



MAHARSHI DAYANAND UNIVERSITY ROHTAK

(A State University established under Haryana Act No. 25 of 1975)

NAAC accredited 'A' Grade

NOTICE INVITING TENDER

Sealed tenders on percentage basis are invited on behalf of the Registrar, MDU, Rohtak from contractors/societies / agencies on approved list of PWD, MES, CPWD, autonomous bodies and State / Centre Govt. undertakings. The tender forms will be issued to the contractors / societies agencies / up to the date of opening of tenders as mentioned against work by 12:00 Noon and will be received up to 2:00 P.M. in the office of the Registrar and opened at 3:00 P.M. on the same day in the Committee Room of Vice-Chancellor office in the presence of the tenderers or their authorized representatives, who may like to be present at that time. **The tender documents may be obtained from the office of the undersigned and the same be deposited in the office of the Registrar by the due date.**

Sr. No.	Name of work	App. Amt. (Rs.in lac)	Earnest Money (Rs.)	Cost of tender form (Rs.)	Date of opening of tender	Time limit
1.	SITC of 1000 KVA T/F in existing Press building 11/433 KV Sub Station for Mini Auditorium, light load of Admn. Block, Godawari Girls Hostel, Press building, Stadium building, Squash Court & Swimming Pool including SITC of 400 KVA D.G. Set for Mini Auditorium and light load of Admn. Block in MDU, Rohtak	92,00,000/-	1,84,000/-	5,000/-	04.03.2014	06 months
2.	Replacement of burnt /defective / damaged mains and sub mains cables of UIET building in MDU, Rohtak	25,00,000/-	50,000/-	1,000/-	04.03.2014	03 months
3.	Renovation of existing building at UILMS, Gurgoan (E.I.)	11,70,000/-	23,400/-	1,000/-	04.03.2014	04 months

CONDITIONS:-

1. Complete NIT / DNIT (Detailed Notice Inviting Tender) alongwith eligibility criteria/terms & conditions and changes if any can be seen in the office of undersigned on any working day during office hours (9:00 AM to 5:00 PM) or on University Website – www.mdurohtak.ac.in
2. The tenderer will keep in touch with the University Web site for any change in the NIT / DNIT till the last date/revised last date of sale of tender and incorporate such changes in NIT / DNIT and the tender bids.
3. At the time of purchase of tender documents, the contractors should submit the following documents:-
 - (a) Proof of enlistment.
 - (b) Copy of PAN card.
 - (c) Copy of latest income tax return.

(d) Successfully work done certificates of civil works during last 5 years (financial year 2009-10 to 2013-14) as under:-

One certificate of 80% of the estimated cost of this tender.

Or

Two certificates of 60% of the estimated cost of this tender

Or

Three certificates of 40% of the estimated cost of this tender

All the above certificates in paras 3(a) to 3(d) above will be self attested with stamp.

4. In case tendering receiving / opening day happens to be a holiday, the tenders will be received / opened on next working day at the same time.
5. Validity of tender will be 90 days.
6. Earnest money is to be deposited at the time of purchase of the tender. It should be in the shape of Demand Draft or Deposit at Call in favour of the Executive Engineer, MDU, Rohtak payable at Rohtak.
7. Contractors shall quote single percentage of rate below/above/at par on (HSR+C.P.) on all chapters. N.S. item rates are to be quoted separately. The tender, without the rates of N.S. items, if any, in DNIT, will be rejected.
8. Conditional tender is liable to be rejected.
9. Any work, here tendered, may be withdrawn from further processing at any stage at the discretion of the competent authority without assigning any reason.
10. Engineer-in-Charge is competent to increase / decrease the quantity of work. In case of decrease of quantity, the contractor shall have no claim to any payment or compensation whatsoever on account of any profit or advantage which he might have derived from the execution of the work in full.
11. Nothing extra whatsoever shall be paid on account of losses, damages done by rains or any other natural calamity.
12. The tender is liable to be rejected if the tender is found in variance of the above conditions or the conditions of the DNIT.
13. The University reserves the right to accept or reject or negotiate any of the tender or conditions/items without assigning any reason.
14. Plumbing and E.I. work shall be got done through license holder agencies for the works involving PH / E.I.
15. The agencies shall paste the cello tape on the rates quoted by them.
16. Tender by post / telegraphic/courier shall out rightly be rejected.
17. Exemption of tender fee or earnest money or security will not be permitted in any case.

Executive Engineer (C-II)

PTO

A copy of the pre-page is forwarded to the following for information and necessary action:-

1. Superintending Engineer, PWD B&R Circles, Rohtak
2. Technical Advisor to VC, MDU, Rohtak
3. Executive Engineer(C-II), MDU, Rohtak
4. Executive Engineer, PWD B&R (Medical College), Rohtak / KUK / HAU. Hisar / GJU, Hisar / CDLU, Sirsa / BPS Women University, Khanpur/ DBSCRU, Murthal
5. P.A. to Vice-Chancellor (for kind information of the Vice-Chancellor), M. D. University, Rohtak
6. P.A. to Registrar (for kind information of the Registrar), MDU, Rohtak
7. Divisional Accountant, Engg. Cell, MDU, Rohtak
8. SDE(C-I, II, III) / SDE (Elect.) / SDE (PH) / SDE (Horti.-I, II), MDU, Rohtak
9. H.D.M., Engineering Cell, MDU, Rohtak
10. Notice Board
11. Contractor/Agency/Society: _____

Executive Engineer(C-II)

DNIT for the work SITC of 1000 KVA T/F in existing Press building 11/433 KV Sub Station for Mini Auditorium, light load of Admn. Block, Godawari Girls Hostel, Press building, Stadium building, Squash Court & Swimming Pool including SITC of 400 KVA D.G. Set for Mini Auditorium and light load of Admn. Block in MDU, Rohtak.

App. Amount : Rs. 92,00,000
Earnest Money : Rs. 1,84,000/-
Time limit : 06 months

Sr. No.	H.S.R. No.	Qty.	Description	Rate	Unit
1.	6.6	150 cum	Earth work in excavation in foundations, trenches, etc. in all kinds of soils, not exceeding 2 metres depth including dressing of bottom and sides of trenches, stacking the excavated soil, clear from the edge of excavation and subsequent filling around masonry, in 15 cm layers with compaction, including disposal of all surplus soil, as directed within a lead of 30 meters.	@ Rs. 1108.10 (Rs. One thousand one hundred eight and paise ten only)	Per 100 cum
2.	10.26	10 cum	Cement Concrete 1 : 8 : 16 with brick ballast 40 mm nominal size in foundation and plinth.	@ Rs. 300.20 (Rs. Three hundred and paise twenty only)	Per cum
3.	10.42	3 cum	Cement concrete 1: 1½ : 3 with stone aggregate 20 mm nominal size in foundation and plinth.	@ Rs. 702.50 (Rs. Seven hundred two and paise fifty only)	Per cum
4.	10.79	2 cum	Cement Concrete 1: 2: 4 with stone aggregate 20 mm nominal size for reinforced concrete work but excluding steel-reinforcement centering and shuttering in foundation and plinth.	@ Rs. 625.80 (Rs. Six hundred twenty five and paise eight only)	Per cum
5.	11.4	40 cum	First class brick work laid in cement sand mortar 1 : 4 in foundation and plinth.	@ Rs. 424.60 (Rs. Four hundred twenty four and paise sixty only)	Per cum
6.	15.5	100 sqmtr	12 mm thick cement plaster 1 : 4	@ Rs. 12.70 (Rs. Twelve and paise seventy)	Per sq mtr

