

HIMACHAL PRADESH
PUBLIC WORKS DEPARTMENT

No.PW-MED-TA/Tender/ 2022-2023-

714

Dated: 06/05/22

To

The Executive Engineer (IT Cell),
o/o Engineer-in-Chief,
Nirman Bhawan, Nigam Vihar,
HPPWD, Shimla-2

Subject: - Publishing of Tender Notice

Reference: - Engineer-in-Chief, HP.PWD, Shimla vide office letter No. PW/ CTR-32-20/ Genl. Inst./
/Tender Documents/2021-22-10953-11052 dated 24.07.2021.

"JAI HIND"

Enclose please find herewith copy of NIT (**Notice Inviting Tender**) No. 648-97 dated 06.05.2022 for uploading the same on departmental web portal as per Govt. Notification No. PBW(B) A (3) 1/2020 dated 16.07.2021 as the works mentioned in the tender notice are of urgent nature and in public interest.

DA/ As Above.

Executive Engineer,
Electrical Division,
HPPWD, Mandi (H.P.)

Certificate

Certified that the tenders as called vide this office letter No. PW/MED\TA\NIT\2022-2023-648-97 dated 06.05.2022 are invited without press notice due to exigency of works in public interest.

Executive Engineer,
Electrical Division,
HPPWD Mandi HP

HIMACHAL PRADESH
PUBLIC WORKS DEPARTMENT

NOTICE INVITING TENDER

Sealed percentage and item rate tender on Form No. 6&8 are invited by the Executive Engineer, Electrical Division, HPPWD, Mandi (H.P.) for the works at Sr No. 1 to 8 from eligible electrical contractors enlisted in appropriate class in HPPWD (Electrical), for work at Sr No/ 9 OEM (Networking solution) or authorized agency of OEM, for work at Sr No. 10 from OEM (Fire Alarm) or authorized agency of OEM, for work at Sr No. 11 and 12 from OEM (EPBAX) or authorized agency of OEM and for works at Sr No. 13 to 15 from OEM (HVAC System) or authorized agency of OEM, so as to reach in his office on or before 18.05.2022 up to 10.30 A.M. and will be opened on the same day at 11:00 A.M in the presence of intending contractors or their authorized representatives. The application for issuing of tender form will be received in his office against cash payment Rs. 350/- (Non-refundable) for each work on or before 17.05.2022 up to 01:00 P.M. and the tender forms can be had from his office on same day. The application for the purchase of the tender documents should be accompanied with earnest money of each work separately in the shape of National Saving Certificate/FDR/ Call Deposit / Bank draft of any Schedule Bank / Post Office duly pledged in favour of the Executive Engineer, Electrical Division, HP.PWD, Mandi (H.P.). Conditional tenders and the tenders received without earnest money will be rejected. The receipt of application for issue of tender forms by post shall not be entertained / considered in any case. The tender forms shall be issued to registered Contractors or their authorized representatives. The copy of enlistment / renewal order and valid Electrical License shall be attached with the application for purchase the tender document.. The ambiguous / telegraphic / conditional / fax / E-mail or by post tenders shall also not be entertained / considered in any case. The tender shall be issued to those Contractors / Firms who are found eligible, suitable and competent. The decision of the Executive Engineer regarding suitability / eligibility / competency of Contractors/ Firms shall be final binding on the Contractors / Firms applying for the issuing of the tender. The offer for the tenders shall be kept open for 120 days. The Executive Engineer reserves the right to reject the tender without assigning any reasons, if there happens to be any holiday the same will be opened on next working day.

Work No. 1:- Providing and fixing Air Conditioners of 1.5 tonne capacity and LED Pot Top Lantern at DTO Residence at Kullu District – Kullu HP
Estimated Cost: Rs. 300234/-only, Earnest money: Rs. 6000/- only, Time allowed: - One Month.

Work No. 2:- Providing and laying SOP Power Cable in the campus of Circuit House at Manali District – Kullu HP Estimated Cost: Rs. 155620/-only, Earnest money: Rs. 3100/- only, Time allowed: - One Month.

