INSTITUTE OF TECHNOLOGY, KORBA (C.G.) Schedule of Requirements : Civil Engg. Laboratory Equipement Package No. :

S. No.	Code	EQUIPMENT	Package Name : Enviornmental Engg. Lab	
		REQUIRED	DETAILS OF SPECIFICATION	QTY.
1	C_ENV_01	Digital Microscope	Item S.No. 01, Code C_ENV_01 equipment required Digital Microscope, the following	
			specification should be quoted	1
			Microscope: Microscope of standard make with objective lense 4X,10X,40X&100X power with 10X eyepiece lense. BINOCULAR RESEARCH MICROSCOPE VISION PLUS Magnification: 40x to 1000x	
			Obsevation Head: Binocular 45*, 360* rotatable, with interpupillary and dioptre adjustment	
			Stand : Sturdy and durable pressure die cast aluminium stand	
			Mechanical Stage: Co-axial low drive double plate mechanism	
		-	system travel on ball bearing guid ways. Focusing system : Co – axial coarse & fine focusing system	
			Supported on hell bearing system	
			supported on ball bearing Illumination : The illuminator incorporated 3W LED long.	
			I The state of the	
	1		and has adjustable brightness.	_
			Quadruple Nose piece : Quadruple ball bearing Nose piece with	
			click stops.	,
	1		Substage Condenser : Abbe type N.A. 1.25 with iris diaphragm for	
			resolution and contrast control	

Prepared By

Checked By



H.O.D. Civil Engg.

INSTITUTE OF TECHNOLOGY, KORBA (C.G.)

Schedule of Requirements : Civil Engg. Laboratory Equipement

		Surre	Package No.:	
			Package Name: Engg. Geology Lab	
S. No.	Code	EQUIPMENT REQUIRED	DETAILS OF SPECIFICATION	QTY.
20	C_EG_20	resistivity meter	Item S.No. 20, Code C_EG_20 equipment required resistivity meter, the following specification should be que ted	1
			F	
			Accuracy Transmitter: 400 V – 125 W – 2A	
	1 15		24 bit voltage and current measurements	
			Noise monitoring before injection	
1.			SP compensation including linear drift	
		ų.	Digital stacking for noise reduction	
			Standard deviation computation Reliability	
			Shock resistant case	
			Protection From Solar Radiation, Lightning,	
			Current Leakage, Temperature, Humidity,	
			Voltage/current Fluctuation Data Interpretation Software	
			• IX1D or WINSEV (PC), for electrical	
-			sounding interpretation (horizontally	
			layered earth hypothesis)	
			RES2DINV for pseudo-section inversion	
.			to true resistivity 2D section	
- 1			RES3DINV (PC) for resistivity inversion of	·
		e Se g	3D surveys Output Current Specifications	
Phas			• Current upto 2A	
			• Voltage up to 400V (800V peak to peak)	
			• Power up to 125 W	
			• Salactable cycle time of 0.25, 0.5, 1.2, 4 or 9c	1 1
			• Current measurement precision: 0.5%	

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Schedule of Requirements : Civil Engg. Laboratory Equipement

Package No.: Package Name: Engg. Geology Lab

S. No.	Code	EQUIPMENT	Package Name : Engg. Geology Lab DETAILS OF SPECIFICATION	QTY.
5. 110.		REQUIRED		
			Input Voltage Specifications	
			Automatic ranging and calibration	
		<u>~</u>	• Input impedance : 50 M Ω	. 4
			• Rejection filters for 50 Hz and 60 Hz >95dB	
			Voltage measurement precision: 0.1%	
			Noise reduction: continuous stacking	
1			SP compensation through linear drift correction	
			Resistivity accuracy: 1%	
			Chargeability (IP) optional	
			Resistance Range 10-5 to 104 Ohms General Specifications	
			Error Signal for Poor Current and Potential	
1			electrode grounding and Discontinuity	
	1		USB Link for data download	
			Data memory: 16GB	
1			Power supply: Receiver (Rechargeable Lithium	Ry
1			Ion), Transmitter - internal rechargeable 12V,	
			7 AH battery or external 12V car battery	
			Emergency push button for Security	
1	1		• Weight: ~10 kg	

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