				only)	
7.	18.12	5 Quintal	Wrought iron and mild steel (using angles, flats, square bars, tee and channels) ladders grills, grafting frames, window guards, iron doors openable or fixed stair case or parapet or any other type of railing, gates and tree guards etc. including cost of screws and welding rods or bolts and nuts complete fixed in position.	@ Rs. 1040.35 (Rs. One thousand forty and paise thirty five only)	Per Quintal
8.	18.22	3 Quintal	Fe-500 EQR TMT steel bars for RCC, works, where not included in the complete rate of RCC including bending, binding and placing in position complete.	@ Rs. 917.05 (Rs. Nine hundred seventeen and paise five only)	Per quintal
9.	31.12		(C) Moulded case circuit breakers Supply and erection of moulded case circuit breaker on wall or on existing pedestal including bonding to earth and necessary connections:		
		10 nos.	(i) 15 amp to 60 amp 415 V, 10 KA, 3 Phase	@ Rs. 1926.00 (Rs. One thousand nine hundred and twenty six only)	Each
		4 nos.	(ii) 100 amp to 220 amp, 415 V, 10 KVA, 3 Phase	@ Rs. 4246.00 (Rs. Four thousand two hundred and forty six only)	Each
		2 no.	(iv) 300 amp to 400 amp 415 V 10 K.A. 3 Phase	@ Rs. 10,502.00 (Rs. Ten thousand five hundred and two only)	Each
		5 nos.	(v) 500 amp to 600 amp 415 V 35 KA 3 Phase	@ Rs. 10720.00 (Rs. Ten thousand seven hundred twenty only)	Each

10.	31.13	16 mtrs	Supply and erection of M.S. angle iron frame duly welded for housing M.S. sheet & main switches etc. on it, fixed on wall by means of suitable size of rag bolts with cement concrete, duly painted with three coats of approved paint including one coat of red oxide: (i) Size 50 mm x 50mm x 6mm	@ Rs. 55.90 (Rs. Fifty five and paisa ninety only)	Per mtr
11.	31.14	2 sqm.	Supply and erection of 3 mm thick mild steel sheet duly welded on existing M.S. angle iron frame for fixing the main switches etc. as required, duly painted with three coats of approved paint including one coat of red oxide.	@ Rs. 337.00 (Rs. three hundred thirty seven only)	Per Sqm
12.	31.21	5 mtrs. 100 mtrs	Pipe laying Supply and erection of pipe for wiring purposes including bends inspection boxes etc. where necessary and painting as required: (xxix) Supply and erection of cast iron pipe laid 1 metre below ground level including digging and refilling of the trench completing with joining with jute and cement etc. (a) Cast iron pipe 120 mm dia. (xxx) Supply and erection of PVC pipe of 6 kg. pressure, laid 1 metre below ground level complete, including digging refilling of the trench with jointing etc.: (a) PVC pipe 120 mm dia	@ Rs. 77.00 (Rs. Seventy seven only)	Per mtr
				@ Rs. 59.00 (Rs. Fifty nine only)	Per mtr
13.	31.22	16 nos.	Earthing (iv) Earthing with tinned copper earth plate	@ Rs. 1149.00	Each

		16 nos.	600 mm x 600 mm x 3 mm thick including accessories and providing masonry enclosures with cover plate having locking arrangement and watering pipe etc. complete as required. (v) Extra charcoal or coke and salt for G.I. plate or copper plate earth electrode.	(Rs. One thousand one hundred and forty nine only) @ Rs. 186.00 (Rs. One hundred and eighty six only)	Each
		160 mtrs.	(x) Pdg. and fixing 25 mm x 5 mm copper strip in 40 mm dia G.I. pipe from earth electrode as required.	@ Rs. 155.00 (Rs. One hundred and fifty five only)	Per mtr
		160 mtrs	(xiv) Pdg. and fixing 25 mm x 5 mm copper stirp on surface or in recess for connections etc. as required with all labour and material.	@ Rs. 117.00 (Rs. One hundred and seventeen only)	Per mtr.
14.	31.26	15 mtrs	Supply and erection of underground cable, loose in existing pipe or trenches complete with necessary connections: (iv) 10 sqmm 2 Core Cable	@ Rs. 27.80 (Rs. Twenty seven and paisa eighty only)	Per mtr.
		900 mtrs	(xxxv) 400 sq mm 3½ Core Cable (Armoured)	@ Rs. 450.00 (Rs. Four hundred fifty only)	Per mtr.
15.	31.28	2 nos.	Supply and erection of suitable compression type brass Cable glands for underground cable: (ii) 10 sq mm. to 16 sq mm Cable 2 to 4 core	@ Rs. 9.20 (Rs. Nine and paisa twenty only)	Each
		20 nos.	(vii) 300 sq mm to 400 sq mm cable 3 to 3½ core	@ Rs. 62.30 (Rs. Sixty two and paisa thirty only)	Each
16.	31.35		(ix) Supply and erection of aluminium lugs heavy duty including crimping etc. up to the entire satisfaction of the Engineer-in-charge of the work.		

		20 nos.	(m) 240 sq. mm.	@ Rs. 18.50 (Rs. Eighteen and paisa fifty only)	Each
		60 nos.	(o) 400 sq. mm.	@ Rs. 35.20 (Rs. Thirty five and paisa twenty only)	Each
17.	31.63	30 sq mtr	Supply, installation, testing and commissioning of Wall / free floor mounting dust & vermin proof compartmentalized cubical panel made out of 2 mm thick CRCA sheet, required hardware 3 mm thick Bakelite sheet provided all along the bus bar and cable alley separating switches compartment and supporting suitable channel duly painted by 2 coat of Zine / Red oxide primer followed by 2 coats of powder coating in grey or required shade after rinsing . The panel having PU / Neoprene rubber gasket of not less than 3 mm thickness separate detachable gland plate MS base channel hinged door with inter locking arrangement for equipment / switch wear. Transparent acrylic sheet shall be provided in front of bus bar compartment to prevent direct access to bus bar Bakelite sheet 3 mm thick for separately cable alley to BBC from switch chamber Extended solid copper bars up to cable alley shall be provided for outgoing connection which shall be paid as extra items. Side walls and cable alley compartments shall be having bolted type doors with detachable extension type structure. The panel will be complete with control wiring (copper) and fuse protection (Only outer area on all sides shall be measured).	@ Rs. 2160.00 (Rs. Two thousand one hundred and sixty only)	Per sqmtr
18.	31.64	300 kg.	Supplying and fixing of copper bus bar duly tinned by means of SMC/DMC type insulator high tensile nuts and bolts spring washers fixing to same in existing panel	@ Rs. 525.00 (Rs. Five hundred and twenty five only)	Per Kg.

			including bending, cutting in required shape and size and insulation with colour coding heat shrinkable PVC insulation complete in all respect.		
19.	31.65	3 sets	Providing and fixing digital metering equipment for LT cubical panel consisting of 96 mm x 96 mm 0-500 V voltmeter with selector switch. Amp meter (of required ratio up to 600/5 amp) with selector switch and required C. Ts 3 Nos. a set of 3 Nos. phase indication lamps RYB LED.	@ Rs. 4050.00 (Rs. Four thousand and fifty only)	Per Set
20.	N.S.	100 mtr.	S/E of underground Havells brand PVC/XLPE insulated heavy duty electrical cable for working up to and including 1100 volts to LT power cable IS 1554-(Part-II)1988/7098 (Part-I) with aluminum in conductor ISI marked power cable 630 mm ² 3½ core armoured laid in existing pipe / trenches up to the entire satisfaction of the Engineer-in-Charge..	Rate to quoted by the Contractor	Per mtr.
21.	N.S.	24 nos.	Supply and erection of aluminium lugs 630 sqmm heavy duty including crimping etc. up to the entire satisfaction of the Engineer-in-Charge ASCON make.	Rate to quoted by the Contractor	Each
22.	N.S.	1 no.	Supply, erection, testing and commissioning of 1000 KVA Transformer 11KV/0.433 KV 3 Phase, 50 Hz, Dyn 11 Double wound Class F insulation cast resin dry air cooled core type transformer confirming to IS 11171 2026 air cooled, copper wound including specification built as per standard practice and painted with synthetic enamel paint complete with all parts and accessories including all labour and material required to complete the job up to the entire satisfaction of the Engineer-in-Chief of work:	Rate to quoted by the Contractor	Each
			No load voltage ratio 11/0.433 KV		
			No. of Phases = 3		
			Frequency Cycle = 50 Hz		
			Type Double Wound core type copper wound.		

