

# Schedule of Requirements

Tender: INF P 1672/23

S.No	Project Name	Location	Packages	Date and Time of Bid Opening
1	Purchase of Equipment /tools/Furniture/Books for GPI Lakki Marwat	Lakki Marwat	1. Chemistry Lab 2. Physics Lab 3. Woodworking Workshop 4. Plumbing & Public Health Workshop 5. Machinist 6. Computer Lab	<b>16/08/2023</b>  <b>Bid Submission time:</b> <b>10:30 am</b> <b>Bid Opening Time:</b> <b>11:30 am</b>
2	Purchase of Equipment/tools /Furniture /Books for GPI Mansehra	Mansehra		
3	Purchase of Equipment/tools/Furniture/Books for GPI Alpuri Shangla	Shangla		
4	Purchase of Equipment/tools/Furniture/Books for GPI Pattan Kohistan	Kohistan		

**\*PLEASE ORGANIZE YOUR BID FOR THE PACKAGE AS FOLLOWS;**

- 1) Bidder can bid ITEM-WISE against the Schedule of requirements.
- 2) The Items/Equipment must have Minimum Specification acceptable to the Technical Committee of KP-TEVTA; however the higher specification may be accepted if within the financial limit.
- 3) All bidders must submit the relevant details of bid/proposals duly labelled by a permanent marker with the name of bidder and also to provide documents in soft copies (MS WORD format) on USB drive
- 4) The Supplier shall write in bold & legible letters "Name of the Project & Package" on the envelope.
- 5) The supplier will submit the tender documents properly Computer Typed and each page shall be endorsed and numbered, along with terms and condition issued by the KP-TEVTA, dully signed by the authorized personnel with company seal; otherwise the bid will not be accepted.
- 6) The prices, including all taxes, should be quoted item-wise in Pakistani Rupees so as to reach the premises of the KP-TEVTA Head Office.
- 7) After Sale service and supply of spare parts must be guaranteed for a period of One year.
- 8) Please list the Earnest Money of this package in the Earnest Money Letter Stamp Paper.
- 9) Bid Processing Fee is Rs. 3500/-.
- 10) The supplier will supply the items won as a result of bidding on FOR basis to GPI Mansehra, Kohistan, Shangla and Lakki Marwat.
- 11) National Manufacturers are eligible to bid/quote their manufactured items but Branded items with Country of Origin/OEM: USA, Europe, Turkey, Japan, Korea will be appreciated.
- 12) Brand of the quoted item(s) shall be exclusively mentioned.
- 13) After Sale service and supply of spare parts must be guaranteed for a period of One year.
- 14) The original Request for Proposal documents duly signed and officially sealed by the bidder must be submitted as a whole with the proposals. Any conditional, ambiguous, incomplete, supplementary, or revised offer after the opening of tender shall not be entertained.
- 15) Any overwriting/crossing, etc. appearing in the offer may be properly signed by the person signing the tender. All pages of the tender must be properly signed & stamped. Offer with any overwriting/use of Blanco shall not be accepted in any circumstances.
- 16) Offers should be valid for FY: 2023-24 from the date of opening of the Tender.
- 17) The successful bidder(s) shall get the equipment inspected at their premises workshop before its dispatch to the indicated Locations.

**PROCUREMENT SECTION KHYBER PAKHTUNKHWA TEVTA**

1	CHEMISTRY & PHYSICS LAB GLASS WARE				
S#	Items	Quantity Required	Cost per item	Total Cost	Amount of CDR
1.	Beaker 50 ml (Pyrex)	24 No			
2.	Beaker 250 ml (Pyrex)	24 No			
3.	Beaker 500 ml (Pyrex)	24 No			
4.	Beaker 1000 ml (Pyrex)	12 No			
5.	Wash bottle (plastic)	24 No			
6.	Bottle reagent 500ml (narrow mouth)	16 Doz			
7.	Bottle reagent 250 ml (narrow mouth)	24 doz			
8.	Bottle Reagent 500 ml (wide mouth)	6 doz			
9.	Bottle Reagent 3 ltr	24 No			
10.	Burette 50 ml	24 No			
11.	Measuring cylinder 100 ml	6 No			
12.	Measuring cylinder 10 ml	12No			
13.	Crucible Porcelain with lid	24 No			
14.	Cork rubber assorted	6 doz			
15.	Fusion tube	24 gross			
16.	Capillary tube	10 lb			
17.	Centered Glass Crucible lid	24 No			
18.	Borosilicate Glass	24 No			
19.	Dish evaporating (Porcelain 75	15 No			
20.	Flask Round bottom 500 ml	24 No			
21.	Flask Flat Bottom 3 ltr,	10 No			
22.	Flask Conical 100 ml	24 No			
23.	Flask Filtration 500 ml	24 No			
24.	Funnel Buchner	24 No			
25.	Funnel separating 250 ml	24 No			
26.	Funnel	24 No			
27.	Filter paper	6 Pkt			
28.	Glass rods	24 No			
29.	Kipps "s apparatus 1000 ml	10No			
30.	Litmus paper blue and Red	24 pkt			
31.	Pestle & Mortar glass	10 No			
32.	Tiles Glazed white	24 No			
33.	Test tube holder	4 gross			
34.	Trough Glass	24 No			
35.	Burette.	24 No			
36.	Suction pump glass	24 No			
37.	Watch glass	24 No			
38.	Ostwald Viscometer	24 No			
39.	Stalagmometer	24 No			

# CHEMISTRY LAB EQUIPMENT

S#	Items	Quantity Required	Unit Cost	Total Amount	Amount of CDR
1	Electrolyzer 220V, 50HS with platinum electrode and DC power supply.	2 Nos			
2	Filter paper (whatman No.1) .	100 sheet			
3	Glass funnel dia: 7.5 cm	25 Nos			
4	Glass tube: Soda lime length: 150cm Ex-dia:3-4 mm	25 Nos			
5	Glass rods: (Stirring) Length: 20 cm, dia: 6-7 mm	25 Nos			
6	Pipette Graduated: 10ml,	50 Nos			
7	Pipette 15ml.	50 Nos			
8	Stand Tripod (cast iron) Height: 20cm, with circular top,	50 Nos			
9	Spirit lamp. Metallic medium size.	50 Nos			
10	Test Tubes: Dimension: 150x12mm, Pyrex	300 Nos			
11	Test tube stand (wooden) .	25 Nos			
12	Tongs (Black ended steel) with Bow length: 20cms, /.	25 Nos			
14	Wire gauze, .	50 Nos			
15	Volumetric flask. 100ml,	12 Nos			
16	Volumetric flask. 250ml,	12 Nos			
17	Distillation plant: Stainless steel, 220 V, 300V, capacity: 1 gallon. .	2 Nos			
18	Periodic chart/ Periodic table	2 Nos			
19	Copper sulphate (anhydrous).	0.5 kg			
20	Potassium Nitrate	0.5 kg			
21	Ferrous sulphate	0.5 kg			
22	Calcium sulphate.	0.5 kg			
23	Soda Ash.	0.5 kg			
24	Sodium Bicarbonate.	2 kg			
25	Spirit Methylated.	10 liter			
26	Iron Stand with clamp.	50 Nos			
27	Wooden Stand. .	50 Nos			

# CHEMICALS

S#	Items	Quantity Required	Unit Cost	Total Amount	Amount of CDR
1.	Nitric Acid	5 ltr			
2.	Hydrochloric Acid	5 ltr			
3.	Sodium Hydroxide (Pellets)	2 kg			
4.	Ammonia liquor	5 ltr			
5.	Carbon Disulphide	2 kg			
6.	Silver Nitrate	250 gm			
7.	Ammonium carbonate	1 kg			
8.	Sodium Carbonate/Washing soda	1 kg			
9.	Sodium Nitrate	1 kg			
10.	Sodium bicarbonate	1 kg			
11.	Potassium carbonate	1 kg			
12.	Potassium chloride	1 kg			
13.	Potassium chromate	1 kg			
14.	Potassium Dichromate	1 kg			
15.	Potassium chlorate	1 kg			
16.	Ammonium sulfide	1 kg			
17.	Ammonium sulfate	1 kg			
18.	Ammonium Molybdate	1 kg			
19.	Bismuth Nitrate	1 kg			
20.	Bismuth Chloride	1 kg			
21.	Cadmium Nitrate	1 kg			
22.	Cadmium chloride	1 kg			
23.	Lead Nitrate	1 kg			
24.	Lead Carbonate	1 kg			
25.	Lead Acetate	1 kg			
26.	Sodium Nitrogen per oxide	1 kg			
27.	Sodium sulfite	1 kg			
28.	Sodium sulfate	1 kg			
29.	Sodium Thiosulfate	1 kg			
30.	Sodium Chloride	1 kg			
31.	Sodium chromate	1 kg			
32.	Acetic acid (glacial)	2.5 ltr			
33.	Oxalic Acid	1 kg			
34.	Maleic Acid	1 kg			
35.	Succinic Acid	1 kg			
36.	Salicylic acid	2.5 ltr			
37.	Ethylene glycol	1 kg			
38.	Potassium permanganate	1 kg			
39.	Glycerin	1 kg			
40.	Acetone	2. ltr			
41.	Chloroform	2.5 ltr			