Work No. 3:- Providing Façade Lighting in campus of Meeting Hall at Circuit House Mandi HP Estimated Cost: Rs. 400541/-only, Earnest money: Rs. 8050/- only, Time allowed: - One Month

Work No. 4:- C/o Ayurvedic Health Sub Centre at Somanachani District Mandi HP (SH : Providing E.I therein) Estimated Cost: Rs. 212690/-only, Earnest money: Rs. 4300/- only, Time allowed: - Along with civil work.

Work No. 5:- Repair and maintenance of E.I in various Non –Residential Buildings at Shri Lal Bahadur Shastri Govt. Medical College and Hospital Nerchowk (SH: Replacement and maintenance of damaged accessories in Boys Hostel - Block, all toilets Block , Girls Hostel, Toilet Block B, Wiring for additional Geysers points in Intern Hostel therein) . Estimated Cost: Rs. 288694/-only, Earnest money: Rs. 5800/- only, Time allowed: - One month

Work No. 6:- C/o PHC Building level-I at Bara (Chachiot) District Mandi HP (SH: Providing EI therein). Estimated Cost: Rs. 201096/-only, Earnest money: Rs. 4050/- only, Time allowed: - One month

Work No. 7:- C/o Pre-Engineered Building for Animal Clinic and operation theatre at Veterinary Polyclinic Mohal Distt - Kullu HP (SH: Providing EI therein). Estimated Cost: Rs. 140439/-only, Earnest money: Rs. 2850/- only, Time allowed: - One month

Work No. 8:- C/o CHC Building at Padhar, District Mandi HP , (SH: Providing balance work of E.I therein) . Estimated Cost: Rs. 498554/-only, Earnest money: Rs. 10000/- only, Time allowed: - One month.

Work No. 9:- Supplying, Installation Testing and Commissioning of Networking Solutions at HPPWD Division office Manali at Katrain Distt Kullu HP Estimated Cost: Rs. 368291/-only, Earnest money: Rs. 7400/- only, Time allowed: - One Month

Work No. 10:- Supplying, Installation Testing and Commissioning of Fire Alarm System at HPPWD Division office Manali at Katrain Distt Kullu HP Estimated Cost: Rs. 496380/-only, Earnest money: Rs. 9950/- only, Time allowed: - One Month.

Work No. 11:- C/o HPPWD Division office Manali at Katrain Distt Kullu HP (SH: Providing EPBAX system therein Estimated Cost: Rs. 179647/-only, Earnest money: Rs. 3600/- only, Time allowed: - One Month.

Work No. 12:- C/o Additional accommodation to Circuit House at Manali District Kullu HP (SH: Providing EPBAX system therein) Estimated Cost: Rs. 428798/-only, Earnest money: Rs. 8600/- only, Time allowed: - One Month.

Work No. 13:- Providing Centrifugal compressor Oil in 5 Chiller Machine (38 ltr capacity each) installed in HVAC Plant at Shri Lal Bahadur Shastri Govt. Medical College and Hospital Nerchowk . Estimated Cost: Rs. 424736/-only, Earnest money: Rs. 8500/- only, Time allowed: - One month

Work No. 14:- Supplying Water Treatment Chemical for HVAC System existing at Shri Lal Bahadur Shastri Govt. Medical College and Hospital Nerchowk . Estimated Cost: Rs. 492900/-only, Earnest money: Rs. 9900/- only, Time allowed: - One month

Work No. 15:- Annual Repair and maintenance (AMC) of HVAC System (Chiller Plant) of Carrier make installed at Shri Lal Bahadur Shastri Govt. Medical College and Hospital Nerchowk (SH: Servicing / Descaling of HVAC Plant system (Chiller plant) and minor repair in chiller plant. Estimated Cost: Rs. 356000/-only, Earnest money: Rs. 7200/- only, Time allowed: - One month.

NOTE:-

1. No contractor or his accredited agent shall be permitted to participate in the competition unless he holds a valid wiring license and have been duly registered in appropriate class in the HPPWD Department (Electrical)
2. No person or persons other than the contractor shall be issued tender documents unless he/they hold power of attorney duly registered under law. The tender of those contractors who are registered as dealer under H.P. General Sales Tax Act 1968 / GST and who have cleared all dues on accounts of tax will be entertained only.
3. The rates must be quoted in percentage (Above / Below) to the amount put to tender both in figures as well as in words otherwise tender will not be considered.
4. The eligible contractor should submit performance certificate for specialized jobs as required
5. Conduit pipe is to be laid simultaneously with the progress of civil work, wherever applicable.
6. The tendered amount should be within the limit of(+) 5% to (-) 10%. Notification dated 07.10.2021 shall be applicable for Bid price lower than -10% and more than +5%.