			Cooling: Air Cooled		
			Vector Group ISS-DYN 11/IS-20267		
			Tapping range step + - step + - 5/-10/2.5%		
			Step of 2.5%		
			Temperature Rise = 50/90 degree C		
			Off Circuit Tap Changer		
			Externally Hand Operated		
			Enclosure Protection IP-23 (indoor)		
			4 Nos. flat rollers bidirectional		
			Cast resin Dry type		
			Rating & Terminal marking plate.		
			Two earthing Terminal with lugs.		
			Lifting lugs.		
			3 Nos. PT 100 RTDs with WTI Scanner.		
			H.V.- 3 Pole single gland cable box suitable for reception of 1 no. 3 core up to 240 sqmm H.T. XLPE cable and laying of copper conductor multi core control cable from transformer to H.T. VCB for safety tripping suitable to mounted on exiting plinth and petty material required to complete the job as per entire satisfaction of the Engineer-in-Charge of the work..		
			POWER FACTOR PANEL 350 KVAR		
23.	N.S.	1 no.	Supply, erection, testing & commissioning of cubical type panel dust & vermin proof L.T. automatic power factor control panel 350 KVA capacity suitable for automatic operation & control of power factor within the set limit free standing floor mounting made with powder coated Havells grey paint suitable for operation on 3 phase 4 wire 50 cycle per second 400/440 volt AC supply equipped with the following size 1500 x 2100 x 600 mm with following material: A. 1 no. automatic power controller 14 stage	Rate to quoted by the Contractor	Each

		<p>(L & T/ABB/Siemens)</p> <p>B. 1 no. MCCB 800A TP 50 KA space only (L & T/ABB/Siemens)</p> <p>C. Connection from incomer moulded case circuit breaker to bus bar by means of solid copper strips of requisite capacity duly tinned & insulated with PVC sleeving and requisite copper wire of outgoing MCCB.</p> <p>D. 1 no. 3 phase 5 KVAR dry capacitor heavy duty (L & T/ABB/Siemens)</p> <p>E. 1 no. 3 phase 10 KVAR dry capacitor heavy duty (L & T/ABB/Siemens)</p> <p>F. 1 no. 3 phase 15 KVAR dry capacitor heavy duty (L & T/ABB/Siemens)</p> <p>G. 1 no. 3 phase 20 KVAR dry capacitor heavy duty (L & T/ABB/Siemens)</p> <p>H. 10 no. 3 phase 30 KVAR dry capacitor heavy duty (L & T/ABB/Siemens, ABB)</p> <p>I. 1 no. 3 phase contactor 18 A for 5 KVAR capacitor (L & T/Siemens, ABB)</p> <p>J. 1 no. 3 phase contactor 32 A for 10 KVAR capacitor (L & T/Siemens, ABB)</p> <p>K. 1 no. 3 phase contactor 45 A for 15 KVAR capacitor (L & T/Siemens, ABB)</p> <p>L. 1 no. 3 phase contactor 50 A for 20 KVA capacitor (L & T/Siemens)</p> <p>M. 10 no. 3 phase contactor 80 A for 30 KVAR capacitor (L & T/Siemens, ABB)</p> <p>N. 1 no. MCB TP 10KA 16A for 5 KVA capacitor (L & T/Siemens)</p> <p>O. 1 no. MCB TP 20KA 32A for 10 KVAR capacitor (L & T/Siemens, ABB) Space only.</p>		
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			<p>P. 1 no. MCB TP 25KA 40A for 15 KVAR capacitor (L & T/Siemens, ABB) Space only.</p> <p>Q. 1 no. MCB TP 25KA 63A for 20 KVA capacitor (L & T/Siemens, ABB) Space only</p> <p>R. 10 no. MCB TP 25KA 80A for 30 KVAR capacitor (L & T/Siemens, ABB) Space only</p> <p>S. 14 nos. Indicators (ON)</p> <p>T. 14 sets pushbutton (Red + Green)</p> <p>U. 14 nos. Auto-manual selector switch</p> <p>V. Connection from bus bar to capacitor by means of 16/25 sqmm PVC copper cable.</p> <p>W. 2 nos. cooling fan.</p> <p>X. 1 set Metering set (ASS, VSS, Volt, Amp.c.t.)</p> <p>Z. Earthing copper bus bar of cross section 25 mm x 5 mm duly tinned and insulated throughout the length of panel will be complete with all internal wiring with PVC copper wire, internal connection etc. with all labour and material require to complete the job in all respect (but without cost of MCCBs and copper bus bar incoming and outgoings), up to the entire satisfaction of the Engineer-in-Charge of the work.</p>		
24.	N.S.	3 nos.	Incomer: SITC of ACB 2000A MDO 50KA FP Microprocessor based electrically interlocking draw out type manually ON/OFF indicator under voltage relay and control circuit in existing panel to the entire satisfaction of the Engineer-in-Charge of the Work. (L & T/ Siemens)/ ABB make. (But without the cost of panel / copper bus bar).	Rate to quoted by the Contractor	Each
25.	N.S.	2 nos.	SITC of ACB 1000A MDO 50KA FP Microprocessor base electrically interlocking draw out type manually, ON/OFF indicator, under voltage relay and control circuit in existing panel to the entire satisfaction of the Engineer-in-Charge of the work. (L & T/ Siemens),	Rate to quoted by the Contractor	Each

			ABB make. (But without the cost of panel / copper bus bar).		
26.	N.S.	1 Set	<p>SITC of ACB 1000 amp. MDO 50 KA = 2 nos. Microprocessor based electrically interlocking electrical draw out type, ON/OFF indicator, under voltage relay and control circuit in existing panel to the entire satisfaction of the Engineer-in-Charge of the work. (L & T/ Siemens), ABB make.</p> <p>For AMF panel of DG set 400KVA with 4 no. outgoing MCCB 630A 35KA = 2 nos. and 1 no. MCCB 800A 50KA & 1 no. space only with following detail: (But without the cost of panel and copper bus bar).</p> <ol style="list-style-type: none"> 1 no. battery charger 1 no. AMF controller (Procom) 12 nos. control MCB SP 6 Amp. 12 nos. indicator 1 no. DC amp meter (AE) 1 no. DC volt meter (AE) 6 nos. PLA relay 24 VDC 	Rate to quoted by the Contractor	Each
27.	N.S.	1 no.	<p>Supply erection of 630 A FP Motorised type change over in existing angle iron frame/pedestal including all labour and material as per entire satisfaction of the Engineer-in-Charge of the work (L&T, Siemens, ABB) (But without the cost of panel / copper bus bar).</p> <ol style="list-style-type: none"> 2 nos. Under voltage relay. 2 nos. timer 4 nos. Pla relay 12 nos. control MCB SP 6 Amp. 12 nos. Indicators. 	Rate to quoted by the Contractor	Each
28.	N.S.	50 mtr.	S/E of PVC insulated (Heavy Duty) electrical cables for working voltage up to and including 1100 volts to IS 1554 (Part-II) 1988 with copper conductor ISI marked copper conductor 1.50 mm ² 19 core Havells make in	Rate to quoted by the Contractor	Each