42.	Carbon Tetrachloride	2.5 ltr		
43.	Benzene	2.5 ltr		
44.	Toluene	2.5 ltr		
45.	Xylene	2.5 ltr		
46.	Benzaldehyde	1ltr		
47.	Cyclohexane	2.5 ltr		
48.	Bleaching powder	1 kg		
49.	Butyl acetate	2.5 ltr		
50.	Methyl ethyl ketone	2.5 ltr		
51.	Copper sulfate	1 kg		
52.	Copper Chloride	1 kg		
53.	Zinc Chloride	1 kg		
54.	Zinc Sulfate	1 kg		
55.	Zinc Carbonate	1 kg		
56.	Zinc Granules	1		
57.	Urea	1 kg		
58.	Magnesium sulfate	1 kg		
59.	Magnesium Chloride	1 kg		
60.	Magnesium Nitrate	1 kg		
61.	Magnesium oxide	1 kg		
62.	Cobalt chloride	1 kg		
63.	Cobalt Nitrate	1 kg		
64.	Cobalt carbonate	1 kg		
65.	Nickel sulfate	1 kg		
66.	Nickel nitrate	1 kg		
67.	Stannous chloride	1 kg		
68.	Stannic chloride	1 kg		
69.	Phenolphthalein	0.5 kg		
70.	Methyl orange	1 pack		
71.	Methyl red	1 pack		
72.	Congo red	1pack		
73.	Aluminum Nitrate	1 kg		
74.	Aluminum sulfate	1 kg		
75.	Ethyl alcohol absolute	2.5 ltr		
76.	Methyl alcohol	2.5ltr		
77.	Sodium Benzoate	1 kg		
78.	Sodium phosphate	1 kg		
79.	Sodium tripolyphosphate	1 kg		
80.	Sodium silicate	1 kg		
81.	Zinc Oxide	1 kg		
82.	Boric Acid	0.5 kg		
83.	Sodium Tetra Borate (Borax)	0.5 kg		
84.	Stearic Acid	0.5 kg		
85.	Iodine crystals	0.5 kg		

86.	Potassium Iodate	0.5 kg		
87.	Starch	0.5 kg		
88.	Buffer solution pH-7	1 ltr		
89.	Buffer solution pH-4	1ltr		
90.	Buffer solution pH-9/-10	1ltr		
95	Citric acid	0.5 kg		
96	Acid Acetic	2.5 ltr		
97	Acid Picric	1 kg		
98	Aniline	1 kg		
99	Ammonium Chloride	1 kg		
100	Ammonium Cyanate	1 kg		
101	Ammonium Phosphate	1 kg		
102	Ammonium Acetate	1 kg		
103	Aceto Phenone	1 lb		
104	Acid Cinnamic	1 lb		
105	Antimony Chloride	1 lb		
106	Barium Chloride	1 kg		
107	Barium Nitrate	2 ltr		
108	Bromine	1 lb		
109	Cadmium Bromide	1 lb		
110	Calcium Acetate	1 lb		
111	Calcium Carbonate	1 lb		
112	Calcium Chloride Anhydrous	1 lb		
113	Calcium Sulphate Anhydrous	1 lb		
114	Cobalt Sulphate	1 lb		
115	Copper Carbonate	1 lb		
116	Copper Nitrate	2 lb		
117	Chemical Label books	2 doz		
118	Dimethyl Amine	10 kg		
119	2,4- Dintro Phenyl Hydrazine	100 gm		
120	Ferric Chloride	2 lb		
121	Ferrous Sulphate	5kg		
122	Dextrose	1 lb		
123	Hydroxyl Amine Hydro Chloride	10gm		
124	Magnesium Metal	1 lb		
125	Magnesium Iodide	1kg		
126	Mercuric Chloride	250 gm		
127	Nickel Chloride	1kg		
128	Potassium Bromide	1 lb		
129	Potassium Ferricyanide	1 lb		
130	Potassium iodide	1 lb		
131	Potassium Nitrate	1 lb		

132	Potassium oxalate	1 lb			
133	Potassium Thiocyanate	1 lb			
134	Potassium Sulphate	1 kg			
135	Phenyl Hydrazine Hydrochloride	1 lb			

# PHYSICS LABORATORY

S.No	Description of Items with Specification	Qty.	Unite Rate	Total amount	Amount of CDR
1.	<b>Resonance tube apparatus, length 1 meter:</b> With Plastic tube 840×25mm mounted on record with 500ml Plastic tube bulb.	10 Nos			
2.	<b>Sonometer with slotted weights and two wedges:</b> Wooden resonance box with two rules 1m long. one each brass and steel wires. two moveable bridges pulley and fixed screws, slotted weights ½ kg×4, 1 kg×4, 2 kg×4	10 Nos			
3.	<b>Linear Expansion apparatus with metal rod and Accessories:</b> Apparatus added with speedometer, glass jacket enclose Brass, Iron, Aluminum and a Copper rod within Error scale having differently colored pointers. Accessories: Brass, Iron, Aluminum, Copper rods	10 each sets			
4.	<b>Steam generator:</b> Aluminum vessel with cork lid and retainer on an adjustable hot plate with thermal circuit breaker, volume 250ml	12 No			
5.	<b>Sextant:</b> Student model, Comprising 220mm radius, withsighter adjustable half mirror and scale 0 to 130 with Vernier reading to five minimum in wooden case.	10 Nos			
6.	<b>Set of weights:</b> 13 pieces set of Brass weights in storage block. 1×1g, 2×2g, 1×5g, 1×10g, 2×20g, 1×50g, 1×100g, 2×200g, 1×500g, 1×1000g.	10 Nos			
7.	<b>Kundt's tube with scale and Accessories:</b> Transparent acrylic tube with scale and end plates with tubing nozzles for filling with various gases, built-in speaker at one end, a bore and guide for accommodating moving piston or probe microphone at the other end. Includes retaining clips for mounting on stands and a connector lead for the speaker, length 1000mm, dia 70mm, tube nozzle 7mm dia. Accessories for each set: 1 Probe microphone with frequency range 20hz-20000hz with DIN plug for battery box, barrel foot, 1 function	10 Nos			



	generator (230V,50hz),1 whistle,a 1700hz tuning fork,1 bottle of corkpowder.			
8.	<b>Hook's law apparatus with helical spring:</b> Pointer and scale graduated in cm and mm hanging weights 6×50gm, 5 helical springs of lengths 120mm, 145mm, 150mm. 147mm,142mm.	10 Nos		
9.	<b>Convex lenses:</b> Of different focal lengths from 10cm to 50 cm	60 No		
10.	<b>Concave lenses:</b> Of different focal lengths from 10cm to 50cm	60 No		
11.	<b>Concave mirrors:</b> Of different focal lengths from 10cm to 50cm	60 No		
12.	<b>Convex mirrors:</b> Of different focal lengths from 10cm to 50cm	60 No		
13.	<b>Fletcher trolley complete:</b> Light metal track 1720×150 min wide with leveling feetcovered with stops at either end, aluminum pulley 50mm dia., clamp for vibrator and automatic Pen release. Metal trolley with three wheels mounted.on ball bearings. Five hooks to accommodate cylindrical masses approximate 350gm. Vibrator 60mm long with clamping works at 5 and 8Hz and Pen holder to take fibertip type of pen.	03 No		
14.	<b>Single ray projector with accessories:</b> Light source for experiments on optics, connecting line 1.5m long with 4mm plug dimension 120mm×70mm dia., magnetic holder for single ray projector 12V, 60VA (230V, 50Hz), Halogen lamp12V, 35W	02 sets		
15.	<b>Multiple ray projectors, magnetic with accessories:</b> Light source for optics. Lamp 12V, 55W connecting line 1.5 meter long with 4mm Plug. Dimension 150 × 200 × 50mm <sup>3</sup> Transformer 12V, 60 VA9230,50Hz) Halogen Lamp 12V, 55W.	02 sets		
16.	<b>Optics kit for white board:</b> Plan mirror (plastic) 200×35×35mm <sup>3</sup> . Convex, concave mirror f=±100mm 200×35×35mm <sup>3</sup> . Plano Concave lens (Acrylic glass), f= 400mm, 200×40×35mm <sup>3</sup> . Plan parallel Plate (Acrylic glass) 200×100×35mm <sup>3</sup> . Semicircular body, f=200mm dia. 200×35mm <sup>2</sup> (Acrylic glass) Right angled prism 200×200×35mm <sup>2</sup> (acrylic glass) Cubide ( Plastic) 100×20× 35mm <sup>3</sup> Cylinder (plastic), dia. 5×35mm <sup>2</sup> Cylinder(plastic) dia. 6×35mm <sup>2</sup>	10 Nos		

17.	<p><b>Heat equivalent apparatus:</b> Consist of a shaft with ball bearing at both ends, an integrated counter for measuring the number of revolutions and an attached table clamp. 1 basic unit, 1 Aluminum calorimeter, 1 temperature sensor, 1 pair of adopter cables with 4mm safety plugs / 2mm plugs, 1 fraction belt, 1 bucket of 5 liter, 1 counter weight, cord of length 1.80m and temperature calibration table.</p>	10 Nos			
18.	<p><b>Optical bench complete with all standard accessories:</b> <b>Optical bench:</b> Optics Track (1.2 m) rugged aluminum track. The metric tape makes position measurements easy. <b>Accessories:</b> Light Source has a lighted crossed arrow target with metric scale for focusing images through lenses or using with the concave mirror. Acts as a point light source, 1, 3, or 5 parallel rays, or red-green-blue rays. Lenses: 4 - 50 mm diameter. Lens's focal lengths +100, +200, +250, -150 mm mounted in protective holders. Concave/Convex Mirror: 50 mm diameter plastic mirror with reflective surface on both sides. Includes "half-screen" upon which the image is focused. Adjustable Lens Holder: from 19 mm to 75 mm in diameter. Storage Box: Everything fits neatly into the protective storage box, with the exception of the 1.2 meter Optics Track. 1 transparent screen, 1 white screen. 1 pin hole aperture d=1mm 1 pin hole aperture d=6mm</p>	10No			
19.	<p><b>Electrical calorimeter (1200ml) with accessories:</b> Consist of a double walled, heat insulating plastic container with insulating vessel inside made of reflecting glass with heating coil and stirrer <b>Accessories:</b> Aluminum shot 100g, copper shot 200g, glass shot 100g, granules for filling calorimeter.</p>	10 each set			
20.	<p><b>Precision hair Hygrometer:</b> Consist of a round plastic housing with a human hair Measuring range: 0%---100% relative humidity Temperature range: 35c-+65% °C Reading accuracy: ±5% Diameter: 100mm</p>	10 Nos			
21.	<p><b>Torsion apparatus:</b> Searle horizontal pattern. Two cast iron feet and grub securing screws separated by two support rods approx. 700mm long, wheel</p>	10 Nos			