Executive Engineer,
Electrical Division,
HPPWD, Mandi (H.P.)

No.PW-MED/TA/NIT/2022-2023-- 648-97

Dated: 06/05/22

Copy forwarded to the following for information please:-

1. The Engineer-in-Chief, HPPWD, Nirman Bhawan. Nigam Vihar Shimla-1.
2. The Deputy Commissioner, Mandi District – Mandi H.P
3. The Chief Engineer (Mandi Zone), HPPWD, Mandi.
4. The Superintending Engineer (Elect.) HPPWD, Shimla-9
5. The Executive Engineer (IT) o/o Engineer-in-Chief, HPPWD, Shimla through email: eeict-pwd-shi@hp.gov.in a/w copies of Schedule of Quantities for uploading the same on HPPWD web portal.
6. The Sub Divisional Officer(Civil), Mandi District – Mandi H.P
7. The Commissioner, Municipal Corporation, Mandi District – Mandi HP
8. All the Assistant Engineers (Elect.) under this Division.
9. All the Heads of Branches in this office.
10. All the registered eligible Electrical contractor under this Division.

Executive Engineer,
Electrical Division,
HPPWD, Mandi (H.P.)

Job 1		Estimated Cost:- Rs. 300234/-only.		Earnest Money:- Rs. 6000/-only.		Time :- One Month.	
Schedule Of Quantity		Rate in figure.		Rate in words.		Unit	
Name of work:-		Qty.		Amount			
Sr. No.	Description	Qty.	Rate in figure.	Rate in words.	Unit	Amount	
1	Providing and fixing Air Conditioners 1.5 tonne capacity and LED Post Top Lantern at DTO Residence at Kullu District Kullu HP.	2	Nos.		Each		
2	Supplying & fixing 25w LED Post Top made of die cast aluminium base and spun aluminium round top . complete with all accessories ,connections, testing and commissioning etc. as required complete in all respects and to the best satisfaction of Engineer-in-charge. Make:- Jaquar/Bajaj/Twinkle.	3	Nos.		Each		
3	Supplying and fixing 20 Amps, 4 Module AC Box with SP MCB, plug top, metal enclosure, on surface or in recess, . complete with connections, testing and commissioning etc. as required complete in all respect. Make:- L&T/Legrand/Siemens.						
4	Wiring for circuit / sub-main with following size PVC insulated heat resistant flame retardant (HRRF) and low smoke single core (flexible) copper conductor cable in PVC casing & capping along with 1 No.HRRF/SPVC insulated single core copper conductor cable of same size for earthing as required complete in all respect. Cable make : PLAZA / FINOLEX / UNITECH / BONTON / KEI / BIYANI / GEMSCAB / CMI .	100	Metre		Per Metre		
5	2x1.5 Sq. mm.	150	Metre		Per Metre		
6	2x4.0 Sq. mm.	3	Nos.		Each		
7	Supplying and fixing of 3 star 1.5 tone capacity split type Inverter Hot and Cold AC,including copper pipe ,drain pipe and stand for out door AC unit complete with installation connection etc. as required complete in all respect. Make:-Voltas/Bluestar/Mitsubishi.	10	Nos.		Each		
8	Supplying & fixing LED TUBE 22W Aluminium BATTEN , complete with all accessories ,connections, testing and commissioning etc. as required complete in all respects and to the best satisfaction of Engineer-in-charge. Make:-Jaquar/Bajaj/Twinkle.	1	Nos.		Each		
9	Providing and installation of stationary storage type Electric water heater (Geyser) of various sizes by means of expansion-bolts with nuts and washers, including embedding of expansion-bolts in the wall, providing and fixing of 2 No C.P. connection rods 18" long, making good the damages, electrical connections,testing and commissioning etc. as required complete in all respect. Make:-Bajaj/Usha/Jaquar.						
10	25 Liter capacity water heater (Cat-A)						
	Total						


 Executive Engineer,
 Electrical Division,
 HPPWD Mandi (HP).