			existing pipe/trench with all labour and up to the entire satisfaction of the Engineer-in-Charge of the work.		
29.	N.S.	1 no.	<p>S.I.T.C. of 400 KVA Kirloskar Green make water cooled Diesel Generating Set with following specifications.</p> <p>A. Diesel Engine Kirloskar make – Eco friendly (CPCB norms complaint) 4 – stroke, water cooler, Diesel Engine model DV8 developing 490 BHP, Designed to run continuously at 1500 RPM, Turbocharged aspirated complete with following major arrangements:</p> <ul style="list-style-type: none"> • Flywheel with Starter Ring for Generating Set. • Air filter. • Lube oil cooler assembly with accessories. • Exhaust air manifold. • Exhaust silencer. • Expansion bellow. • Fuel filter. • Lube oil filter. • Exhaust gas Turbocharger with after cooler. • Radiator with pusher type fan, with fan guard, coolant pump. • 24 V electrical starting system with starter motor and battery charging alternator. • In-line mono block fuel injection pump with electronic governor and fuel feed pump. • Engine mounting supports. • Engine control panel – Microprocessor based controller. • Safeties and indications against low lube oil pressure, high coolant temperature etc. • K cool super plus corrosion inhibitor coolant for 	Rate to quoted by the Contractor	Each

			<p>cooling.</p> <ul style="list-style-type: none"> • Engine Operator / Maintenance & Spare parts Manual. • Engine spare parts manual. • Engine Warrantee Certificate. • Engine Test Certificate. <p>B. ALTERNATOR</p> <p>Kirloskar Green make rated at 400 KVA, 415 Volts, 3 phase, 4 wire, 0.8 p.f. (lag), 50 Hz, 1500 RPM, in accordance with IS 4722 as per following specifications:</p> <ul style="list-style-type: none"> • Type: Salient poles, single bearing, brushless type, suitable for direct coupling to engine. • Rating: Guaranteed to deliver required output at the ambient temperature conditions. Suitable for an over-load of 10% for 1 hour in every 12 hours operation. • Voltage Regulation: Provided with fast response thyristor type electronic automatic voltage regulator, which holds output voltage within desire limits. (+/- 1%). • Excitation: Self excited-self regulated. • Alternator loading: Suitable for taking rated load immediately after machine reaches rated voltage and speed. • Vibration: Suitable for direct coupling with Engine and mounted on common M.S. Channel base frame. • Enclosure: Screen protected drip proof enclosure with IP – 23 degree of protection. • Cooling: Air cooled type with radial fan mounted on Rotor. • Winding and insulation: Insulation class H as 		
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			<p>defined in IS – 4722.</p> <p>C. ESSENTIAL ACCESSORIES</p> <p>One following set of essential accessories are supplied with each DG set.</p> <ul style="list-style-type: none"> • One no. MS Base Frame suitable for mounting of the offered engine and alternator. • One no. Day fuel tank of standard capacity complete fuel gauge, inlet/outlet connections, drains plug. etc. • Two no. 12 V DC battery of suitable capacity with leads. • 1 Set of AVM pads fitted in base frame. • All above accessories are housed in sound proof acoustic enclosure. <p>Specification of Sound Proof Enclosure</p> <p>I. Construction:</p> <ul style="list-style-type: none"> • The container is designed for easy access to serviceable parts. • Modular construction for easy assembling and dismantling. • Fabricated out of CRCA sheet of 14/16 SWG. Base frame is made out of sheet steel minimum of thickness 3/4/5 mm. • The hardware is of high tensile grade i.e. bolts of 10.9/8.8/or suitable grade. Hardware are of SS of MS and all hardware are surface treated. • Fuel tank is fitted in the base frame having suitable capacity as a day tank fitted with breather and all other necessary assemblies. • The fuel level measurable through Engine Controller. 		
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		<ul style="list-style-type: none"> • There is provision for filling the fuel from inside the enclosure. • Fuel tank is connected to engine with flexible fuel pipes. • Batteries are accommodated in a separate tray inside the enclosure. • There is provision for drain plugs for draining mobile oil / diesel. • The doors are gasketed with high quality EPDM gaskets to avoid leakage of sound. • The door handles are lockable type. <p>II. Painting :</p> <ul style="list-style-type: none"> • The sheet metal components are hot dip seven tanks pre-treated. • To have long life of container it is P.P. based powder coated (inside as well as outside). • Base from is epoxy or PU or powder coated. <p>III. Acoustic Insulation:</p> <ul style="list-style-type: none"> • Sound proofing of enclosure is done with quality rock wool confirming to IS-8183 of suitable thickness and density. • The rock wool / glass wool is further covered with fiber glass cloth / fiber tissue paper fire resistive and perforated powder coated sheet of 0.6 mm thickness. • Residential silencer is provided to control exhaust noise. • Interconnection between silencer and engine is through stainless steel flexible hose / pipe. • Sound attenuator / barriers are provided at air entry / exit to the container for sound reduction. <p>Ventilation & Air Circulation:</p>		
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			<ul style="list-style-type: none"> The system is designed to provide air inlet / exhaust through acoustic louvers for efficient air circulation and having following special features: <ul style="list-style-type: none"> (a) Adequate ventilation is provided to meet air requirement for combustion and heat removal. (b) The temperature inside the enclosure limited to 5/7°C over and above ambient temperature near air suction point. <p>V. Electrical:</p> <ul style="list-style-type: none"> i). Provision for neutral / body earthing : Points are available at side of the enclosure with the help of flexible copper wires from alternator neutral, and electrical panel body respectively. ii) Engine panel is mounted in the container itself. All parameters are visible from outside and all operation buttons are accessible easily. 		
30.	N.S.	25 cum	Supply and filling of tibba sand in existing trench as per entire satisfaction of the Engineer-in-Charge of the work.	Rate to quoted by the Contractor	Per cum
31.	N.S.	15 cum	Supply and filling of river sand in existing trench as per entire satisfaction of the Engineer-in-Charge of the work.	Rate to quoted by the Contractor	Per cum
32.	N.S.	4000 nos	Supply and erection of 1 st class bricks on existing cables as per entire satisfaction of the Engineer-in-Charge of the work.	Rate to quoted by the Contractor	Each
33.	N.S.	10 nos.	Providing and fixing precast RCC (1: 1½: 3) cable route marker of size 0.75 mtr. deep / 0.25 mtr. width x 0.15 mtr thick. 0.25 mtr. below top of side wall and proper embedded in wall. The writing words, H.T. cable on three sides of route markers including arrow on two sides with approved make of enamel paint of red colour including white colour Apex of approved make with 6	Rate to quoted by the Contractor	Each

			nos. horizontal stirrups of tor steel bar 8 mm dia and 6 nos. vertical tor steel bar 12 mm dia as instruction and as per entire satisfaction of the Engineer-in-Charge of the work.		
34.	N.S.	2 nos.	SITC of 3 pole MCCB 800 Amp 50 KA in existing / capacitor panel / L.T. panel with control wiring as per entire satisfaction of the Engineer-in-Charge of the work.	Rate to quoted by the Contractor	Each
35.	N.S.	4 nos.	S/E of Co2 type fire extinguisher of capacity 4.5 kg. ISI mark as per IS 933 for B & C class of fire. The fire extinguisher is to be erected on the existing walls by means of suitable hooks and clamps. The firefighting equipment shall be provided in the H.T. room. It should be capable of extinguishing fire in the T/R caused due to short circuit fault or otherwise. The fire extinguisher should have following specification: Height- 685 mm, App. Weight (empty) : 10.5 kg. Discharge time 24 Sec.	Rate to quoted by the Contractor	Each