	165mm dia. moving in ball bearings, mounted on front foot, other end supported with clamping block through rear foot with two aluminum scales graduated with 30-0-30 in single degree mounted on pillar support, two pointers with clamp for attaching to specimen, one each Brass and Steel rods 5mm diameter, chord and hook for carrying masses and two spanners for clamping block nuts.				
22.	<b>Differential pulley:</b> One piece aluminum with diameter of 38.5 mm & 63.5mm mounted in a metal frame with hook.	06 No			
23.	<b>Differential wheel and axle;</b> compound wheel and axle with cast aluminum alloy block Comprising wheel 100mm diameter and axle 50mm & 25mm diameter mounted on adjustable steel cones and steel frame, wood back board with four holes for wall mounting, complete 5m nylon cord and steel hook.	06 No			
24.	<b>Maxwell's needle with accessories:</b> Hollow metal cylinder 200mm long pointer and chuck to accommodate wires up to 20swg with each hollow and solid cylinders 50mm long tripod, stand with rod 1.2m long, base with leveling screws, clamp with arms 180mm long with chuck complete with three wires 1.5m long, one Brass 26swg and one each steel 26 and 20swg.	10 Nos			
25.	<b>Friction measuring apparatus with Accessories:</b> Demonstration apparatus with moveable friction surface for measuring static and dynamic friction. The track can be made inclined. Dynamometer, 3 rails for holding static bodies, three 100gm weight. <b>Accessories:</b> Precision dynamometer (1N range), (2N range), (10N range)	03 No.			
26.	<b>Experiment set pulleys, block and tackle:</b> Complete set of equipment consisting of a stable base plate, retort stand rods, pulley blocks, block and tackle, a set of pulleys of various diameters on an axle, weight holders, slotted weights with base plate 810×200mm, pulleys 50mm diameter, stand rods 810mm×12.5mm, slotted weights 2×10g, 2×20g, 2×50g, 4×100g, 4×200g, 1×500g, holder s, 1×10g, 1×20g, 5×50g.	03 Nos			
27.	<b>Reciprocating motion motor:</b> A field coil motor connected to a rotary to linear converter mechanism showing cross sectional view. Both motor and gearbox are fully sectioned to show the method of operation. Lead from motor and gear box	03 Nos			

	together taken to three 4mm sockets for connection to a 12 volts DC or AC supply mounted on plastic base complete with instructional booklet.			
28.	<b>Compound lever (Brace version):</b> Wooden structure consisting of Front and rear legs, leaver arm, base beam, handle, arms, lever arm, beam sides, brace, feet, hex bolt, washer, fasteners.	03 Nos		
29.	<b>Forces in a Jib crane apparatus with complete accessories:</b> Bench mounted. The unit consists of a metallic rod which provides the support locations for jib and tie. Load is applied via a hanger on the junction of jib and tie. To measure the deformation in jib and tie, dial gauges are connected to both elements.	06 Nos		
30.	<b>Simple screw jack for demonstration to students:</b> 220 mm diameter turntable fitted with a 30 mm x 6 mm pitch screw is supported in a heavy cast iron base. Stand on a firm bench and a cord and weight hanger are wound round the rim of the turntable and hung over the pulley. The pulley runs on ball bearings to reduce friction to a minimum. To be provided with instructional manual	04 No		
31.	<b>Inclined plane:</b> Metal base and inclined surface plane hinged with scales for angles, length and height. angle of inclination between 0-45,adjustable pulley, roller weight pan and cord	03 No		
32.	<b>Simple harmonic module/apparatus:</b> Consist of a black metal disc, 200mm dia supported vertically on a clear plastic base fitted with feet. A white marker 13mmdia may be made to follow a circular orbit about the central of the disc. A similar marker move in a slot along the diameter of the disc in phase with the peripheral marker performing SHM when the peripheral marker caused to rotate at uniform speed .The disc is marked with cords and radial lines to assist in locating the relative marker positions.	10 Nos		
33.	<b>Worm and wheel apparatus:</b> Wall-mounted, to study a way of connecting 2 shafts at right angles. Gear sets for 1, 2, 3 and 4 start worm and wheel units; interchangeable to fit on a rigid steel back plate. Two load hangers and weights set.	03 sets		
34.	<b>Derrick Crane:</b> Bench-top, for analysis of internal forces in a	03sets		

	pin-jointed framework. Deflection measured by individually calibrated leaf-spring balances. Movement measured by digital Vernier. Load hanger, loading weights, link and digital caliper.			
35.	<b>Gearing elements to illustrate simple mechanical belt and gear wheel drives:</b> Gearing elements consisting of base plate, belt pulley(35mm diameter), belt pulley (70mm dia.) gear wheel (20 teeth), gear wheel (40 teeth), crank handle, drive belt sets.	03 sets		
36.	<b>Reaction of beam apparatus:</b> .Bench mounted. This apparatus is designed for simple experiments and demonstrations on simply supported beams. Two spring balances act as supports and enable reactions to be read directly. Three movable load hangers allow loads to be put in a number of positions. Levers can be investigated by suspending the beam from the free standing frame, and holding down the end with a spring balance.	03No		
37.	<b>Bell crank lever:-</b> (1) Strong table unit for demonstrating the application of moment to a crank lever. (2) Pressure gauge 50N. (3) Metal crank mounted in ball bearings. (4) Mechanical advantage min. 1:1 max. 2:1 (5) Fine compensation device for adjusting the crank so that the forces always act vertically. (6) Crank length vertical: 200mm, horizontal: 400mm. Set of weights: up to 20N along with 6 weights with carrier.	04No		
38.	<b>Fractional horse power motor and Accessories:</b> max 746 watts(single phase induction)with prony brake and revolution counter. With related accessories required for operational characteristics.	10 Nos		
39.	<b>Fly wheel with slotted weight:</b> Cast metal made, approx. 200mm dia×40mm thick mounted on a balanced horizontal shaft in metal bracket 280×180mm <sup>2</sup> drilled for wall mounting.	03 No		
40.	<b>Specific gravity bottle,25cc:</b>	24 No		
41.	<b>Specific gravity bottle,50cc:</b>	24 No		
42.	<b>Viscometer (Standard Size)with Accessories:</b> Falling sphere viscometer with 6 spheres and 1 ball gauge measuring range 0.5mPaS To $7 \times 10^4$ mPaS.	10 Nos		

	<p><b>Accessories:</b> 2 sphere of Borosilicate glass, 2 spheres of Ni-iron and 2 spheres of steel, thermometer 0-100C, test certificate with accurate values for spheres constant K and density, silicon tubing (2x) immersion/circulation thermostat</p>			
43.	<p><b>Photo Electric cell for determining planks constant with Accessories:</b> Basic apparatus with photo cell, volt meter, Nano ammeter and power supply, 5 LEDs in casing with connector leads one plug in supply 12V AC, wave length 472 nm, 505 nm, 525nm, 588 nm, 611nm, <b>Accessories for photo electric cell:</b> Set of 15 experimental leads, 75cm</p>	10 Nos		
44.	<p><b>Galvanometer DC:</b> Range <math>\pm 35</math> Micro Amp, scale division 1 Micro Amp, Internal resistance 1000 ohm</p>	10 Nos		
45.	<p><b>Laser beam apparatus :</b></p> <ul style="list-style-type: none"> <li>➤ 0.5mw He-Ne Laser</li> <li>➤ optical bench</li> <li>➤ screen</li> </ul> <p>Metal bench, guide rail with leveling plate form 500mm, laser diode driver and temperature controller, laser safety goggles. 1000mw and 100mw diode laser with built in cooler, thermistor and photo diode, lens, collimator, optical rider, mounting plate, Nd:YAG crystal. Laser mirror 1 and 2. frequency module, passive Q switch. PIN photo diode on optical rider, cylindrical lens of <math>f = +15\text{mm}</math>, <math>+25\text{mm}</math>, <math>+45\text{mm}</math>, collimator lens of <math>f = +75\text{mm}</math>, focusing lens <math>f = +75\text{mm}</math>, filter holder with filters, polarization filter and transport case.</p> <p><b>Or</b> <b>Equivalent Specification.</b></p>	10 Nos		
46.	<p><b>Magnets Horseshoe:</b> Horseshoe magnet Alnico magnet with screw, Poles marked red and green pole Area approx. <math>20 \times 10\text{mm}^2</math>. Distance between poles approx. 50mm length of shank approx. 70mm.</p>	10 Nos		
47.	<p><b>Parallel plate capacitor with Accessories:</b> A fixed and a moveable plate on a guide rail having centimeter scale, plate separation can be finally adjusted and read off from display to an accuracy of 1/10mm plate spacing: 0-160mm, plate area <math>500\text{cm}^2</math> plates solid casting. Plates can be adjusted between 0 and 20mm via a sindle. <b>Accessories:</b> Plastic dielectric plate <math>300 \times 300 \times 2\text{mm}^3</math> approx Plexiglass dielectric plate <math>300 \times 300 \times 2\text{mm}^3</math> approx</p>	10 Nos		
48.	<p><b>Electric field meter (230V, 50Hz.) with Accessories:</b></p>	10 Nos		

