110V, 10VA	Standard Quaility	2 Nos.		
78	Solar panel with Battery	18 Watt	Standard Quaility	1 Set		
79	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, set complete with case iron and plate, fixing bolts, foundation bolts and flexible coupling. Induction Motor rating: 7.5 HP, 415V, 50 cycles, 3 phase. DC Shunt Generator rating: 5 KW, 440V (Output voltage varies 110-440v)	Standard Quaility	1 No.		
C. Shop Machinery - For 4 (2+2) units no additional items are required						
80	DC Series Motor coupled with spring balance load	2.5 KW, 220 Volts	Standard Quaility	1 No.		
81	Single phase Transformer, core type, air cooled	1 KVA , 240/415 V, 50 Hz	Standard Quaility	3 Nos.		
82	Three phase transformer, shell type oil cooled with Delta/ Star	3 KVA , 415/240 V, 50 Hz 2	Standard Quaility	2 Nos.		
83	A.C. Series type Motor	1 HP, 240 V, 50 Hz	Standard Quaility	1 No.		
84	Manual Motor coil Winding Machine	With step arbor	Standard Quaility	1 No.		
85	Ceiling fan coil Winding Machine	250V, 50 Hz, 1-Φ, with speed control	Standard Quaility	1 No.		
86	Primary current injection set	220V, 50 Hz, 1-Φ, output current - 200 A (min) with timer	Standard Quaility	1 No.		

(दर शब्दों में लिखे रू. - .....)

Trade : Fitter

Sno	Name of the Tool & Equipments and Specification AS Per Tools List	Detail Specification	Make	Quantity	Rate Per Item	Total Amount
1	Vernier caliper	150 mm	Standard Quaility	3 nos.		
2	Drill twist straight shank	3 mm to 12 mm by 0.5 mm H.S.S.	Standard Quaility	1set		
3	Drill twist Taper shank	8 mm to 20 mm by 0.5 mm H.S.S.	Standard Quaility	1set		
4	File triangular smooth	200 mm	Standard Quaility	7 nos.		
5	File square second cut	250 mm	Standard Quaility	6 nos.		
6	File triangular second cut.	200 mm	Standard Quaility	2 nos.		
7	File flat second cut safe edge.	300 mm	Standard Quaility	10 nos.		
8	File flat bastard	200 mm	Standard Quaility	2 nos.		
9	File flat bastard	300 mm	Standard Quaility	2 nos.		
10	File round bastard.	250 mm	Standard Quaility	10 nos.		
11	File hand second cut.	150 mm	Standard Quaility	2 nos.		
12	Hand Reamer set (Tapar pin straight flute)	Nominal Dia 6, 8, 10, 12, 16mm	Standard Quaility	1 set		
14	Scraper flat	150 mm	Standard Quaility	2		
15	Scraper triangular	150 mm	Standard Quaility	2		
16	Scraper half round	150 mm	Standard Quaility	2		
17	Chisel cold cross cut & diamond point.	9 mm X 150 mm	Standard Quaility	2		
18	Chisel cold flat	9 mm X 100 mm	Standard Quaility	2		
19	Chisel cold round noze.	9 mm X 100 mm	Standard Quaility	2		
20	Sleeve drill Morse	No. 0 - 1, 1 - 2, 2 - 3, 3 - 4, 4 - 5	Standard Quaility	1 Set 3 - 4, 4 - 5		
21	Pow er tools for fastening	Capacity 10-18mm	Standard Quaility	1 no.		
22	Different Profile gauges (Plate type) - For demonstration	Metric standard	Standard Quaility	4 nos		
23	Knurling tool (Diamond, straight & Diagonal)		Standard Quaility	1 each		
24	Inde xable boring bar with inserts	1" shank	Standard Quaility	4 nos.		
25	Machine maintenance mannual for Lathe, Pedestal grinder, Drill machine, Power saw		Standard Quaility	1 no.		
26	Tem perature gauge	Range 0 - 150°C	Standard Quaility	1 each		
27	Dowel pin (straight)	Dia. -1" Length -4" (Mat: Stainless Steel)	Standard Quaility	1 each		
28	Standard Tap screws	M3, M4, M5, M6, M8, M10, M12, M14, M16	Standard Quaility	1 each		
29	Lapp ing plate	Dia. -6"	Standard Quaility	2 each		
30	Medium carbon Heat treated alloy steel Metric Studs and bolts along with nuts (for display) of standard length (May be manufactured in-house)	M6, M8, M10, M12, M14, M16 (Standard)	Standard Quaility	2 each		
31	Caps screws	M6, M8, M10, M12	Standard Quaility	2 each		