Note:

1. The underground cable will be used of Havells / Polycab make. No extra payment will be allowed on this account.
2. PVC pipe of 6 Kg. pressure Kasta / Swastik / Supreme make of HSR item no. 31.21 will be used if required. No extra payment will be allowed on this account.
3. The materials used for HSR item no. 31.12, 31.15, 31.17 and 31.41 will be used of Standard/Havells make if required and no extra payment will be allowed on this account.
4. PVC copper wire 31.38, 31.39 and 31.40 will be used of Havells / Polycab make if required and no extra payment will be allowed on this account.

DNIT for the work of Replacement of burnt / defective / damaged mains and sub mains cables of UIET building in MDU, Rohtak.

App. Amount : Rs. 25,00,000/-

Earnest Money : Rs. 50,000/-

Time limit : 03 months

Sr. No.	H.S.R. No.	Qty.	Description	Rate	Unit
1.	6.6	793.5 cum	Earth work in excavation in foundations, trenches, etc. in all kinds of soils, not exceeding 2 metres depth including dressing of bottom and sides of trenches, stacking the excavated soil, clear from the edge of excavation and subsequent filling around masonry, in 15 cm layers with compaction, including disposal of all surplus soil, as directed within a lead of 30 meters.	@ Rs. 1108.10 (Rs. One thousand one hundred eight and paisa ten only)	Per 100 cum
2.	10.42	41 cum	Cement concrete 1: 1½ : 3 with stone aggregate 20 mm nominal size in foundation and plinth.	@ Rs. 702.50 (Rs. Seven hundred two and paisa fifty only)	Per cum
3.	11.4	116 cum	First class brick work laid in cement sand mortar 1 : 4 in foundation and plinth.	@ Rs. 424.60 (Rs. Four hundred twenty four and paisa sixty only)	Per cum
4.	15.5	691 sqmtr	12 mm thick cement plaster 1 : 4	@ Rs. 12.70 (Rs. Twelve and paisa seventy only)	Per sqmtr
5.	31.12	1 no.	(C) Moulded case circuit breakers Supply and erection of moulded case circuit breaker on wall or on existing pedestal including bonding to earth and necessary connections: (iv) 300 amp to 400 amp 415 V 10 K.A. 3 Phase	@ Rs. 10,502.00 (Rs. Ten thousand five hundred and two only)	Each
6.	31.21		Pipe laying		

		<p>Supply and erection of pipe for wiring purposes including bends inspection boxes etc. where necessary and painting as required:</p> <p>(xxx) Supply and erection of PVC pipe of 6 kg. pressure, laid 1 metre below ground level complete, including digging refilling of the trench with jointing etc.:</p> <p>100 mtrs (a) PVC pipe 120 mm dia</p> <p>20 mtrs (b) PVC pipe 80 mm dia</p>	<p>@ Rs. 59.00 (Rs. Fifty nine only)</p> <p>@ Rs. 42.00 (Rs. Forty two only)</p>	<p>Per mtr</p> <p>Per mtr</p>
7.	31.26	<p>Supply and erection of underground cable, loose in existing pipe or trenches complete with necessary connections:</p> <p>270 mtrs (xxix) 95 sq mm 3½ Core Cable (Armoured)</p> <p>150 mtrs (xxx) 120 sq mm 3½ Core Cable (Armoured)</p> <p>410 mtrs (xxxii) 150 sq mm 3½ Core Cable (Armoured)</p> <p>150 mtrs (xxxiii) 185 sq mm 3½ Core Cable (Armoured)</p> <p>500 mtrs (xxxiiii) 240 sq mm 3½ Core Cable (Armoured)</p> <p>1000 mtr (xxxv) 300 sq mm 3½ Core Cable (Armoured)</p>	<p>@ Rs. 121.10 (Rs. One hundred twenty one and paisa ten only)</p> <p>@ Rs. 147.60 (Rs. One hundred forty seven and paisa sixty only)</p> <p>@ Rs. 179.30 (Rs. One hundred seventy nine and paisa thirty only)</p> <p>@ Rs. 215.40 (Rs. Two hundred fifteen and paisa forty only)</p> <p>@ Rs. 286.00 (Rs. Two hundred eighty six only)</p> <p>@ Rs. 349.00 (Rs. Three hundred forty nine only)</p>	<p>Per mtr.</p> <p>Per mtr.</p> <p>Per mtr.</p> <p>Per mtr.</p> <p>Per mtr.</p> <p>Per mtr.</p>

8.	31.28	4 nos.	Supply and erection of suitable compression type brass Cable glands for underground cable: (iv) 70 sq mm. to 95 sq mm Cable 3 to 3½ core	@ Rs. 22.50 (Rs. Twenty two and paisa fifty only)	Each
		8 nos.	(v) 120 sq mm. to 185 sq mm Cable 3 to 3½ core	@ Rs. 28.60 (Rs. Twenty eight and paisa sixty only)	Each
		12 nos.	(vi) 240 sq mm cable 3 to 3½ core	@ Rs. 35.00 (Rs. Thirty five only)	Each
9.	31.35	12 nos.	(ix) Supply and erection of aluminium lugs heavy duty including crimping etc. up to the entire satisfaction of the Engineer-in-charge of the work. (j) 120 sq. mm.	@ Rs. 7.90 (Rs. Seven and paisa ninety only)	Each
		36 nos.	(m) 240 sq. mm.	@ Rs. 18.50 (Rs. Eighteen and paisa fifty only)	Each
9.	31.48	300 nos.	Supply and erection of MS saddles and clamps on wall/RCC parapet for fixing underground cable at a distance of 0.60 metre centre to centre fixed by means of rawl plug including the cost of all labour and material required to complete the job in all respect.	@ Rs. 5.00 (Rs. five only)	Each
10.	N.S.	30 nos.	Providing and fixing precast RCC (1: 1½: 3) cable route marker of size 0.75 mtr. deep / 0.25 mtr. width x 0.15 mtr thick. 0.25 mtr. below top of side wall and proper embedded in wall. The writing words, L.T. cable on three sides of route markers including arrow on two sides with approved make of enamel paint of red colour including white colour Apex of approved make with 6 nos. horizontal stirrups of tor steel bar 8 mm dia and 6 nos. vertical tor steel bar 12 mm dia as instruction and as per entire satisfaction of the Engineer-in-Charge of the work.	Rate to quoted by the Contractor	Each

11.	N.S.	1300 mtrs	Dismantling of old / defective / burnt cables 1' / 2' below ground level / in existing pipe including the cost of old bricks) and refilling of trenches and old cables hand-over to store as per entire satisfaction of the Engineer-in-Charge of the work.	Rate to quoted by the Contractor	Per mtr
12.	N.S.	120 mtrs	Road cutting by machine / manual means for fixing of required size of PVC pipe as per entire satisfaction of the Engineer-in-Charge of the work.	Rate to quoted by the Contractor	Per mtr
13.	N.S.	66 cum	Supply and filling of river sand in existing trench as per entire satisfaction of the Engineer-in-Charge of the work.	Rate to quoted by the Contractor	Per cum
14.	N.S.	26600 nos	Supply and laying of 1 st class bricks on existing cables as per entire satisfaction of the Engineer-in-Charge of the work.	Rate to quoted by the Contractor	Each
15.	N.S.	133 cum	Supply and filling of tibba sand in existing trench as per entire satisfaction of the Engineer-in-Charge of the work.	Rate to quoted by the Contractor	Per cum

Note:

1. The underground cable will be used of Havells / Polycab make. No extra payment will be allowed on this account.
2. PVC pipe of 6 Kg. pressure Kasta / Swastik / Supreme make of HSR item no. 31.21 will be used if required. No extra payment will be allowed on this account.
3. The materials used for HSR item no. 31.12, 31.15, 31.17 and 31.41 will be used of Standard/Havells make if required and no extra payment will be allowed on this account.
4. PVC copper wire 31.38, 31.39 and 31.40 will be used of Havells / Polycab make if required and no extra payment will be allowed on this account.