[illegible]

NAME OF WORK:- C/o Ayurvedic Health sub Centre at Somanachani District- Mandi HP. (Shi- Providing E.I in there in.)		Schedule Of Quantity		Estimated Cost:- Rs. 212890/-only. Earnest Money :- Rs. 4300/-only. Time :- Along with civil work.	
Sr. No.	Description	Qty.	Rate in figure.	Rate in words.	Amount
1	Wiring for light point / fan point / exhaust fan / call bell point with 1.5 Sq. mm. PVC insulated heat resistant flame retardant (HRRF) and low smoke single core (flexible) copper conductor cable in surface/ recessed steel conduit and earthing the light point with 1.5 Sq.mm. HRRFRLS/PVC insulated single core copper conductor cable as required complete in all respect. Cable make : PLAZA / FINOLEX / UNITECH / BONTON / KEI / BIYANI / GEIMSCAB / CMI.	21 Nos.			
i)	Group C				
ii)	Group A	17 Nos.			
2	Supplying and fixing metal box of 100mmx100mmx60mm deep (nominal size) on surface/recess with suitable size phenolic laminated sheet cover in the front including providing and fixing 5 pin 5/6 amps socket outlet and 5/6 amps, piano type switch, connections, painting etc. as required complete in all respect. Make- ESS KAY / CONA /Anchor	8 Nos.			
3	Supplying and fixing metal box of 180mmx100mmx60mm deep (nominal size) on surface/recess with suitable size phenolic laminated sheet cover in the front including providing and fixing 6 pin 15/16 amps socket outlet and 15/16 amps, piano type switch, connections, painting etc. as required complete in all respect. Make- ESS KAY / CONA /Anchor	11 Nos.			
4	Providing and installation of exhaust fan of following sizes in the existing opening, including making the hole to suit the size of the above fan, making good the damages, connections, testing and commissioning etc. as required complete in all respect. Make: Bajaj , Usha, Anchor	5 Nos			
5	Exhaust Fan, Light duty, (Domestic) 300 mm sweep Prov. & Fixing glazed LED 36 watt batten high quality design aluminium extruded with decorative end caps complete with connection , testing , commissioning etc as reqd. complete in all respect. Make Twinkle / Great White/Syska / Opulus / Bajaj / Great White / Phillips etc.	6 Nos.			
6	Prov. & Fixing glazed LED 20 watt batten high quality design aluminium extruded with decorative end caps complete with connection , testing , commissioning etc as reqd. complete in all respect. Make Twinkle / Great White/Syska / Opulus / Bajaj / Great White / Phillips etc.	4 Nos.			
7	Supplying and fixing bakelite batten/angle holder including connections etc. as required complete in all respect. Make: Anchor , CONA , ESS KAY .	9 Nos.			

8	Providing and fixing LED Surface mounted 2x2 36 watt Square panel with aluminium die cast housing of superior quality complete with Connection, testing commissioning as required complete in all respect as per entire satisfaction of the Engineer in charge. Make : Wipro / Bajaj / Phillips / Jaquar / Twinkle / Lux Max .	2	Nos.			Each	
9	Supplying and erection of steel light bracket made of G.I. pipe 'A' class of suitable length and dia, the pipe banded to give an angle of 100 to 110 degree fitted with bolt & nuts at the top of existing pole or wall including painting the pipe with two coats of approved paint over priming coat complete in all respects as required complete in all respect.	2	Nos.			Each	
10	40 mm dia. G.I. pipe, heavy class Providing & fixing LED batten of 40 Watt of to enhance the delight of occupants with comfortable experience through its classic design & glare free illumination of make as per Cat no. ZD-LTD010-40W complete with Connection, testing commissioning etc as required in all respect. Make: LED LUM, Twinkle, Jaquar, Bajaj, Clair	2	Nos.			Each	
11	Providing and installation of stationary storage type Electric water heater (Geyser) of various sizes by means of Expansion-bolts with nuts and washers, including embedding of expansion bolts in the wall, providing and fixing of Non-return valve, Dead weight safety valve, 2 No C.P. connection rods 18" long, making good the damages, electrical connections, safety valve connections, testing and commissioning etc. as required complete in all respect as per entire satisfaction of Engineer-in-Charge. Make : Racold / Bajaj / Usha.						
i)	25 Liter capacity water heater (Cat-A)	1	No.			Each	
ii)	35 Liter capacity water heater (Cat-A)	1	No.			Each	
12	Supplying and fixing Ding-Dong / Electronic musical bell, suitable for D.C./A.C. single phase, 230 volts complete as required complete in all respect. Make: ANCHOR, CONA, ESS, ESS KAY.	2	Nos.			Each	
13	Supplying and erection of 6 amps. to 32 amps. rating, 10 KA breaking capacity, 240 volts, 'C' curves, miniature circuit breaker of following poles in the existing MCB DB complete with connections etc. as required complete in all respect. Make : L&T / Legrand / ABB / SIEMENS.	18	Nos.			Each	
14	Single pole, Cat-A. Supplying and erection of 40/50/63 amps rating, 10 KA breaking capacity, 240 volts, 'C' curves, miniature circuit breaker of following poles in the existing MCB DB complete with connections etc. as required complete in all respect. Make : L&T / Legrand / SIEMENS.	2	Nos.			Each	
	Double pole Cat-A.						

