

Schedule of quantity				Estimated Cost	380500.00
				Earnest Money	7610.00
Name of work- Construction of water quality test laboratory (WQMSP) at Fatehpur in Tehsil Fatehpur Distt. Kangra (HP).				Time Limit	15 Days
SH :- Providing and Supplying of laboratory equipments for water testing lab in JSV Division Fatehpur.					
Sr. No.	Description Of Item	Quantity	Unit	Rate	Amount
1	<p>Digital Spectrophotometer. Range of 340 nm to 960 nm with facility for concentration, %Transmission (%T), Absorbance (Abs.), and Concentration (Conc.). Dual display of wavelength and data Highly stable and accurate. SPECIFICATIONS: Range: 340-960nm Resolution: %T:01, Abs.:0.001, Conc.:1 Output: %T:0-100, Abs.:0.001, Conc.:0-1999 Deductor: Silicone photodiode Light source: 6V, 10W, Tungsten Halogen Lamp Spectral Bandwidth: 5mm Wavelength Resolution:1mm Power: 230 V ± 10% AC, 50Hz Complete with accessories-Glass Square Cuvettes of 10 mm path-length: A set of 2, Operation Manual and Dust Cover Make: Elico, Esico, Systronics etc.</p>	1.00	Each		
2	<p>Water Analysis Kit 3 1/2 Digit display LCD, covering 8 parameters pH, conductivity, TDS, Salinity, colorimeter, Turbidity, Dissolved Oxygen and Temperature with rechargeable battery,- cum mains operated complete with accessories fitted in a high quality ABS brief case, operation.(Make: Elico, Esico, Systronics etc.)</p>	1.00	Each		
3	<p>Water Distillation Unit (Cabinet Type) Automatic, single stage boiler and condenser of borosilicate glass with built in cut-off device with reset button output 1.5 ltr-2 ltr, power 1.5 KW conductivity of distilled water less than 2.5µs/cm. Provided with replaceable silica sheathed (Quartz) heater.</p>	1.00	Each		
4	<p>Bacteriological Incubator Make:- Merck/Hach/Qic/Leh/Waters/Memmert:-Specifications inner size approx. 0.5 x 0.5 x 0.5 m (h x w x d) material inside stainless steel chamber hot enameled outside range 35 to 60 °C, thermostatically controlled accuracy ±1.0 °C power supply 220 VAC ± 25%, 47 to 53 Hz, approx. 400 Watt display digital display. Features • 3 shelves • high quality insulation between inner chamber and outer wall • full length inner glass door with roller type latch for monitoring without disturbing inside temperature • thermometer access hole to display inside temperature Accessories • suitable thermometer having 0.1 °C graduation complete in all respect as per the direction and to the entire satisfaction of Engineer-In-Charge within all leads and Lifts.</p>	1.00	Each		

5	<p>Balance Analytical Capacity 200grms and Sensitivity 1Mg</p> <p>Specifications Type electronic, single pan capacity up to 200 g resolution 0.1 mg pan size approximately 80 mm diameter display LCD power supply 220 V \pm25%, 47 to 53 Hz AC Power</p> <p>Features</p> <ul style="list-style-type: none"> • auto zero tare function • removable stainless steel tray • overload protection • auto calibration facility <p>Accessories</p> <ul style="list-style-type: none"> • set of certified calibration weights (0 to 200 gm. Full range) • voltage stabiliser • dust proof cover • necessary tools • operation manual 	1.00	Each		
6	<p>Hot Plate (Rectangular)</p> <p>Specifications size approx. 0.3 x 0.45 m (l x w) temperature range ambient to 300 °C, thermostatically controlled top plate material cast iron, body hot enameled mild steel power supply 220 VAC \pm25%, 47 to 53 Hz</p> <p>Features</p> <ul style="list-style-type: none"> • 2000 Watt spiral heaters of best quality with porcelain beads insulation, embedded in top plate • power indicator light 	1.00	Nos		
7	<p>Magnetic stirrer Sartoris</p> <p>Specifications :- rotation speed 0 to 1200 rpm, electronically controlled heating element 300 Watt, thermostatically controlled power supply 220 VAC \pm25%, 47 to 53 Hz</p> <p>Features</p> <ul style="list-style-type: none"> • stainless steel top <p>Accessories</p> <ul style="list-style-type: none"> • PTFE (Teflon) coated magnets, size 10 mm to 50 mm, increasing with 5 mm, two of each 	1.00	Each		
8	<p>Tds Meter Pen Type Lab Based</p> <p>Range 1-1999 Ppm. resolution 10 Ppm. Accuracy +/- 0.1 full scale, Tds Factor 0.40-1.00 Operating Temperature 0-5 C and Normalization Temperature 25 C.(Direct Reading Digital Display)</p>	1.00	Each		