DNIT for the work of “renovation of existing building at UILMS, Gurgaon”. (E.I.)

App. Amount : Rs. 11,70,000/-
Earnest Money : Rs. 23,400/-
Time limit : 04 months

Sr. No.	H.S.R. No.	Qty.	Description	Rate	Unit
1.	31.12 (a)	2 nos.	Main Switches Supply and erection of metal clad switches / B.D.Bs with rag bolts on wall or on existing angle iron board/pedestal including bonding to earth and necessary connections: (xiv) Triple pole switch with neutral link 32 amp, 415 volts. (Cat B)	@ Rs. 261.00 (Rs. Two hundred sixty one only)	Each
		2 nos.	(xv) Triple pole switch with neutral link 63 amp, 415 volts. (Cat B)	@ Rs. 521.00 (Rs. Five hundred twenty one only)	Each
		2 nos.	(xvi) Triple pole switch with neutral link 100 amp, 415 volts. (Cat A)	@ Rs. 1921.00 (Rs. One thousand nine hundred twenty one only)	Each
		2 nos.	(xvii) Triple pole switch with neutral link 200 amp, 415 volts. (Cat A)	@ Rs. 2646.00 (Rs. Two thousand six hundred and forty six only)	Each
2.	31.13	10 mtrs	Supply and erection of M.S. angle iron frame duly welded for housing M.S. sheet & main switches etc. on it, fixed on wall by means of suitable size of rag bolts with cement concrete, duly painted with three coats of approved paint including one coat of red oxide. (ii) Size 40 mm X 40 mm X 6mm.	@ Rs. 46.50 (Rs. Forty six and paisa fifty only)	Per mtr

3.	31.14	1 sqmtr.	Supply and erection of 3 mm thick mild steel sheet duly welded on existing M.S. angle iron frame for fixing the main switches etc. as required, duly painted with three coats of approved paint including one coat of red oxide.	@ Rs.337.00 (Rs. Three hundred thirty seven only)	Per Sqm.
4.	31.15	2 nos.	Supply and erection of sheet steel enclosures 2 pole /3 pole with earth plug and socket suitable for incorporating single pole / triple pole MCB on wall / on existing pedestal complete with necessary connections etc. (ii) S.P.N. enclosure for single pole MCB 20 Amp.	@ Rs. 293.00 (Rs. Two hundred ninety three only)	Each
5.	31.17	80 nos. 2 nos. 2 nos. 5 nos.	Supply and erection of miniature circuit breaker / isolator 240 / 415 V in the existing distribution board including making necessary connections. (a) Miniature Circuit Breakers of 9 K.A. breaking capacity. (ii) 6 amp to 32 amp SP (ii) 6 amp. to 32 amp SPN (iii) 40 amp to 63 amp SPN (iii) 40 amp to 63 amp TPN	@ Rs. 95.00 (Rs. Ninety five only) @ Rs. 197.00 (Rs. One hundred ninety seven only) @ Rs. 240.00 (Rs. Two hundred forty only) @ Rs. 499.00 (Rs. Four hundred ninety nine only)	Each Each Each Each
6.	31.18	50 nos	(M) Supply and erection of Fittings and Accessories: (xi) Bakelite angle/straight button holder large size.	@ Rs. 6.20 (Rs. Six and paisa twenty only)	Each

		100 nos	(xii) Switch 5 amp. on existing sheet.	@ Rs. 3.80 (Rs. Three and paisa eighty only)	Each
		20 nos	(xiii) Wall socket 5 amp. on existing sheet.	@ Rs. 4.40 (Rs. Four and paisa forty only)	Each
		20 nos.	(xiv) 15 amp. switch on existing sheet	@ Rs. 10.30 (Rs. Ten and paisa thirty only)	Each
		20 nos.	(xv) 3 pin 15 amp. multi socket on existing sheet.	@ Rs. 11.20 (Rs. Eleven and paisa twenty only)	Each
		50000 sqm	(xviii) Bakelite sheet including fixing with brass screws and washers. (a) 5 mm thick	@ Rs. 0.04 (paisa four only)	Per cm
		20000 sqm	(b) 3 mm thick	@ Rs. 0.03 (Paisa three only)	Per cm
7.	31.21		(P) Pipe laying Supply and erection of pipe for wiring purposes including bends inspection boxes etc. where necessary and painting as required:-		
		50mtr.	(xxi) Heavy gauge welded conduit pipe 20 mm dia 1.60 mm thickness flushed.	@ Rs. 16.30 (Rs. sixteen and paisa thirty only)	Per mtr.
		50mtr.	(xxii) Heavy gauge welded conduit pipe 25 mm dia 1.60 mm thickness flushed.	@ Rs. 19.60 (Rs. nineteen and paisa sixty only)	Per mtr.
		10 mtrs	(xxx) Supply and erection of PVC pipe of 6 kg. pressure, laid 1 metre below ground complete, including digging, refilling of the trench with jointing etc: (c) PVC pipe 65 mm dia.	@ Rs.31.00 (Rs. Thirty one only)	Per mtr

8.	31.25	<p>100 mtr</p> <p>50 mtr</p> <p>60 mtr</p>	<p>(S) Under Ground Cables Supply & erection of underground cable 1 metre below ground level covered with sand and bricks including necessary connections, digging and refilling of trenches.</p> <p>(iv) 10 Sq mm 2 Core Cable (Armoured)</p> <p>(v) 16 sq mm 2 Core Cable (Armoured)</p> <p>(xli) 25 Sq mm 4 Core Cable (Armoured)</p>	<p>@ Rs. 41.80 (Rs. Forty one and paisa eighty only)</p> <p>@ Rs. 48.90 (Rs. Forty eight and paisa ninety only)</p> <p>@ Rs. 70.50 (Rs. Seventy and fifty only)</p>	<p>Per mtr.</p> <p>Per mtr.</p> <p>Per mtr.</p>
9.	31.26	<p>50 mtr</p> <p>25 mtr</p> <p>40 mtr</p>	<p>Supply and erection of under ground cable, loose in existing pipe or trenches complete with necessary connections:</p> <p>(iv) 10 sqmm 2 Core cable (Armoured)</p> <p>(v) 16 sq mm 2 Core Cable (Armoured)</p> <p>(xli) 25 sqmm 4 Core cable (Armoured)</p>	<p>@ Rs. 27.80 (Rs. Twenty seven and paisa eighty only)</p> <p>@ Rs. 35.00 (Rs. Thirty five only)</p> <p>@ Rs. 56.30 (Rs. Fifty six and paisa thirty only)</p>	<p>Per mtr.</p> <p>Per mtr.</p> <p>Per mtr.</p>
10.	31.28	<p>3 nos.</p> <p>10 nos.</p>	<p>Supply and erection of suitable compression type brass cable glands for underground cable:</p> <p>(iii) 25 sqmm to 50 sqmm cable 2 to 4 Core</p> <p>(iv) 70 sqmm to 95 sqmm cable 3 to 3 ½ core</p>	<p>@ Rs. 16.80 (Rs. Sixteen and paisa eighty only)</p> <p>@ Rs. 22.50 (Rs. Twenty two and paisa fifty only)</p>	<p>Each</p> <p>Each</p>