	Maximum output voltage: 10 VIV output can correspond to 100V/c,300V/cm,1000V/cm,10V,30V, 100V(with lx voltage measurement plate), 100V,300V,1000V( with 10 x voltage measurement plate), I capacitor measurement plate 250cm <sup>2</sup> set Plexiglas spacers, Drip cup basin.				
49.	<b>Center of gravity apparatus:</b> Comprises a rod mounted on a base with a suspension screw at the top and four laminas of clear acrylic - 1 each of circular, triangular, square and trapezoidal. Each lamina has suspension holes along their periphery.	10 Nos			

# WOODWORK SHOP

S.No	Description of Items with Specification	Qty.	Unite Rate	Total amount	Amount of CDR
1	Work Benches. Local Best quality 1320mmx560mmx838mm Wood tops thickness 32 mm with wooden leg 102mm square.	10 No			
2	Bits Auger.6mm to 25mm Bits auger consisting of 13 bits 6mm to 25mm. Local Best quality	10 No			
3	Bits Auger. Local Best quality 6mm 10mm 12.5mm 19mmMade of tool steel double square.	10 No			
4	Bits Expansive and Adjustable.15 to 35mmBits expansive and adjustable, boring from 15mm to 5mm. Local Best quality	10 No			
5	Bits Countersink.12.5mmBits countersink for brace. For wood, 12.5mm dia. Local Best quality	10 No			
6	Bits Screwdriver. Local Best quality 4.75mmBits screwdriver 4.75mm for brace.	10 No			
7	Screwdriver. Local Best quality 6mmScrewdriver, 6mm for brace.	10 No			
8	Bits Screwdriver. Local Best quality 8mm,15mmBits screwdriver, for brace.	10 No			
9	Bits Gimlet. Local Best quality 2 Size No2,3 Size No3,4 Size No4,5 Size No5 6 Size No6,7 Size No7,8 Size No8	10 No			
10	Bits Brace.200mm Bits brace 200 mm sweep "Alligator" Jaw chromed. Local Best quality	10 No			
11	Bits (Machine).9.5mm 12.5mm 9mm, 25mm Bits Machine for wood. Local Best quality	10 No			
12	Twist Drills.1.5mm to 12.5mm 3mm 4.74mm Twist Drills straight shank. Local Best quality	05 No			
13	Hand Drill , Local Best quality 8mmDouble pinion drill with die cast body and wooden handle. Used for small drilling operations. Overall dia. 215mm 3jaw chuck type.	05 No			
14	Vice. Local Best quality 175mmVice, wood workers rapid action, dog in front jaw.	05 No			
15	Curving Sets. Curving sets consisting of chisel, bent gauge u-tool skew chisel, veining tool, forged stool blades long wooden handles (set of size) Local Best quality	6 No			
16	Chisels.3mm, 115mmChisels wood forged in one piece, tough plastic handles. Local Best quality	12 No			
17	Chisel Wood. 6mm 9.5mm 12.5mm 19mm 25mm 37.5mm 50mm Chisels wood forged in one piece, tough plastic handles 115 mm blades. Local Best quality	10 No			
18	Gauges. Local Best quality 3mm 6mm 12.5mm 19mm 25mm	10 No			



	Gauges outside ground for wood working.			
19	Hammer. Local Best quality ½ Kg,¼ Kg, Hammer nail bent claws, bell face designed to pull nails without heads.	10 No		
20	Planes.355mm x 50mm Planes jack smooth bottom fine gray cast iron frames. Local Best quality	10 No		
21	Plane. Local Best quality 355mm x 50mmPlane jointer.	10 No		
22	Planes. Local Best quality 140mm x 19mmPlanes rabbit.	10 No		
23	Planes. Local Best quality 225mm x 50mm Planes smoothing.	10 No		
24	Plane. Planes Router hand plane circular for concave and convex surfaces, steel base. Local Best quality	10 No		
25	Plane. Local Best quality 150mmPlanes block low cutting angle of 12 degree.	10 No		
26	Rules. Local Best quality 610mm x 28mm 350mm Rules bench, made of hardwood.	10		
27	Shrink Rules. Local Best quality 300mm 7.5mm (L)5mm(L) Shrink Rules Steel.	10 No		
28	Saw Coping.162mmSaws coping using pin type blades adjustable to any angle. Local Best quality	10 No		
29	Saw, Blades. Local Best quality 150mm Saw blades coping saw.	10		
30	Saw. Local Best quality 300mm.Saws back full hand grip handle.	10 No		
31	Saw. Local Best quality 300mmSaw compass with reversible blade, feature.	10 No		
32	Saw. Local Best quality 660mm Hand Saws, coarse cut 8 TPI	10 No		
33	Saw. Local Best quality 140mm & 660mm Saw hand rip.	10 No		
34	Saw.300mm 14 TPI. Local Best quality	10 No		
35	Saw. Local Best quality 225mmHand saw coarse cut.	10 No		
36	Mitre Box.608mm x 127mmMitre box including eleven point stiff back saw, adjustable angle capacity at right angle 200 mm at 45 degree, 125mm. Local Best quality	10 No		
37	Miter Machine.660mm x 100mm Mitre machine including vice clamps stiff back fine tooth saw for picture frame and molding cutting. Local Best quality	10 No		

38	Screw Driver. Size 1, 2, 3, 100mm shank 6mm blade 150mm shank 6mm blade 225mm shank 6mm blade. Screw drivers. Local Best quality	10 No			
----	--	----------	--	--	--

## PLUMBING & PUBLIC HEALTH ENGG SHOP

S. No	Description of Items with Specification	Qty.	Unite Rate	Total amount	Amount of CDR
1.	<b>Pipe Wrench.</b> Best quality 18" ,12",08", Pipe wrench heavy-duty pipe wrench. Tough quality one pipe frame housing and handle with replaceable heel jaws, pipe capacity 2, 1, and ¾ respectively.	10 No			
2.	<b>Pipe Wrench,</b> Best quality. -¼"-4"Cap.Pipe wrench China type ratcheting and reversing china pipe wrench. Drop forged steel body nickel chrome plate 12"handle 15"chain capacity ¼ to 4"	10 No			
3.	<b>Pipe Grip,</b> Best quality. -Cap-2"Pipe grip 2"capacity fabric step 14"metal handle.	10 No			
4.	<b>Pipe Reamer.</b> Best quality Cap-1"-2"Pipe reamer with handle ratchet type 1"to 2"capacity with burning spiral flutes.	10 No			
5.	<b>Pipe Vice (stand/leg)</b> Best quality. 1/8"-2 ½ "Cap Pipe vice capacity 1/8"to 2 ½"mouthed on triangular metha table tray, fitted with three metal folding legs.	10 No			
6.	<b>Pipe Thread Set, (Pipe threading Dic:)</b> Best quality. -¼ "to 1 ¼ " Pipe thread set (NPT) reversible reversible ratchet handle set to include dies for pipe size ¼, 3/8 ½, and ¾,1, 1 ¼ inches.	10 No			
7.	<b>Pipe Cutter.</b> ¼"to 1 ¼"Pipe cutter with heavy duty cutter wheel (capacity 1/8"to 1 ¼") , Best quality .	10 No			
8.	<b>Pipe Cutter.</b> ¼"to 2"Pipe cutter with heavy duty cutter wheel (capacity ¼" to 2") , Best quality .	10 No			
9.	<b>Cutter Wheel.</b> Cutter wheels these wheels to fit above cutters (CTP2-1 & CTP2-2) , Local Best quality .	10 No			
10.	<b>Wrenches.</b> -Local good quality made 08",10",12",Wrench adjustable alloy steel construction drop forged rust resistant finish. , Local Best quality.	5 set			
11.	<b>Level aluminum</b> masons 48"with 2 double plumbs and one double level. Local Best quality.	10 No			
12.	Square Steel.24"x 16" Square steel 24"body 16"tongue. , Local Best quality.	10 No			