9	<p>Ph Meter Lab Based</p> <p>Specifications</p> <p>Functions Measurement of pH, mV</p> <p>Display 4 digit LCD/LED</p> <p>pH Meter • Range: 0-14</p> <ul style="list-style-type: none"> • Accuracy: 0.01 pH unit • Resolution: 0.01 pH unit • Multipoint calibration (5 points) <p>mV Meter • Range: 0-1000</p> <ul style="list-style-type: none"> • Resolution: 0.01 mV • Accuracy 0.05 mV <p>Temperature Compensation</p> <ul style="list-style-type: none"> • 0 to 100°C, manual and automatic <p>Calibration • Calibration certificate from NABL Accredited Laboratory and installation qualification, operational qualification and performance qualification certificate</p> <p>Power supply • 220 VAC ±10%, 47 to 53 Hz</p> <ul style="list-style-type: none"> • Dual power (battery/AC Power) <p>Accessories • Two electrodes with silicon body (one spare)</p> <ul style="list-style-type: none"> • Electrode stand • Carrying case for transportation in field • Operation manual • Three buffer solutions for calibration i.e. pH 4, pH 7, pH 9.2 	1.00	Each		
10	<p>Autoclave</p> <p>Specifications</p> <p>material stainless steel inside and lid hot enameled outside</p> <p>working pressure adjustable to 1 bar</p> <p>max. pressure 1.5 bar</p> <p>power supply 220 VAC ±25%, 47 to 53 Hz, single phase, approx. 2500 Watt</p> <p>Accessories</p> <ul style="list-style-type: none"> • pressure gauge • steam release cock • safety valve • aluminium perforated basket • water level indicator • lifting arrangement <p>Capacity 10-12 ltrs</p>	1.00	Each		

11	<p>Supplying of Referezirator</p> <p>Specifications type vertical double door capacity approx. 280 litre power supply starting automatic frost free voltage 160 to 260 VAC, 47 to 53 z running voltage 140 to 280 VAC, 47 to 53 Hz temperature continuous constant temperature at 4°C</p> <p>Features <ul style="list-style-type: none"> • built in voltage stabiliser • 2 doors and 3 trays • self draining defrosting • PUF insulation • locking system </p>	1.00	Each		
12	<p>Providing Thermometer of reputed Make</p> <p>Specifications type mercury filled glass made range three ranges: 0-80oC, 10-150oC, 20-250oC accuracy □0.5oC</p> <p>Accessories <ul style="list-style-type: none"> • Storage box </p>	2.00	Each		
13	<p>Providing and fixing of Water Bath of big size</p> <p>Specifications inner size approx. 0.4 x 0.3 x 0.1 m (l x w x d) material stainless steel inside, stove enameled outside temperature range ambient to 100°C, thermostatically controlled power supply 220 VAC ±25%, 47 to 53 Hz accuracy □2□C</p> <p>Accessories <ul style="list-style-type: none"> • stainless steel cover, 1 mm thickness, with 12 holes, 75 mm diameter </p> <p>Features <ul style="list-style-type: none"> • drain cock or plug • double walled, highly insulated • pilot lamp for thermostat operation </p>	1.00	Each		
14	<p>Providing Coolbar with icepacks.</p> <p>Specifications size place for 12, one litre bottles with enough space for ice blocks material galvanised iron</p> <p>Features <ul style="list-style-type: none"> • double wall having insulation filling • drain cock • locking facility </p>	1.00	Each		