11.	31.30	13 nos.	<p>V Supply and erection of weather proof M.S. box of size 20 cm x 15 cm x 10 cm covered with 3.00 mm thick M.S. sheet hinged cover housed in 1 : 2 : 4 cement concrete muff including suitable size of PVC pipe for incoming and outgoing cables, including the cost of 1 no. 16 amp 415 volts Kit Kat and 2 nos. 63 amp 415 volts neutral links, fixed on hard wood board in M.S. box including the cost of locking arrangement, painting and necessary connections etc.</p> <p>(1) Muff size 40 cm dia 50 cm high</p>	<p>@ Rs. 120.00 (Rs. One hundred twenty only)</p>	Each
12.	31.31	1 no.	<p>Supply and erection of metal clad bus bar chamber made from 1.6 mm thick M.S. sheet fixed with rag bolts on wall or on existing pedestal / angle iron frame including bonding to earth, detachable top and bottom painting and necessary connections etc. (Copper bars duly tinned)</p> <p>(iv) 200 amp 4 bars of 55 cm each (cross section 25 mm x 5 mm), chamber over all size 60 cm x 45 cm x 18 cm.</p>	<p>@ Rs. 524.00 (Rs. Five hundred twenty four only)</p>	Each
13.	31.38	50 nos. 50 nos.	<p>Wiring only in 1.5 sqmm PVC insulated copper conductor cable in existing conduit pipe and MS boxes covered with 5 mm thick Bakelite sheet including cost of switch, wall socket ceiling rose etc.</p> <p>(ii) Light Point:</p> <p>(a) Short point.</p> <p>(b) Medium point</p>	<p>@ Rs. 99.00 (Rs. Ninety nine only) @ Rs. 152.00 (Rs. One hundred fifty two only)</p>	Each Each

		50 nos.	(c) Long point	@ Rs. 222.00 (Rs. Two hundred and twenty two only)	Each
		10 nos	(vii) 3-Pin. 5 amp plug point including earthing the 3 rd pin etc. (a) Short point.	@ Rs. 116.00 (Rs. One hundred sixteen only)	Each
		10 nos	(b) Medium point	@ Rs. 173.00 (Rs. One hundred seventy three only)	Each
		10 nos	(c) Long point	@ Rs. 239.00 (Rs. Two hundred thirty nine only)	Each
		10 nos	(viii) 3-Pin. 15 amp plug point with 4 sqmm PVC insulated copper conductor cable including earthing the 3 rd pin etc. (a) Short point.	@ Rs. 236.00 (Rs. Two hundred thirty six only)	Each
		10 nos	(b) Medium point	@ Rs. 375.00 (Rs. Three hundred seventy five only)	Each
		10 nos	(c) Long point	@ Rs. 537.00 (Rs. Five hundred thirty seven only)	Each
14.	31.40	500 mtr	Supply and erection of PVC unsheathed copper conductor cable single core 1100 volts grade in pipe of suitable size excluding cost and erection of pipe. (i) Cable size 1.5 sqmm (3/0.81 mm)	@ Rs. 10.20 (Rs. Ten and paisa twenty only)	Per mtr

		1000 mtr	(ii) Cable size 2.5 sqmm (3/1.05mm)	@ Rs. 16.30 (Rs. Sixteen and paisa thirty only)	Per mtr
		1000 mtr	(iii) Cable size 4 sqmm	@ Rs. 24.50 (Rs. Twenty four and paisa fifty only)	Per mtr
		300 mtr	(iv) Cable size 6 sqmm (7/1.05 mm)	@ Rs. 35.60 (Rs. Thirty five and paisa sixty only)	Per mtr
15.	31.41		Supply and erection of double door sheet steel enclosure distribution board suitable for MCBs and ELCBs etc. recessed in wall including bonding to earth with all labour and material required to complete the job in all respect up to the entire satisfaction of the Engineer-in-Chief of the work.		
		2 nos	(i) 4-way, SP & N (Horizontal)	@ Rs. 650.00 (Rs. Six hundred and fifty only)	Each
		2nos	(ii) 8-way, SP & N (Horizontal)	@ Rs. 870.00 (Rs. Eight hundred and seventy only)	Each
		2 nos	(v) 4-way, TP & N (Horizontal) (8 + 12)	@ Rs. 1670.00 (Rs. One thousand six hundred and seventy only)	Each
		2 nos	(vi) 8-way, TP & N (Horizontal) (8 + 24)	@ Rs. 2100.00 (Rs. Two thousand and one hundred only)	Each

16.	31.44	50 mtrs.	Supply and erection of PVC conduit pipe ISI marked (Medium) recessed in wall/ceiling etc. including cost of PVC bends, inspection box and all other material required to complete the job in all respect up to the entire satisfaction of Engineer-in-Charge of work. (b) 25mm dia	@ Rs. 37.00 (Rs. Thirty seven only)	Per mtr.
17.	31.45	10 nos. 60 nos. 20 nos.	Supply and erection of copper lugs including crimping etc. upto the entire satisfaction of Engineer-in-charge of work. (a) 1.5 sqmm to 2.5 sqmm (b) 4 sqmm to 6 sqmm (c) 10 sqmm	@ Rs. 4.80 (Rs. four and paisa eighty only) @ Rs. 6.00 (Rs. six only) @ Rs. 10.30 (Rs. ten and paisa thirty only)	Each Each Each
18.	31.48	1500 nos.	Supply and erection of MS saddles and clamps on wall/RCC parapet for fixing underground cable at a distance of 0.60 metre centre to centre fixed by means of rawl plug including the cost of all labour and material required to complete the job in all respect.	@ Rs. 5.00 (Rs. five only)	Each
19.	31.49	5000 sqmm	Supply and erection of MS box made of 16 Gauge MS sheet recessed in wall, with arrangement of fixing brass screws, 2 nos. check nuts and one no. PVC bush of required size including all labour and material required to complete the job in all respect up to the entire satisfaction of Engineer-in-charge of work. (i) With two coats of primer	@ Rs. 0.12 (Rs. paisa twelve only)	Per Sqm

