



Govt. of Bihar
MUZAFFARPUR INSTITUTE OF TECHNOLOGY,
MUZAFFARPUR, BIHAR – 842003
(Under the Department of Science & Technology, Govt. of Bihar, Patna)

Notice. No.: 61/TEQIP-III

Dated: 25 /09/2018

Rebid for PPAS Lab

M.I.T. Muzaffarpur is in the process of procuring equipment of Electrical Engineering Department under TEQIP-III Scheme. Detail specification are as follows.

Package Name: MITM/EE/PPAS-LAB

Package Code: TEQIP-III/BH/mitm/89

Interested supplier/bidders are required to give the following information/documents on principal@mitmuzaffarpur.org latest by 30.09.2018 so that invitation for bidding process can be initiated through PMSS.

1. Supplier Name :
2. Address(With Pin Code):
3. Contact Person Name :
4. E-Mail-ID:
5. Mobile No.:
6. TIN/GST No.
7. PAN No.

S.No.	Item Name	Specification	Qty (Pc)
01.	Transformer Oil Test Kit (Oil breakdown test kit)	60KVA Center tap earthed. Mode Automatic (Motorized) , The standard oil cup provided with the set is as per IS 6792 i.e. High Impact Methylene, Mathacrylate (Acrylic) test cup along with removable Mushroom Head Electrodes, GO & NO GO gauge to adjust Electrode gap. resin Encapsulated HT Transformer short circuit current of the secondary is more than 20mA & o/p volt 15KV. stepless voltage regulator is of toroidal and harmonic free output voltage. Clear Plastic Lid through Lamps indicate various conditions i.e. "MAINS ON" "H.T. ON".	01
02	High Voltage Break Down Tester	0-5/10 KV - 10 & 22KVA with electronic tripping, 0-2500 V DC with electronic tripping	01
03	Current Transformer	CT 5/1	02
04	Potential Transformer	PT :230/110	02
05	Determination Of Sequence Impedances Of 3 Phase Transformer	Input: 3 Phase 415vac, Output: 3 Phase, 110-0-110VAC @ All 3 phases Capacity: 1KVA, One number of digital AC Ammeter 0-5A AC with LCD display & input for Transformer current measurement, Two number of digital AC Voltmeter 0-500V AC with LCD display & input for Transformer voltage measurement, transformer & digital meters mounted sticker front panel, transformer terminals & meter terminals connectors in front panel, 3 phase variac -1KVA is provided, one number of digital Multimeter for winding resistance	

06	<p>Characteristics Of IDMT Over Current Relay (Electromechanical Type)</p>	<p>Electromechanical Type – Over Current Relay –IDMT Type Relay test kit (CURRENT INJECTION Unit) Type:Single Pole /element Over Current Relay,CT Input:5A,PMS :50% -200% in steps of 25%,TMS:0.1 to 1 in steps of 0.1s,IDMT,Curve:IDMT curve of 3sec as per IEC-255,Hand reset type-Mechanical Flag Indicator,Over Current Relay test kit-One number of variable AC current Source of 0-25A,One number of Autotransformer for adjust the current output continuously,One number of digital AC Ammeter (0-30A) /3.5 digit for measure the current input in amp, One number of ATTM Circuit ,One number START push button in ATTM Circuit,One number STOP push button in ATTM Circuit, One number LCD - Digital stop Clock for ATTM Circuit to measure relay trip time in S ,S/10 , S/100,One number reset switch in front panel to restart the digital stop clock</p>	01
07	<p>Characteristics Of IDMT Over Voltage Relay (Electromechanical Type)</p>	<p>Electromechanical type Over Voltage Relay –IDMT Relay test kit with meter (Voltage injector kit)Electromechanical type – IDMT Type with Plug setting & Time setting multiplier, 110V With “NO” & “NC” Contact @5A Ratings, stickered front panel, Voltage input (PT Input) are terminated by banana connectors for external voltage input, Relay test Kit (Voltage injector kit)-One number of variable AC voltage Source of 0-400VAC,One number of Autotransformer for adjust the voltage output, One number of digital AC Voltmeter (0-300V) to measure the Voltage output, One number of ATTM Circuit for Relay trip time measurement, One number START push button in ATTM Circuit, One number STOP push button in ATTM Circuit, One number Digital stop Clock in ATTM Circuit to measure relay trip time, mounted on a nice cabinet with diagram stickered front panel,230VAC@50Hz AC Input with power ON/OFF Switch</p>	01
08	<p>Characteristics Of IDMT Under Voltage Relay (Electromechanical Type)</p>	<p>Electromechanical type Under Voltage Relay –IDMT Relay test kit with meter (Voltage injector kit)Electromechanical type – IDMT Type with Plug setting & Time setting multiplier, 110V With “NO” & “NC” Contact @5A Ratings, stickered front panel, Voltage input (PT Input) are terminated by banana connectors for external voltage input, Relay test Kit (Voltage injector kit)-One number of variable AC voltage Source of 0-400VAC,One number of Autotransformer for adjust the voltage output, One number of digital AC Voltmeter (0-300V) to measure the Voltage output,One number of ATTM Circuit for Relay trip time measurement,One number START push button in ATTM Circuit,One number STOP push button in ATTM Circuit,One number Digital stop Clock in ATTM Circuit to measure relay trip time, mounted on a nice cabinet with diagram stickered front panel,230VAC@50Hz AC Input with power ON/OFF Switch</p>	

09	Transformer Protection Simulation Experimental Unit	3ph. /2KVA 3 phase Transformer set up, Power systems Protection Relays (Differential Relay, Over current & EF Relay, OV/UV Relay) Meter panel with R loads& Fault simulator ,3Ø /2KVA 3 phase Transformer set up One number of 3 phase transformers with primary & secondary tapings is provided with following specification Input:0-230VAC (R phase) with 25 , 50 ,75 ,100% tapping's ,: 0-230VAC (Y phase) with 25 , 50 ,75 ,100% tapping's : 0-230VAC (B phase) with 25 , 50 ,75 ,100% tapping's,Output: 0-230VAC (R phase) with 25 , 50 ,75 ,100% tapping's : 0-230VAC (Y phase) with 25 , 50 ,75 ,100% tapping's ,0-230VAC (B phase) with 25 , 50 ,75 ,100% tapping's Capacity:2KVA,Connection: STAR/DELTA,Both Primary & secondary tapping's are terminated in front panel for simulating fault Power systems Protection Relays-One number of Over Current Relays & Earth Fault Relays.	01
10	Over/Under Voltage Relay Trainer kit	Numerical type Over/Under Voltage Relay –DMT & IDMT Relay test kit with meter (Voltage injector kit) Type:Numerical(Microcontroller) based under / over voltage Relay PT Input 110VAC,PMS:50% -200% in steps of 25%,TMS 0.1 to 1 in steps of 0.1s Function IDMT, OC & UC characteristics, 20X4 LCD indicator for set & actual current indication and trip status indication,In built stop clock for trip time indication, 4 numbers of Touch Keys for parameter setting & selection, Banana connectors for CT input,DMT / IDMT Characteristics selection, One number of “NC” & “NO” Contact @ 230VAC ,5A rating@230vac input.	01
11.	Dielectric Constant, Tan-Delta and Resistivity Test Set	Dielectric constant range(1-13),tan-Delta Range(10^{-5} to 10), Resistivity (10^9 - 10^{15} ohm-cm)	01

Note: Detailed specification of all items will be attached in the invitation letter.

Fair Ahmad
25/09/2018

Fair Ahmad
25/09/18
Principal
MIT Muzaffarpur