

			Estimated Cost:-	192700/- only	
			Earnest Money:-	3900/- only	
	DRAFT NIT		Time:-	Three month	
Name of work: Providing of Instruments of water testing Lab in IPH Division Ghumarwin in Tehsil Ghumarwin District Bilaspur HP under IEC Activities.)					
S.N	Description of item.	Qty	Unit	Rate in	Amount.
				Figures	Words
1	Providing pre programmed UV Digital Spectrophotometer , Micro processor based touch screen interface AC power with battery back up for measurement of presence of Arsenic, Fluoride, Iron, Nitrate, Nitrite, Sulphate, Chlorides, COD, Total hardness and Alkalinity having following specifications:- Touch screen disply with intuitive user interface 1. Operating Mode:- Transmittance (%) Absorbance and Concentration. 2. Source Lamp, Tungsten or halogen 3. Ph Metre 4. Universal sample holder 5. Approximate wave length Range: 340 to 900 nm 6. Wave length accuracy:- +/- 1.5 nm 7. Wave length resolution:- 1 nm 8. Wave Length Calibration:- Automatic 9. Wave length selection:- Automatic, based on method selection 10. Spectral Bandwidth:- 5 nm User- entered calibrations up to 50 data logging 11. 500 points Automatic method recognition: with TNT plus vial 12. Test 10-fold measurement and averaging : with TNT plus 13. Vial test display: Backlit, grayscale LCD touch screen 14. External outputs: USB(1 master, 1 slace) 15. Cell compatibility: 1" square,1" round, 1 cm square, 1 -cm x 5 -cm. 16. Multipath 1'/1 cm, 16 mm round, 13 mm round I Export capability: csv (comma-separated values) file.	1	Each		
2	Providing of Nephelometer (Turbidity meter) electronic digital for nephelometric measurement according to USEPA and ISO 7027, range 0 to 4000 NTU display: 3.5 digital LCD, resolution 0.01 NTU, detector, two sample testing tubes, photo cell accessories complete having accuracy +/- 2% with all essential accessories alongwith dust cover, manual, subbatter and spaced for two years	1	Each		
3	Providing of Multi- parameter Probe type Multimeter with capability of storing results for measurements of:- 1. pH of range 0 to 14 pH resolution 0.1/0.01/0.001 soloutable provision 0.02 pH units. 2. Conductivity of range 0.01 uS/cm to 200 uS/cm and resolution 0.01 uS/cm (5 digits maximum) 3. Total dissolved solids (TDS) of range 0.00 to 50.0 g/L and resolution 0.1 mg/L 4. Dissolved oxygen (DO) of range 0.05 to 20.0 mg/L (0 to 200 %) and resolution 0.01 mg/L and 5. Salinity of range 0 to 42 g/kg of resolution 0.01 ppt. The following minimum features/ specifications i/c additional features, if any be provided:-	1	Each		

	a)The instrument shall be capable of working in fresh, polluted or saline water including all accessories for all tests required.				
	b)The instrument shall have a non volatile flash dish memory capable of storing individual reading as a standard loss of battery power shall not cause loss of memory & memory back up battery shall not be required				
	c)The instrument shall have the capability of updating its internal software with newers version via disk in the field by end users or from the web.				
	d) The instrument shall be capable of having connectorised field replaceable probe for the DO conductivity, temperature, pH & Turbidity sensor. The sensor shall be capable of being removed with out opening or exposing the internal electronic environment				
	e) All optical sensor must have their own dedicated wiping system for anti fouling protection & improved data quality				
	f) All sensors parts shall have secondary back up seals, these protecting the internal electronics from the environment.				
	g) The instrument shall be supplied with users friendly programme providing communication & data processing.				
	h) Calibration solution for all the supplied sensors should be quoted with the instrument.				
	i) Calibration in probes				
	ii) Cable length 3 meters				
	iii) Probe should be stainless steel				
	iv) Temperature				
	v) BOD instead of DO probe				
4	Providing and fixing filtration assembly with vaccum pump of suitable capacity for membranes filter (stainless steel) of specifications:-	1	Each		
	i) Filtration assembly consisting of funnel filter support size for 47 mm dia filter , filtrate flask capacity 1 litre.				
	ii) Vaccum connection = 6 mm O/D.				
	iii) Material : Stainless steel				
	iv) Funnel 300 ml 76 mm				
	v) Accessory:- MF Stainless steel forceps.				
	vi) Consumables:- 500 membrane filter (45 mm, 47 mm)- absorbent pads (47 mm)				
	Petri plate - 50 Nos. (autoclaveble)				
5	Providing of glass ware Borosil first grade Conical flask 250 ml	20	Each		
TERMS AND CONDITIONS					
1	The work will be carried out as per IPH specifications including all leads, lifts and loading,unloading , packing charges etc.				
2	The rates should be inclusive of all taxes , frieght charges etc. nothing shall be paid extra .				
3	The contractor shall have valid letter of authorization from the manufacturer / dealer/ distributor.				
4	The firm shall supply the manufacturer's manual of O&M of equipments and list of spares including periodical maintenance schedule along with list of venders / authorised				
5	The guarantee shall be 36 months from the date of completion of work. In case any defect is found with in guarantee period , the same shall be repaired / replaced by the				
6	The registered contractor/ firm in IPH department can work but if not so, the bidding contractor shall get himself registered in appropriate class if				
7	The specifications in respect of purpose to be served by the apparatus/ equipments , working range of the equipments configured in the schedule of quantity shall be				
8	The equipments shall conform to specifications as per CPHEEO manual , implementation manual of National Rural Water Quality Monitoring and Surveillance programme &				

9	Nothing shall be paid for damaged or undelivered material to the firm in any condition.				
10	The rates are inclusive with carriage of material in all leads and lifts.				
11	No deviation/ extra/ substitute item will be allowed without prior approval of Executive Engineer.				
12	No payment shall be made to contractor if he fail to provide EPF account No. and shall contribute regularly in respective UAN No. of deployed				
13	10% security, income tax, 1% labour cess and GST will be deducted from each running bill of the contractor as applicable.				
14	The validity of the tender shall be 120 days from the date of the opening of the tender.				
15	For any delay in execution of work beyond time period or breakdown during the guarantee period 0.1% of the total cost shall be deducted for each day of the delay.				
16	The contractor / firm shall install the equipments in the laboratory and shall be responsible for calibration, testing and commissioning of the same to the entire satisfaction of the				
17	The Warranty / Guarantee should be properly insured by the bidder & proof to this effect be attached.				
18	All the equipments shall carry a replacement warranty of one year minimum or as specified by the manufacturer.				
19	Selected bidder has to ensure availability of spare parts & service maintenance for atleast five years on payment of cost if applicable.				
20	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 by equivalent new				
22	Sealed tenders with separate Technical & Financila bids duly filled in proper proforma.				
23	The vender should be original manufacturer of the equipments or authorised supplier , representative in India.				