20.	31.55	100 nos	Supply and erection of Socket size rotary step type Electronic regulator for A.C. ceiling fan Anchor make Deluxe model no. 50440 ISI/SSK make PC 561 operated on 120/280 V.A.C. Supply complete including cutting of existing Bakelite sheet and making necessary connection etc. up to the entire satisfaction of the Engineer-in-Charge.	@ Rs. 195/- (Rs. One hundred ninety five only)	Each
21.	31.64	20 kg.	Supplying and fixing of copper bus bar duly tinned by means of SMC / DMC type insulated high tensile nuts and bolts spring washers fixing to same in existing panel including bending, cutting in required shape and size and insulation with colour coding heat shrinkable PVC insulated Complete in all respect.	@ Rs. 525.00 (Rs. Five hundred twenty five only)	Per Kg.
22.	N.S. 1	1 no.	Dismantling of existing pedestal including disconnections of cables / wires from existing BBC, TPN switches of various sizes (63 A to 300 A), TPN DB as per entire satisfaction of Engineer-in-charge of work.	Rate to be quoted by contractor	Each
23.	N.S. 2	6 nos.	Dismantling of TPN switches (63 A to 300 A) of various sizes from existing pedestal / angle iron board as per entire satisfaction of Engineer-in-charge of work.	Rate to be quoted by contractor	Each
24.	N.S. 3	6 nos.	Dismantling of various sizes of TPN DB / SP NDB from existing pedestal / angle iron frame as per entire satisfaction of Engineer-in-charge of work.	Rate to be quoted by contractor	Each
25.	N.S. 4	2 nos.	Dismantling of various sizes of bus bar chamber from existing pedestal / angle iron frame as per entire satisfaction of Engineer-in-charge of work.	Rate to be quoted by contractor	Each

26.	N.S. 5	1 job	Dismantling of old DG Set 40 KVA from existing foundation with panel old battery and other accessories including disconnections of cables / wires and as per entire satisfaction of Engineer-in-charge of work.	Rate to be quoted by contractor	Each
27.	N.S. 6	500 mtr	Dismantling of various sizes of existing cables (i.e. 10 sq mm 2 core cable to 240 sq mm 3½) already laid 1 mtr below ground level, including dismantling of old bricks and refilling of trenches (old bricks will not be retained by the University) as per entire satisfaction of Engineer-in-charge of work.	Rate to be quoted by contractor	Per mtr.
28.	N.S. 7	100 nos	Dismantling of existing old wiring points as per entire satisfaction of Engineer-in-charge of work.	Rate to be quoted by contractor	Each
29.	N.S. 8	500 kg.	Supply and erection of required size of M.S. angles / flat embedded in wall on suitable height with necessary locking arrangement for fixing Voltage Stabilizer / indoor AC units including welding, cutting & painting etc. complete in all respect and as per entire satisfaction of Engineer-in-charge of work.	Rate to be quoted by contractor	Per kg.
30.	N.S.9	1 nos.	SITC of 400 mm wall fan Orient make Model no. Wall 41 on existing wall complete in all respect and as per entire satisfaction of Engineer-in-charge of work.	Rate to be quoted by contractor	Each
31.	N.S. 10	300 nos	SITC of 1 x 28 watt T.L. tube fitting Philips make. TMS 122 m 1 x TL-5-28 watt EBT complete with tube rod Philips make on existing wall / ceiling with necessary connections & other petty material required to complete the job in all respect and as per entire satisfaction of Engineer-in-charge of work.	Rate to be quoted by contractor	Each
32.	N.S. 11	300 nos	Removal of 1 x 40 watt tube fitting complete with tube rod from existing wall / hanging including removal of existing connections etc. complete in all respect and as	Rate to be quoted by contractor	Each

			per entire satisfaction of Engineer-in-charge of work.		
33.	N.S. 12	300 nos	Credit of old 1 x 40 watt box type fitting complete with tube rod and as per entire satisfaction of Engineer-in-charge of work.	Rate to be quoted by contractor	Each
34.	N.S. 13	5 nos.	Removal and refixing of exhaust fans of any size complete in all respect and as per entire satisfaction of Engineer-in-charge of work.	Rate to be quoted by contractor	Each
35.	N.S. 14	50 nos	Dismantling of TPN MCB's, SPN MCB's, SP MCB's from existing DB's including disconnections of existing cables / wires complete in all respect and as per entire satisfaction of Engineer-in-charge of work.	Rate to be quoted by contractor	Each
36.	N.S. 15	10 nos.	Supply and erection of Post Top decorative luminaries with poly carbonate prismatic diffuser, Spun Aluminum. Hat round complete with 70 watt control gear Cat. No. TDUL-107, Genius-R with M.H. lamp 70 watt E-27 Venture make on existing pole with petty material required to complete the job (Twinkle make) in all respect and as per entire satisfaction of Engineer-in-charge of work.	Rate to be quoted by contractor	Each
37.	N.S. 16	1 no.	<p><u>SITC OF 16 mtr high mast lighting system.</u></p> <p><u>(a) Supply part.</u></p> <p>(1) Supply of raising & lowering type 16 mtr high mast system.</p> <p>Mast shaft shall be in two sections, top hit galvanized, inside & outside in single dip, suitable for wind velocity as per IS-875 part 3. There shall be only one longitudinal seam weld per section and no circumferential weld. It shall also include accessories for high mast including head frame, 2- point suspension system with steel wire rope 6 mm dia (7/19 construction) doubles drum winch, Galvanized lantern carriage arrangement suitable for up to 8 luminaries</p>	Rate to be quoted by contractor	Each

		<p>symmetrically, lighting integral power tools for raising and lowering of operation of high mast Bajaj make = 1no.</p> <p>(2) Supply of foundation bolts manufactured from special steel along with nuts, washer, anchor plate, templates. + 1 set.</p> <p>(3) Supply of non integral flood light luminaries type RVP 302 2 x 400 watt with M.H.T. lamp and its control gear boxes Philips make. = 8 nos.</p> <p>(4) Supply of twin dome aviation obstruction lights of type BJAOL with 100 watt G.S.L. lamp = 1 no.</p> <p>(5) Supply of control panel housing suitable control circuit for automatic switching on & off of the mast required size o accessories i.e. up and down switch, RS 485 extension unit, TP MCB, SP MCB, Super Nova Contractor, 2 nos. MNX 45 Amp L/T make, On and Off 32 Amp SP MCB, connector = 8 nos., TPN MCB 63 Amp, Togonal switch, timer etc. and petty material as per entire satisfaction of the Engineer-in-charge of work = 1 set.</p> <p>(b) <u>Erection part.</u></p> <p>(1) Construction of suitable shallow foundation with 'M 20' grade concrete for the high mast considering the safe soil bearing capacity as site as 10T / sqmtr at 2 mtr depth with all material & labour (foundation as per Design & Drawing of Bajaj Co.)</p> <p>(2) Erection of high mast with the help of suitable tools and plants, wiring of luminaries with 8 nos. required size of copper wire and copper</p>		
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			<p>cablings of high mast from panel to high mast.</p> <p>(3) Erection of G.I. pipe earthing for high mast with 2.50 long 40 mm dia G.I. pipe including erection of high mast earth terminal with 25 x 3 mm GI Tape with all material & labour. = 1 job.</p> <p>(4) Installation of control panel on suitable foundation including all material & labour. = 1 job</p> <p><u>(c) Testing & commissioning of 16 mtr high mast system. = 1 job.</u> (Including S/E of other petty material required to complete the job as per entire satisfaction of the Engineer-in-charge.)</p>		
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Note:

1. The underground cable will be used of Havells / Polycabe make. No extra payment will be allowed on this account.
2. PVC pipe of 6 Kg. pressure Kasta / Swastik / Supreme make of HSR item no. 31.21 will be used if required. No extra payment will be allowed on this account.
3. The materials used for HSR item no. 31.12, 31.15, 31.17 and 31.41 will be used of Standard/Havells make if required and no extra payment will be allowed on this account.
4. PVC copper wire 31.38, 31.39 and 31.40 will be used of Havells / Polycabe make if required and no extra payment will be allowed on this account.
5. Old material will be counted at site i.e. UILMS, Gurgaon and whole of the material handed-over at M.D.U., Rohtak Engineering Store with counting. No freight / labour of loading & unloading will be paid extra.