32	Drill gauges	Letter drill gauge (A to Z) , Number drill gauge (1 to 60) , Metric drill gauge (1.5mm to 12.5mm, 30 holes)	Standard Quaility	2 nos.		
33	Cast Iron Globe Valve (Flanged type)	150NB, Class# 150 Flange:ANSI125-B16.1	Standard Quaility	2 nos.		
34	C.I. Sluice / Gate valve (flanged type)	150NB, Class# 150 Flange:ANSI125-B16.1	Standard Quaility	2 nos.		
35	Stop cock	25NB (2-way, Threaded end)	Standard Quaility	2 nos.		
36	M.S . Pipe	150NB, Sch.40, ERW, IS:1239	Standard Quaility	as required		
37	Slip- on Forged steel Flange	150NB, ANSI-B16.5, Class#150	Standard Quaility	4 nos		
38	Bolt & Nut with washer (May be manufactured in-house)	M20x2.5x90Long (part thread - Hex. Head)	Standard Quaility	20 nos.		
39	Jigs & Fixture (sample)-For demonstration (May be manufactured in-house)			1 no.		
40	M. S . Shaft (May be manufactured in-house)	Bright M.S. round bar f80mm, 600mm long, Stepped ff0mm on 300mm one end	Standard Quaility	2 nos.		
41	Pulle ys (for V-belt or Flat belt)	to fit on 50mm dia. Shaft with key slot	Standard Quaility	1 no.		
42	Steel keys (May be manufactured in-house)	to fit with keyslot of shaft & pulley	Standard Quaility	2 nos.		
43	Dam aged old spur gear	to fit 50mm dia. Shaft	Standard Quaility	2 nos.		
44	V-be lt and Flat belt	to fit on pulley	Standard Quaility	1 each		
45	Pack ing gasket	PTFE gasket roll small size	Standard Quaility	1 no.		
46	Washer, clutch, keys, jib, cotter & circlip	minimum 25mm size, carbon steel material	Standard Quaility	2 each		
47	Hollow punch	Straight Shank Hollow Punch Sets 5-12mm	Standard Quaility	1 set		
48	Drill Drift (May be manufactured in-house)	200mm hardened and black finish	Standard Quaility	1 no.		
49	Bearing different types	each type of diameter 25mm (min.)	Standard Quaility	1 each		
50	Lifting sling	8mm Nominal Dia. Single leg sling	Standard Quaility	2 nos.		
51	Bearing extractor	Universal gear puller 2 or 3 jaws adjustable	Standard Quaility	1 no.		
52	Pulle y extractor	Universal gear puller 2 or 3 jaws adjustable	Standard Quaility	1 no.		
53	Lathe tools bit.	6 mm x 75 mm HSS/Carbide	Standard Quaility	1 no.		
54	Compressor unit	suitable for Pressure: 8 bar, Delivery: 50 lpm (or more), Reservoir capacity: 24 Litres (or more), 230V, 50 Hz, with pressure regulator and water separator	Standard Quaility	1 No.		
55	Pneumatic Trainer Kit, each consisting of the following matching components and accessories:		Standard Quaility	1 Sets.		
56	I. Single acting cylinder	Max. stroke length 50 mm, Bore dia 20 mm	Standard Quaility	1 No.		
57	II. Double acting cylinder	Max. stroke length 100 mm, Bore dia 20 mm, magnetic type	Standard Quaility	1 No.		
58	III. 3/2-way valve	manually-actuated, Normally Closed	Standard Quaility	2 Nos.		
59	IV. 3/2-way valve	pneumatically-actuated, spring return	Standard Quaility	1 No.		