13.	<b>Star Drill.</b> ¾ " Star drill forged alloy steel, each set to consist of one each 1/2, ¼ , 3/8 ¾ with 12 shank (for drilling brick stone concrete) , Local Best quality .	5 set		
14.	<b>Hacksaw.</b> 12" Hacksaw 10"to 12"adjustable pistol grip handle rust proof finish. , Local Best quality .	10 No		
15.	<b>Hammer Ball. 24 Oz</b> Hammer Ball peen 150 Oz size: hardwood handles, drop forged alloyed steel head , Local Best quality .	10 No		
16.	<b>Hammer Ball Pin.16 Oz</b> Hammer ball peen 24 Oz size: hardwood handles drop forged alloyed steel head , Local Best quality .	10 No		
17.	<b>Hammers Nail.16 Oz x ¼</b> Oz Hammer nails, 16 Oz, bell face, curved (Claw carpenters) , Local Best quality .	10 No		
18.	<b>Screwdrivers.16"x ¼ "</b> Screwdrivers ¼"x 16"shank plastic handle, vanadium steel blade , Local Best quality .	12 No		
19.	<b>Water closet English type,</b> (Complete Set) Best quality .	06 NO		
20.	<b>Water closet Indian type</b> , Best quality .	06 NO		
21.	<b>Wash Hand Basin.</b> Wash hand basin central pillar cock pattern , Best quality .	06 NO		
22.	<b>Wash Hand Basin.2</b> Pillar cock pattern , Best quality .	06 NO		
23.	<b>Urinal.</b> , Best quality .	06 NO		
24.	<b>Pillar Cock.</b> Pillar cock (Asian Pattern) , Local Best quality .	12 No		
25.	<b>Mixer Type.</b> Mixer type pillar cock , Local Best quality .	12No		
26.	<b>Stop Cock</b> , Best quality .	12No		
27.	<b>Bib Cock</b> , Best quality .	12No		
28.	<b>Waste Coupling</b> , Best quality .	12No		
29.	Files.Round12" 2 <sup>nd</sup> cut , Local Best quality .	12No		
30.	Files. Flat 12" 2 <sup>nd</sup> cut , Local Best quality .	12No		
31.	Files. Three square 12" 2 <sup>nd</sup> cut , Local Best quality .	12No		
32.	Electric Pipe thread cutting Machine with pipe cutter and pipe reamer ½",to 1/1 2"	03 Nos		
33.	Pillar type Drill machine 3ph Motor power 1.1 kw With work surface table 475x425mm surface stand 410x325 mm	03 Nos		
34.	Pedestal Grander Machine 400 v/3ph motor power 1.5w	03 Nos		
35.	Portable/ hand Grinding machine 4" dia	05 Nos		
36.	Portable / hand Grinding machine 4" dia	05 Nos		
37.	Portable/ hand Circular Saw 4"with cutter	12 Nos		
38.	Air Compressor with Electric Motor 1 hp	02 Nos		

	and pressure working gauges			
39.	Pipe Bender for M.S G.I pipe bedding with complete accessories 1/2" to 1 1/2 " pipe Bending	02 Nos		
40.	Portable LT Hammer Drill machine 5mm to 32mm 03 Nos	03 Nos		
41.	Driver Socket Wrench set (16 pieces ) 1/2" to 2"	2 set		
42.	Testing Equipment for Fresh water pipe system leakage testing (manual)	02 Nos		
43.	Hot air Gun for PVC welding 50 C <sup>0</sup> 450 C <sup>0</sup>	03 Nos		
44.	Ratchets pipe threader kit set (Ratcheting w/5 does and case 1/2" to 1 1/4"	12 Nos		
45.	Flat Plier (Electrician)	12 Nos		
46.	Slip Joint plier	12 Nos		
47.	Aluminum ladder (18 feet)	03 Nos		
48.	Basin Wrench / sink wrench	12 Nos		
49.	First Aid Box ( Plastic) 220x270mm	03 Nos		
50.	PPRC pipe cutter	12 Nos		
51.	Tim Srip 10"	06 Nos		
52.	Centre punch 4"	12 Nos		
53.	Flat Chisel 12" long	06 Nos		
54.	Number Punch set 4" (09 pieces)	03 Nos		
55.	Masonry Drill Bit set 5 mm to 32mm	03 Nos		
56.	Steel tap 60cm-5"	36 Nos		
57.	Scriber	36 Nos		
58.	Tap and Die set 5mm to 25mm	03 set		
59.	Oil cane (Plastic)	36 Nos		
60.	Adjustable Wrenches 8"-10" 3 types	10 Nos each size		
61.	<b>PPE Personal Protective Equipment</b>			
62.	Safety jacket (Plastic, Highways)	25 Nos		
63.	Safety Helmet (Plastic)	25 Nos		
64.	Safety shoes with Copper plate toe	25 Nos		
65.	Safety Gloves	25 pairs		
66.	Safety Goggles (Plastic)	25 Nos		

# WOOD WORK SHOP

S. No	Description of Items with Specification	Qty.	Unite Rate	Total amount	Amount of CDR
1.	Work Benches. Local Best quality 1320mmx560mmx838mm Wood tops thickness 32 mm with wooden leg 102mm square.	10 No			
2.	Bits Auger.6mm to 25mm Bits auger consisting of 13 bits 6mm to 25mm. Local Best quality	10 No			
3.	Bits Auger. Local Best quality 6mm 10mm 12.5mm 19mmMade of tool steel double square.	10 No			
4.	Bits Expansive and Adjustable.15 to 35mmBits expansive and adjustable, boring from 15mm to 5mm. Local Best quality	10 No			
5.	Bits Countersink.12.5mmBits countersink for brace. For wood, 12.5mm dia. Local Best quality	10 No			
6.	Bits Screwdriver. Local Best quality 4.75mmBits screwdriver 4.75mm for brace.	10 No			
7.	Screwdriver. Local Best quality 6mmScrewdriver, 6mm for brace.	10 No			
8.	Bits Screwdriver. Local Best quality 8mm,15mmBits screwdriver, for brace.	10 No			
9.	Bits Gimlet. Local Best quality 2 Size No2,3 Size No3,4 Size No4,5 Size No5 6 Size No6,7 Size No7,8 Size No8	10 No			
10.	Bits Brace.200mm Bits brace 200 mm sweep "Alligator" Jaw chromed. Local Best quality	10 No			
11.	Bits (Machine).9.5mm 12.5mm 9mm, 25mm Bits Machine for wood. Local Best quality	10 No			
12.	Twist Drills.1.5mm to 12.5mm 3mm 4.74mm Twist Drills straight shank. Local Best quality	05 No			
13.	Hand Drill , Local Best quality 8mmDouble pinion drill with die cast body and wooden handle. Used for small drilling operations. Overall dia. 215mm 3jaw chuck type.	05 No			
14.	Vice. Local Best quality 175mmVice, wood workers rapid action, dog in front jaw.	05 No			
15.	Curving Sets. Curving sets consisting of chisel, bent gauge u-tool skew chisel, veining tool, forged stool blades long wooden handles (set of size) Local Best quality	6 No			

16.	Chisels.3mm, 115mmChisels wood forged in one piece, tough plastic handles. Local Best quality	12 No		
17.	Chisel Wood. 6mm 9.5mm 12.5mm 19mm 25mm 37.5mm 50mm Chisels wood forged in one piece, tough plastic handles 115 mm blades. Local Best quality	10 No		
18.	Gauges. Local Best quality 3mm 6mm 12.5mm 19mm 25mm Gauges outside ground for wood working.	10 No		
19.	Hammer. Local Best quality ½ Kg,¼ Kg, Hammer nail bent claws, bell face designed to pull nails without heads.	10 No		
20.	Planes.355mm x 50mm Planes jack smooth bottom fine gray cast iron frames. Local Best quality	10 No		
21.	Plane. Local Best quality 355mm x 50mmPlane jointer.	10 No		
22.	Planes. Local Best quality 140mm x 19mmPlanes rabbit.	10 No		
23.	Planes. Local Best quality 225mm x 50mm Planes smoothing.	10 No		
24.	Plane. Planes Router hand plane circular for concave and convex surfaces, steel base. Local Best quality	10 No		
25.	Plane. Local Best quality 150mmPlanes block low cutting angle of 12 degree.	10 No		
26.	Rules. Local Best quality 610mm x 28mm 350mm Rules bench, made of hardwood.	10		
27.	Shrink Rules. Local Best quality 300mm 7.5mm (L)5mm(L) Shrink Rules Steel.	10 No		
28.	Saw Coping.162mmSaws coping using pin type blades adjustable to any angle. Local Best quality	10 No		
29.	Saw, Blades. Local Best quality 150mm Saw blades coping saw.	10		
30.	Saw. Local Best quality 300mm.Saws back full hand grip handle.	10 No		
31.	Saw. Local Best quality 300mmSaw compass with reversible blade, feature.	10 No		
32.	Saw. Local Best quality 660mm Hand Saws, coarse cut 8 TPI	10 No		
33.	Saw. Local Best quality 140mm & 660mm Saw hand rip.	10 No		
34.	Saw.300mm 14 TPI. Local Best quality	10 No		

35.	Saw. Local Best quality 225mm Hand saw coarse cut.	10 No			
36.	Mitre Box. 608mm x 127mm Mitre box including eleven point stiff back saw, adjustable angle capacity at right angle 200 mm at 45 degree, 125mm. Local Best quality	10 No			
37.	Miter Machine. 660mm x 100mm Mitre machine including vice clamps stiff back fine tooth saw for picture frame and molding cutting. Local Best quality	10 No			
38.	Screw Driver. Size 1, 2, 3, 100mm shank 6mm blade 150mm shank 6mm blade 225mm shank 6mm blade. Screw drivers. Local Best quality	10 No			



# MACHINIST WORKSHOP

S. No	Description of Items with Specification	Qty.	Unite Rate	Total amount	Amount of CDR
1.	<p><b>Universal Milling Machine</b>            Heavy, solid model made of high-grade Meehanite casting            Dovetail slideways            All slideways hardened            Central lubricating            Main switch with protective motor switch, right-/left-handed rotation switch, emergency-stop button            Largely dimensioned hand wheels with scale            Machine lamp supplied as standard            Coolant equipment supplied as standard            Drilling capacity(max.) ø40 mm            Milling capacity cutter head(max.) ø200 mm            Milling capacity end mill cutter(max.) ø30 mm            Spindle taper ISO50            Spindle speed 58~1800 rpm(50Hz)            60~1750 rpm(60Hz)            Tabel (LxW) 1320x360 mm/            1600x360 mm(optional)            X/Y-axis travel automatic 1000/300/400 mm            T-slot size/distance/number 14 mm / 95 mm / 5            Motor 4 KW            packing size(LxWxH) 2260x2070x2250 mm</p> <ol style="list-style-type: none"> <li>1. Vertical head.</li> <li>2. Slotting head.</li> <li>3. Indexing head</li> <li>4. Rotary table.</li> <li>5. Milling vice swivel 90°</li> <li>6. Milling arbor long dia 22,25,27,32mm</li> <li>7. Stub Arbor.</li> <li>8. Gear set for indexing head 13 pieces .</li> </ol>	1			