15	<p>Providing Double distillation apparatus/ Ultra pure water purification system Conditions and requirements The conductivity after distillation shall be equal or less than 1.0 \squareS/cm at 25°C Specifications material quartz glass, thermal shock resis-tant capacity 1.5 litres/h power supply 220 VAC \pm25%, 47 to 53 Hz, approx. 1 kW Accessories • sturdy metallic stand with supporting ring clamp for condenser • operation manual Features • glass embedded heating element with over-heating protection • switch and neon indicator light for power</p>	1.00	Each		
16	<p>Providing Centrifuge Speed • Maximum 15,000 rpm Centrifugal force (RCF) • Maximum 18,000xg Tube size • Maximum 100 ml Capacity • Maximum 400 ml Rotary angle head • 8 x 50 ml Temperature range • Ambient Display, multifunctional • LCD/LED Power supply • 220 VAC \pm10%, 47 to 53 Hz Protection • Auto shut down for imbalance</p>	1.00	Each		
17	<p>Providing Membrane Filter Assembly with Vaccume pump consisting of Vaccume pump (Oil Filled), motor flow 1/20 Ltr / minute, stage with filter holder membrane of 47mm, Flask 1 liters capacity with filter membrane (PK/100 PC) of Approved Make: NSW/Ambassador/PATSIO</p>	1.00	Each		
18	Colony counter	1.00	Each		
19	Chloroscope simple	1.00	Each		
		Total =			

TERMS AND CONDITIONS

- 1 The work will be carried out as per IPH/JSV specifications including all leads, lifts and loading, unloading, packing charges etc.
- 2 The rates should be inclusive of all taxes, freight charges etc. nothing shall be paid extra.
- 3 Work shall be started within 15 days after the award of the work.
- 4 The firm shall supply the manufacturer's manual of O&M of these equipments and list of spares including periodical maintenance schedule along with list of
- 5 **Guarantee:** Guarantee of One year from the date of completion of work. In case any defect is found within guarantee period, the same will be repaired /
- 6 After sale, service i.e. warranty / Guarantee should be properly ensured by the bidder and proof to this effect be attached.
- 7 Normally only a registered contractor can work in IPH/JSV department but if not so, the bidding contractor shall get himself registered in appropriate class if he is
- 8 No extra / substitute item will be allowed for the completion of this work without prior approval
- 9 For any delay in execution of work beyond the time period or breakdown during the guarantee period 0.1% of the total cost shall be deducted for each day of
- 10 The equipments shall conform to specification as per CPHEEO manual, Implementation manual of National Rural Water Quality Monitoring and Surveillance
- 11 The specifications in respect of purpose to be served by the apparatus/ equipments, bearing range of the equipments configured in the schedule of quantities
- 12 80% of the payment shall be released after physical delivery of material in laboratory and balance shall be released after installation, calibration, testing and
- 13 Nothing shall be paid for damaged or undelivered material to the firm in any condition.
- 14 The supplier shall install the equipments in the laboratory and shall be responsible for calibration, testing and commissioning of the same to the entire
- 15 All equipments shall carry a replacement warranty of one year minimum or as specified by the manufacturer.
- 16 A certificate from the original manufacturer be attached to own the responsibility from the selected bidder for the execution of contract until its tenure.
- 17 Selected bidder has to ensure availability of spare parts and service maintenance for at least five years on payment of cost if applicable (List/ cost).

- 18 If during the warranty period, any system as a whole or any sub system has any failure on two or more occasions in a period of three months, it shall be replaced
- 19 The vendor should be original manufacture of the equipments or authorized supplier / representative in India.
- 20 10% security, income tax and GST will be deducted from each running bill of the contractor.
- 21 1% labour cess charges will be deducted from the contractor bill.
- 22 The validity of tender shall be 60 days from the date of the opening of the tender.
- 23 The warranty / Guarantee should be properly ensured by the bidder & proof to this effect be attached.

Executive Engineer
JSV Division Fatehpur