60	V. One-way flow control valve		Standard Quaility	2 Nos.		
61	VI. 5/2-way valve	with manually-operated switch	Standard Quaility	1 No.		
62	VII. 5/2-way valve	pneumatically-actuated, spring return	Standard Quaility	1 No.		
63	VIII. 5/2-way pneumatic actuated valve	double pilot	Standard Quaility	1 No.		
64	IX. 3/2-way roller lever valve	direct actuation Normally Closed	Standard Quaility	2 Nos.		
65	X. Shuttle valve (OR)		Standard Quaility	1 No.		
66	XI. Two-pressure valve (AND)		Standard Quaility	1 No.		
67	XII. Pressure gauge	0-16 bar	Standard Quaility	1 No.		
68	XIII. Manifold with self-closing	NRV, 6-way	Standard Quaility	1 No.		
69	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	Standard Quaility	1 No.		
70	XV. Relay station	with 3 ralays each with 4 contact sets (3NO+1NC or Change-over type), 5 A	Standard Quaility	1 No.		
71	XVI. 3/2-way single solenoid valve	with LED	Standard Quaility	1 No.		
72	XVII. 5/2-way single solenoid valve	with manual override and LED	Standard Quaility	1 No.		
73	XVIII. 5/2-way double solenoid valve	with manual override and LED	Standard Quaility	1 No.		
74	XIX. Power supply unit,	Input voltage 85 – 265 V AC, Output voltage: 24 V DC, Output current: max. 4.5 A, short-circuit-proof.	Standard Quaility	1 No.		
75	XX. Profile plate,	1100x700 mm, with carriers, mounting frames and mounting accessories (To be fitted onto the pneumatic workstation)	Standard Quaility	1 Sets.		
76	Pneumatic Workstation with 40 square mm aluminium profile legs, wooden work surface, and one pedestal drawer unit having 5 drawers, each with handles and individual cks, on metallic full panel drawer slide:	(1) Work Table – Size(Approx.) L1200mmXW900mmXH900mm, with four castor wheels including two lockable wheels at the front side, (2) Drawer – Size (Approx.) – L460mmxW495mm xH158mm each, and overall size of Drawer unit (Approx.) - L470mmxW495mmxH825mm and (3) Drawer slide height (Approx.) 85mm.	Standard Quaility	1 No.		
77	Carrier for mounting components, such as PB & relay boxes.		Standard Quaility	1 No.		
78	Cut section model for pneumatic components		Standard Quaility	1 Sets.		
79	Hydraulic Trainer Kit, each consisting of the following matching components and accessories:		Standard Quaility	1 Sets.		
80	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.	Standard Quaility	1 No.		
81	II. Pressure relief valve	pilot-operated	Standard Quaility	1 No.		

82	III. Drip tray, steel	size 1160 mm x 760 mm.	Standard Quaility	1 No.		
83	IV. Pressure Gauge	Glycerin-damped, Indication range of: 0 – 100 bar	Standard Quaility	1 No.		
84	V. Four-Way distributor	with five ports, equipped with a pressure gauge	Standard Quaility	1 No.		
85	VI. Double acting hydraulic cylinder	with a control cam, Piston diameter16 mm, Piston rod diameter10 mm, Stroke length 200 mm.	Standard Quaility	1 No.		
86	VII. Suitable Weight	for vertical loading of hydraulic cylinder	Standard Quaility	1 No.		
87	VIII. Mounting kit for weight	for realizing pulling and pushing load	Standard Quaility	1 No.		
88	IX. 3/2-way directional control valve	with hand lever actuation.	Standard Quaility	1 No.		
89	X. 4/2-way directional control valve	with hand lever actuation.	Standard Quaility	1 No.		
90	XI. 4/3-way directional control valve	closed-centre position, with hand lever actuation.	Standard Quaility	1 No.		
91	XII. Non-return valve.		Standard Quaility	1 No.		
92	XIII. Pilot-operated check valve	pilot to open.	Standard Quaility	1 No.		
93	XIV. One-way flow control valve	with integrated check valve.	Standard Quaility	1 No.		
94	XV. T-Connector with self sealing coupling nipples (2 Nos.) and quick coupling socket (1 No.).		Standard Quaility	2 Nos.		
95	XVI. Profile plate,	Anodised Aluminium, 1100x700 mm, with carriers, mounting frames and mounting accessories (To be fitted onto the Hydraulic workstation)	Standard Quaility	1 set		
96	Hydraulic Workstation with 40 square mm aluminium profile legs, wooden work surface, and one pedestal drawer unit having 5 drawers, each with handles and individual locks, on metallic full panel drawer slide:	(1) Work Table – Size(Approx.) L1200mmXW900mmXH900mm, with four castor wheels including two lockable wheels at the front side, (2) Drawer – Size (Approx.) – L460mmxW495mm xH158mm each, and overall size of Drawer unit (Approx.) - L470mmxW495mmxH825mm and (3) Drawer slide height (Approx.) 85mm.	Standard Quaility	1 No		
97	Cut-section models for hydraulic components		Standard Quaility	1 Sets.		

(दर शब्दों में लिखे रू. - .....)

कार्यालय संस्थान प्रबंधन समिति औद्योगिक प्रशिक्षण संस्था.परपोड़ी जिला-बेमेतरा (छ0ग0) द्वारा क्रय किये जाने वाले उपरोक्त सामाग्री मेरे द्वारा प्रस्तुत दर प्रदाय करने हेतु तथा छ.ग. भण्डार क्रय नियम के पालन हेतु सहमत हूं तथा विभाग से अनुबंध निष्पादित करने के लिए बाध्य रहूंगा एवं सभी प्रकार के करें का जो भी भुगतान होगा वाहन करूंगा मेरे द्वारा नियम एवं शर्तों का अध्ययन कर लिया गया है जिसके लिए मैं सहमत हूं।

निविदादाता का नाम - .....

हस्ताक्षर सहित मो./फोन नंबर-.....

नोटः- प्रस्तुत दरों में किसी भी प्रकार के उपरी लेखन मान्य नहीं किया जावेगा।