<p><b>2.</b></p>	<p><b>Lathe Machine</b>  Electrical connection 400 V Spindle  Drive motor 1.5/2.4 kW 4 kW  Spindle taper MT 6  Spindle seat Camlock DIN ISO 702-2 No. 5  Spindle bore, bar passage diameter Ø 52 mm  Quadruple tool holder mounting height max. 16 mm  Centre height 205 mm  Centre width 1 000 mm  Swing Ø over machine bed 410 mm  Swing in the bed bridge 540 mm  Turning length in bed bridge 165 mm  Bed width 206 mm  <b>Speed range</b>  Spindle speed 45 - 1 800 rpm  speeds 16 speeds  2 speeds; elec.control  Travel Top slide travel 100 mm  Cross slide travel 195 mm  Feeds and pitches  Longitudinal feed within the range 0.043 - 0.653  mm/rev (48 feeds)  Cross feed within 0.015 - 0.206 mm  Pitch - metric in range 0.4 - 7 mm  Pitch - inch in range 70 - 4 turns  <b>Tailstock</b>  Tailstock seat MT 3  Tailstock- sleeve diameter  Dimensions  Length x width x height 1 920 x 740 x 1 222  <b>Accessories</b>  Stead Rest (Fined) 01  Steady Rest (Moveable) 01  3 Jaws chuck-01  4 Jaws chuck-01  Revaluing Center-01  Tools post-01  Drilling vice 5" for Drill Machine.  <b>Live Center MT4 set 02 qty</b>  <b>2-Axis Digital Read Out 01 qty</b>  <b>Tapet Turning Attachment Qty 01</b></p>	<p>1</p>			
<p><b>3.</b></p>	<p><b>Shaper Machine</b>  Max stroke length 460mm 18"  Max horizontal travel of working table  485mm 19"  Max vertical travel of working table  350mm 14"  Size of working table 420,300,16.5",12"  Max vertical travel of tool holder 140mm 5.5"  Max rotation angle of cutter holder 0-90 degree  Stroke per minute 12-70  Speed changing of the sliding 1-3  Machine gear speed 3Motor 2-HP-956 RPM-to  Cam Switch</p>	<p>1</p>			

4.	<p><b>Power Hacksaw</b>  Model NO.  G7025  Precision Normal Precision  Blade size 450X35X2mm  cutting capacity 250X250  clamping type manual  Drive V-belt  motor 1.5kw  Trademark HOTON  Transport Package  Plywood Case  Specification 550kgs</p>	1			
5.	<p><b>Pillar Type Drill Machine</b>  Electrical connection 400V / 3Ph ~50Hz  Motor power 1.1 kW  Drilling capacity in steel (S235JR O 30 mm  Spindle seat MT 4  Spindle speeds 120-1810 rpm  Work surface table (LxW) 475 x 425 mm  Work surface stand (Lx W) 410 x 325 mm  Column diameter O 92 mm  Length x width x height 860x480x1720 mm  Total weight 135 kg</p>	1			
6.	<p><b>Surface Grinding Machine</b>  Max. width to be ground 220 mm  Max. length to be ground 470 mm  Max. height to be ground 350 mm  Table size (W×L) 210×450 mm  Grinding wheel Wheel sizes 200×13×31.75 mm  Grinding wheel Speed 3450 (60HZ)  Machine weight 920 kg  Package size 1150×1410×1950 mm  Optional accessories :  Permanent Magnetic Chuck For M818ACooling  And Dust Collector  Wheel Balancing Stand  Parallel Wheel Dresser  Wheel Chuck</p>	1			
7.	<p><b>Pedestal Grinding Machine</b>  Electrical connection  400 V/3 Ph  ~50 Hz  Motor power 1.5 kW  Lengthxwidthxheight 542x304x365 mm  Net weight 37 kg  Net weight Vario 45 kg</p>	1			



15.	<b>Divider</b> <ul style="list-style-type: none"> <li>• Pencil holder for use as a compass</li> <li>• Lockable wing for repeat measurements size 6"</li> </ul>	1		
16.	<b>Flat Screw Driver Set</b> Bi-material (PP+TPR) soft grip handle providing. Excellent comfort Chrome Vanadium (Cr-V) blade for durability. Magnetic tips for easy pick up and screw locator. Three-sided handle allowing more torque with anti-slip and anti rolling features reducing handle slippage. Ergonomic design with finger point in neckdown. Area for precise control. Built-in hang hole for easy storage. Screw tip identification on the handle for organization. <b>1-</b> 3mmx 75mm <b>2-</b> 3mm x 125mm <b>3-</b> 5mm x 100mm <b>4-</b> 6.5mm x 150mm <b>5-</b> 8mm x 200mm <b>6-</b> 8mm x 250mm	1		
17.	<b>Philips Screw Driver</b> Bi-material (PP+TPR) soft grip handle providing. Excellent comfort Chrome Vanadium (Cr-V) blade for durability. Magnetic tips for easy pick up and screw locator. Three-sided handle allowing more torque with anti-slip and anti rolling features reducing handle slippage. Ergonomic design with finger point in neckdown. Area for precise control. Built-in hang hole for easy storage. Screw tip identification on the handle for organization. 1- 1mmx 75mm      2- 1mm x 150mm 3- 2mm x 100mm 4- 2mm x 150mm   5- 3mm x 200mm 6- 3mm x 250mm	1		
18.	<b>Tap &amp; Die Set</b> Set of 40 pieces size 3mm to 12 mm	1		
19.	<b>Screw Pitch Gauge 60°</b>	1		
20.	<b>Screw Pitch Gauge 55°</b>	1		
21.	<b>Radius gauge 1-7,7.5-14mm</b>	1		
22.	<b>Combination Set</b> Combination Set 300mm/12inch Range 180 degrees Three measuring heads are attached to the stainless steel ruler, allowing versatile measurements on various types of work pieces Square head, protractor head and Centre head For various measuring and marking applications Stainless steel rule with engraved graduations 4 Items in set	1		

<b>23.</b>	<b>Allen key Set</b> Hex Key Set 10pc S/arm MM Size = 1.5, 2, 2.5, 3, 4, 5, 5.5, 6, 8, 10mm Set of 10 pieces	1		
<b>24.</b>	<b>Double Ended open Spanner 6-32mm</b> 12 x Spanners: 06-07, 08-09, 10-11, 12-13, 14-15, 16-17, 18-19, 20-22, 21-23, 24-26, 25-28, 30- 32mm	1		
<b>25.</b>	<b>Ball Peen Hammer 500 gm</b> Select clear lacquered wooden hickory handle Hardened and tempered steel head Fully polished head Ball end, for riveting and poll used for normal strike	1		
<b>26.</b>	<b>Cross Peen Hammer 500 gm</b> <ul style="list-style-type: none"> <li>• Weight:1.60 LBS</li> <li>• Width:4.00 (in)</li> <li>• Height:1.00 (in)</li> <li>• Depth:16.00 (in)</li> </ul>	1		
<b>27.</b>	<b>Marking hammer 250 gm</b> <ul style="list-style-type: none"> <li>• Head Shape and Dimensions: Flat</li> <li>• Hiameter 24mm. Ball Diameter</li> <li>• 24mm. Head Length: 95mm.</li> </ul>	1		
<b>28.</b>	<b>Ruber Hammer 4 Inch</b> Item Weight 830 g Product Dimensions 32.5 x 12.7 x 5.3 cm	1		
<b>29.</b>	<b>Number Punch Set/ Letter Punch Set</b> Tip Size (mm) 5 mm	1		
<b>30.</b>	<b>Flat /Round/Half Round/Tri Square/Square files</b>	1		
<b>31.</b>	<b>Needle File Set</b> Size 5 X 180 Set of six pieces	1		
<b>32.</b>	<b>Key File Set</b> Handy files known as "key files" are excellent for use on wood, wax and other soft materials. Shapes are flat, round, three-square, warding, square and half-round. The length of cut is 4" and wooden handles are 2" long. The double cut is approximately a cut 0 with an overall length of 6- 3/4".	1		
<b>33.</b>	<b>File Brush</b> material wood/steel	1		
<b>34.</b>	<b>Flat Chisel.</b> Item Weight 1.45 pounds Product Dimensions 12 x 0.6 x 0.7 inches Forged, one-piece construction for strength Hardened, quenched and tempered for long life and durability Powder-coated finish for easy visibility Ideal for cutting/shaping wrought iron, cast-iron, steel, brass, bronze, copper, aluminum, bolts, nuts, and rivets	1		

35.	<b>Cross Cut Chisel</b> <ul style="list-style-type: none"> <li>▪ Width : 3.7 inch</li> <li>▪ Height : 0.4 inch</li> <li>▪ Length : 6.5 inch</li> </ul>	1			
36.	<b>Grooving Chisel</b> Length (L, L1):- 150 mm Width of Cutting Edge (a,b):- 3 mm Packing Unit:- 10 Piece Width Across Flat of Shaft (s):- 10 mm Weight:- 0.07 kg	1			
37.	<b>Reamer 4,6,8,10, 12 mm</b> Sturdy construction Efficient performance Effective	1			
38.	<b>Die M5, M6, M8, M10, M12</b>	1			
39.	<b>Dies Handles</b> Hardened and tempered jaws. Shiny black finish. General tool for handy tapping. High Quality Tool for Hand Tapping Operation. Smaller Sizes available in Zinc Die Casting. Large sizes above 3/4" available in Steel Casting	1			
40.	<b>Drills Bit Set</b> <ul style="list-style-type: none"> <li>▪ 25 twist drill bits</li> <li>▪ Made of high speed steel</li> <li>▪ Hand-guided and stationary drills.</li> <li>▪ Long lifetime.</li> <li>▪ Low risk of breakage due to excellent elasticity.</li> <li>▪ Suitable for all power tool brands.</li> <li>▪ Stored in a rugged metal box for tool protection and a clean layout.</li> </ul> Note: Use of coolant recommended, e.g. Bosch universal cutting oil 2 607 001 409.	1			
41.	<b>Drill Bit Set</b> Twist drill HSS with morse taper >> 9-part; sizes 14.5/16/18/20/22/24/26/28/30 mm >> Long service life. >> Good chip removal >> Right handed				
42.	<b>Drill Set 1 to 6 mm with Difference 0.1 mm</b> Hss Drill Bit Set For Wood, Plastic And Aluminum Ideal For DIY, Home And General Building / Engineering Using Containing sizes:0.1, 1mm, 1.5mm, 2mm, 2.5mm, 3mm Material: High Speed Steel with Titanium coated				

<p><b>43.</b></p>	<p><b>Centre Drill 2.5, 3.0 mm</b>  Durable and Resistance: Center drill bit is made of HSS high speed steel, with extremely sharp blade, low consumption and durable with impact resistance, wear resistance.  6 Difference Sizes: Drill tip diameter size of center drill bits including  1.0mm, 1.6mm, 2.0mm, 2.5mm, 3.15mm, 5.0mm.  Wide Usages: Center drill bits can be used to make conical holes for a lathe center in order to make a starting point for a standard twist drill, designed to prevent the twist drill from walking, as well as for producing center holds in components or work pieces with require machining between centers.  Metal, Alloy, Copper, Iron, Wood, Aluminum,</p>	<p>1</p>			
<p><b>44.</b></p>	<p><b>H.S.S tool Bits Different Size</b>  Size 1/4 x 6    5/16 x 6    3/8 x 6    1/2 x 6  5/8 x 6    3/4 x 6  Lathe tools, or tool bits as they are sometimes called, are the cutting tools that are used for turning and facing work on the lathe.  The most popular lathe tools are those made of high-speed tool steel (HSS).  They can be used for machining most materials including wood, plastic, aluminum, brass and free-machining steel.  These tools will retain their hardness at temperatures up to 1000° Fahrenheit (588° C.). For this reason, depth of cut, cutting speed and feed rates are important.  The big advantage of high-speed steel tools is the ease with which they can be sharpened.</p>	<p>1</p>			
<p><b>45.</b></p>	<p><b>Morse Taper Gauge set (plug + ring) MT-2, MT-3, MT-4</b>  Material is solid, not easy to break.  High strength and hardness.  Easy to install. Durable in use. Brand new Material: carbon steel Color: gray &amp; black Size: 92x12mm,112x17mm,133x23mm Drill type: fixed sleeve Applicable machine tools: drilling machine  Package included: 3pcs x Morse Taper Adapter  Only the above package content, other products are not included.</p>	<p>1</p>			
<p><b>46.</b></p>	<p><b>Oil Cans</b>  An Oil Can is a very handy tool that holds oil, and also lets you lubricate machines through its thin nozzle tip.  You can buy Oil Cans online in a variety of standard sizes and capacities.  You can choose form brands like Fame, Prima and many others.</p>	<p>1</p>			



47.	<b>Tool Centre Gauge</b> Very Handy Gauge For Grinding & Setting Thread Cutting Tools. Made From Stainless Steel. Satin Chrome Finish. Permanently Deep Etched Graduations. Edge Profile Ground. Useful to find number of threads per inch by means of graduations in 14ths, 24ths and 32nds of an inch.	1			
48.	<b>Hand Vice</b> <ul style="list-style-type: none"> <li>▪ Jaw Opening 28 mm</li> <li>▪ Jaw Width 50 mm</li> <li>▪ Nett Weight 0.55 kg</li> </ul>	1			
49.	<b>Adjustable Wrench 12"</b> Forged chrome vanadium steel is strong and durable Handle hole for tethering, hanging or storage Laser etched jaw scale for easy size identification Polished chrome head and chrome plated body for anti-corrosion protection	1			
50.	<b>Try Angle</b> Item Name Squares Colour Black Length (MilliMeter) 200mm Handle Length 124mm	1			
51.	<b>Counter Sink</b> <ul style="list-style-type: none"> <li>▪ Material: Stainless Steel</li> <li>▪ Size: 6.30-31.00 mm</li> <li>▪ Diameter: 8.30 mm</li> <li>▪ Surface Finish: Polished</li> </ul>	1			
52.	<b>Counter Bore Different Size</b> 7Pcs/set Counterbore Drill Bit Sets HSS Counterbore End Milling Cutter M3.2-M12.4 Countersink Drill Bits Pilot Slotting Milling Cutter End Mill Cutting Tool Set for Copper Aluminum Cast Iron	1			
53.	<b>Twist Drill Grinding Gauge</b> suitable for drill bits up to a diameter of 50 mm.	1			

54.	<b>Safety Goggle</b> <ul style="list-style-type: none"> <li>▪ Extra wide and ultra soft safety goggles with hard plastic lens and durable coating is scratch proof, waterproof, and is an essential piece of protective gear to provide concealment</li> <li>▪ Dual injected rubber design conforms to the face and fits over regular glasses to provide an excellent field of view and offers a high level security from chemicals, dust and debris</li> <li>▪ Universal standard fit wrap-around PVC frame offers maximum comfort and adjustable strap fits a wide range of head sizes</li> <li>▪ Polycarbonate lens is impact resistant and ideal for use on jobs sites with construction tools, worksites, laboratories and class</li> <li>▪ High approved eye wear meets ANSI standard Z87.1 is suitable for use as firearms safety glasses at firing ranges</li> </ul>	1			
55.	<b>Diamond Dresser with Holder</b> <ul style="list-style-type: none"> <li>▪ Small and compact size.</li> <li>▪ Powerful holding of the magnet on the machine table.</li> <li>▪ Easy holding of the diamond dresser.</li> </ul>	1			
56.	<b>Acme Thread Gauge</b> <ul style="list-style-type: none"> <li>▪ American Specifications: ANSI/ ASME B1.5-1997</li> <li>▪ B.S Specifications: B.S 1104 – 1957</li> </ul>	1			
57.	<b>Tool Center Gauge</b> <ul style="list-style-type: none"> <li>▪ Material Aluminum</li> <li>▪ Color Silver</li> <li>▪ Thread Angle 30 Degree</li> <li>▪ Weight Upto 50 gram</li> </ul>	1			
58.	<b>Drill Drift</b> <ul style="list-style-type: none"> <li>▪ Used to remove taper shank tools from sleeves or spindles.</li> <li>▪ Drop forged and hardened.</li> </ul>	1			
59.	<b>Combination Pliers</b> <ul style="list-style-type: none"> <li>▪ Carbon steel hardened and tempered</li> <li>▪ The jaws and cutting edges are induction hardened</li> <li>▪ Heavy duty two-tone soft grip handles with slip guards</li> </ul>	1			
60.	<b>Tool Box</b> Includes 5 tray Metal tool box Durable and long lasting Made up of elegant material	1			

61.	<p><b>Plain Milling cutter Different Size. 100mmx75mm, 100x50, 150mmx80, 150x60</b></p> <ul style="list-style-type: none"> <li>Arbor Hole Diameter 26mm</li> <li>Brand Name F&amp;D Tool Company</li> <li>Cutting Angle 45 degrees</li> <li>Cutting Direction Multi Directional</li> <li>Finish Type Uncoated (Bright)</li> <li>Material High-Speed Steel</li> </ul>	1			
62.	<p><b>Side and Face Cutter Different Size. 100mmx10mm, 75mmx10mm, 150mmx12mm, 150mmx10</b></p> <ul style="list-style-type: none"> <li>Material hss</li> <li>Color black</li> <li>Brand bjs</li> </ul>	1			
63.	<p><b>Shell &amp; Mill</b></p> <ul style="list-style-type: none"> <li>Taper: DIN69871</li> <li>Runout: &lt;0.005mm</li> <li>Taper Tolerabce: &lt;MT3</li> <li>Balancing: G6.3/15000</li> <li>Surface Treatment: Blackening</li> <li>Application: for mounting milling cutters with transverse or longitudinal groove.</li> </ul>	1			
64.	<p><b>Colet chuck with Colet</b></p> <p>Optimum 18-piece Ø2-20mm ER32 clamping sleeve set with socket, ISO40 mounting cone!</p> <p>Easy-to-use, high quality ER32 socket set with key, socket, M16 / M16 and BT40 clamping bolts and 18 Ø2-20mm sockets, all packed in a convenient metal storage box. DIN ISO 15488. The seat has an ISO40 mounting cone.</p>	1			

<p><b>65.</b></p>	<p><b>End mill Cutter</b>  Titanium coated  &gt;&gt; Improved hardness and stability with 2x to 5x service life  &gt;&gt; Twice the machining performance  &gt;&gt; Improved workpiece finish  &gt;&gt; Cylindrical shank and lateral lugs  &gt;&gt; Version with 2 cutting edges for milling keyways/fixing grooves and milling out the workpiece centre  &gt;&gt; Vertical or lateral milling possible  &gt;&gt; Version with 4 cutting edges and 30° right-hand twist for good chip removal in normal to hard materials  12-part 3352250  &gt;&gt;6 end mills, short version · Version with 2 cutting edges.  &gt;&gt;DIN 1835 B (Ø12x73, Ø10 x 63, Ø8 x 61, Ø6 x 52, Ø5 x 52, Ø4 x 51 mm)  &gt;&gt;6 end mills, short version · Version with 4 cutting edges.  DIN 1835 B (Ø12 x 83, Ø10 x 73, Ø8 x 61, Ø6 x 57, Ø5 x 57, Ø4 x 55 mm)  20-part 3352255  &gt;&gt; 10 end mills DIN 327 D · Short version · 2 cutting edges  DIN 1835 B, (3/4/5/6/8/10/12/14/18/20 mm)  &gt;&gt; 10 end mills DIN 844 B · Short version · 4 cutting edges  DIN 1835 B, (3/4/5/6/8/10/12/14/18/20 mm)</p>	<p>1</p>			
<p><b>66.</b></p>	<p><b>Involute Gear Milling Cutter Different Size</b></p> <ul style="list-style-type: none"> <li>▪ Module Number: 1.75</li> <li>▪ Material: HSS</li> <li>▪ Outer Diameter: 60mm</li> <li>▪ Inside Bore: 22mm</li> <li>▪ Pressure Angle: 20 degree</li> </ul>	<p>1</p>			
<p><b>67.</b></p>	<p><b>Key Way Cutter</b>  <b>Sizes: 4mm,5mm,6mm,7mm,8mm,9mm10mm</b></p> <ul style="list-style-type: none"> <li>▪ Parallel shank keyway milling cutter according to GB1112-81 production. Accuracy levels are e8 and d8.</li> <li>▪ 2 Flutes Keyway End Mill Cutter</li> <li>▪ Usually used to be assembled on milling machine</li> <li>▪ Can milling of copper, aluminum, tool steel, cast iron, etc</li> <li>▪ High toughness, abrasion resistance, high-speed cutting for the high hardness</li> <li>▪ Can processing directly or fine processing to the heat treatment mold</li> </ul>	<p>1</p>			
<p><b>68.</b></p>	<p><b>Micro Meter Different Sizes</b>  Range 0-25 Accuracy0.004  Resolution 0.01  <b>2.</b> Range 25-50 Accuracy 0.004  Resolution 0.01</p>	<p>1</p>			

69.	<b>Inside Micro Meter</b> Using the measured diameter Design standard, compact, lightweight, easy to use. Range: 5-30mm Accuracy: $\pm 2\mu\text{m}$ The split: 0.01mm Read the result on line division	10			
70.	<b>Dial Verniercallipers</b> Dial Caliper 0-150mm Capacity 0-150mm Resolution 0.02mm Standard DIN862 Shockproof dial caliper Rapid movement with thumb wheel 4 way measurement Hardened stainless steel rack Measuring surface is micro-lapped	10			
71.	<b>Dial Indicator with Magnetic Stand</b> Dial Indicator 0-10mm Range 0-10mm Resolution 0.01mm Diameter 58mm/ear Magnetic Indicator Stand With powerful on/off magnetic base Magnetic force 80kg/ 175LBS Universal mode which can be used for indicators with or without "lug" on backplate Extra rigid	1			
72.	<b>Digital Vernier calipers Different Size</b> <b>Feature</b> Easy to read LCD display Ground micro-lapped measuring surfaces Thumb wheel for fine adjustment Functions: mm/inch conversion, on/off, zero-setting, battery low indication SR44 Battery Capacity Resolution Jaw Length 0-150mm 0-6" 0.01mm 0.0005" 40mm	1			
73.	<b>First Aid box</b> <ul style="list-style-type: none"> <li>• Classic Empty First Aid Box</li> <li>• Red plastic case</li> <li>• H220 x W270 x D90mm</li> </ul>	1			

# LIST OF ITEMS FOR COMPUTER LAB

(Shangla, Kohistan, Mansehra, Lakki Marwat)

S. No	Description of Items with Specification	Qty.	Unite Rate	Total amount	Amount of CDR
1.	<p><b>Desktop System</b></p> <p><b>Processor:</b> 12th Gen Intel Core i5-12400 (cores 06, cache 18 MB,) Turbo boost frequency: 4.4 GHz  <b>RAM:</b> 08 GB DDR4, 3200 MHz  <b>Storage:</b> 1TB HDD + 256 GB SSD/NVMe  <b>Graphics Card:</b> Intel UHD Graphics 730  <b>Network:</b> One RJ-45  <b>USB:</b> Four USB 3.2 Gen 1 ports, Four USB 2.0 ports  <b>Audio:</b> One global headset jack, One audio line-out port  <b>Video:</b> One DisplayPort, One HDMI  <b>Ethernet:</b> Realtek RTL8111HSD  <b>Wireless:</b> 2.4 GHz/5 GHz+ Bluetooth  <b>Operating system:</b> Win 11 Pro  <b>Accessories:</b> Dell Wired Keyboard &amp; Mouse  <b>LED:</b> Branded 18.5" LED  <b>Warranty:</b> One Year Local Warranty  <b>Installation: Yes</b></p>	<p><b>Total 100</b></p> <p><b>25 Shangla</b></p> <p><b>25 Kohistan</b></p> <p><b>25 Lakki Marwat</b></p> <p><b>25 Mansehra</b></p>			
2.	<p><b>65" LED Specs</b></p> <p><b>Size:</b> 65"  <b>OS:</b> Android  <b>RAM/ROM:</b> DDR3-2133: 1G Bytes or Above  <b>Certification:</b> CB, HDMI, Dolby Audio, CTS (Google Official Certification), Netflix  <b>Display Type:</b> 4K LED UHD  <b>Display Resolution:</b> 3840×2160  <b>UHD Support:</b> Yes  <b>Refresh Rate:</b> sixty or Above  <b>Dynamic Contrast:</b> Yes  <b>Connectivity Internet Link:</b> 2.4GHz dual-band Wi-Fi 802.11 b/g/n or Above  <b>HDMI:</b> Yes  <b>USB:</b> Yes  <b>A/V IN:</b> Yes  <b>Headphone:</b> Yes  <b>Speaker Type:</b> Integrated Speaker Boxes (Bottom Side)  <b>Warranty:</b> One Year Local  <b>Installation: Yes</b></p>	<p><b>Total 08</b></p> <p><b>02 Shangla</b></p> <p><b>02 Kohistan</b></p> <p><b>02 Lakki Marwat</b></p> <p><b>02 Mansehra</b></p>			
3.	<p><b>LaserJet Printer</b></p> <p><b>Memory:</b> 64MB  <b>Processor:</b> 400MHz  <b>Connectivity:</b> Hi-Speed USB 2.0 port  <b>Print speed:</b> Black (normal, A4): Up to 20 ppm  <b>First page out:</b> Black (A4, ready): As fast as 8.3 seconds; Black (A4, sleep): As fast as 18 seconds</p>	<p><b>Total 08</b></p> <p><b>02 Shangla</b></p> <p><b>02 Kohistan</b></p>			

	<p><b>Resolution:</b> Black (best): Up to 1200 x 1200 dpi; Black (normal): Up to 600 x 600 dpi</p> <p><b>Duty cycle (monthly, A4):</b> Up to 10,000 pages</p> <p><b>Wireless Connectivity:</b> Yes</p> <p><b>Recommended monthly page volume:</b> 100 to 1,500 pages.</p> <p><b>Warranty: 1 year Local</b></p>	<p><b>02 Lakki Marwat</b></p> <p><b>02 Mansehra</b></p>			
4.	<p><b>Photocopier Specs</b> Copy, Print, Scan, Wireless</p> <p><b>Continuous output speed:</b> 27 PPM or better</p> <p><b>Operation Panel:</b> 4-Line LCD or better</p> <p><b>Warm up Time:</b> 19 seconds</p> <p><b>First Page output Time:</b> 6.5 seconds</p> <p><b>Memory:</b> 512MB or Above</p> <p><b>ARDF capacity:</b> 50 Sheets</p> <p><b>Multiple copying:</b> Upto 999 Copies or Above</p> <p><b>Resolution:</b> 600 dpi or Above</p> <p><b>Zoom:</b> From 25% to 400% in 1% steps</p> <p><b>Print Resolution:</b> 600 x 600 dpi</p> <p><b>Network Interface:</b> Standard: Ethernet (1000/100/10BASE), USB 2.0 Type B x1, Wireless LAN (IEEE 802.11a/b/g/n/ac)</p> <p><b>Wi-Fi:</b> Yes</p> <p><b>Scanning Speed:</b> Mono: 18ipm Color: 6ipm</p> <p><b>Resolution:</b> 600 dpi</p> <p><b>Compression Method:</b> MH/MR/MMR, JPEG</p> <p><b>File Formats:</b> Single Page TIFF, Multi Page TIFF, Single Page JPEG, Single Page PDF, Multi Page PDF</p> <p><b>Scan Modes:</b> Email, Folder, USB</p> <p><b>Paper Handling Size:</b> A3, A4, A5, A6, B4, B5, B6</p> <p><b>Paper Input Capacity:</b> Standard: 500 sheets Maximum: 1,600 sheets</p> <p><b>Paper Output Capacity:</b> 250 sheets</p> <p><b>Warranty:</b> One Year Local</p> <p><b>Installation: Yes</b></p>	<p><b>Total 04</b></p> <p><b>01 Shangla</b></p> <p><b>01 Kohistan</b></p> <p><b>01 Lakki Marwat</b></p> <p><b>01 Mansehra</b></p>			