15	Supplying and fixing of following way, single pole and neutral sheet steel MCB distribution board, 240 volts, on surface / recess, complete with tinned copper bus-bar, wire-set, neutral link, earth bar, din-bar, detachable gland plate, blanking plate, cable, identification labels interconnections, phosphatized and powder painted, including earthing etc. as required complete in all respect. Make : L&T / Legrand / SIEMENS.								
i)	Double Door 12 Way	1	No.						
ii)	Double Door 16 Way	1	No.						Each
16	Wiring for circuit/sub-main with following size PVC insulated heat resistant flame retardant (HRRF) and low smoke single core (flexible) copper conductor cable in surface/recessed steel conduit along with 1 No.HRRFLSPVC insulated single core copper conductor cable of same size for earthing as required complete in all respect. Cable make : PLAZA / FINOLEX / UNITECH / BONTON / KEI / BIYANI / GEMSCAB / CMI.								Each
i)	2x1.5 Sq. mm.	70	Metre						Per Metre
ii)	2x4.0 Sq. mm.	105	Metre						Per Metre
iii)	2x6.0 Sq. mm.	5	Metre						Per Metre
iv)	2x10 Sq. mm.	5	Metre						Per Metre
17	Supplying and drawing following size of PVC insulated, heat resistant, flame retardant (HRRF) and low smoke single core (flexible) copper conductor cable in existing surface / recessed, Steel/PVC conduit as required complete in all respect. Cable make : PLAZA / FINOLEX / UNITECH / BONTON / KEI / BIYANI / GEMSCAB / CMI.	35	Metre						Per Metre
	3x1.5 Sq. mm.								
18	Wiring for circuit / sub-main with 4x4 Sq. mm. PVC insulated heat resistant flame retardant (HRRF) and low smoke single core (flexible) copper conductor cable in surface/recessed steel conduit along with 2 No.4 Sq. mm. (4x4-2x4) HRRFLS/ PVC insulated single core copper conductor cable for earthing as required complete in all respect. Cable make : PLAZA / FINOLEX / UNITECH / BONTON / KEI / BIYANI / GEMSCAB / CMI.	30	Metre						Per Metre

19	Earthing with G.I. earth pipe 4.5 mtr. long and 40mm dia. including accessories and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. (but without charcoal or coke and salt) complete as required complete in all respect.	2	Set				Per Set	
20	Extra for using salt and charcoal for pipe earth electrode complete as required complete in all respect.	2	Set				Per 1 Set	
21	Supplying and laying 6 SWG G.I. wire at 0.50 mtr. below ground level for earth electrode conductor, including soldering etc. as required complete in all respect.	30.00	Metre				Per Metre	
Total								


 Executive Engineer,
 Electrical Division,
 HPPWD Mandi (HP).

Job 5		Estimated Cost:- Rs. 288694/-only.		Earnest Money:- Rs. 5800/-only.		Time :- One Month	
Schedule of quantity							
NAME OF WORK: Repair and maintenance of E.I accessories of various non-residential buildings at Shri Lal Bahadur Shastri Govt. Medical College and Hospital Ner Chowk Distt Mandi HP (Sh:- Replacement & maintenance of damaged accessories in Boys Hostel B Block, all Toilet Block, Girls hostel toilet block-B, wiring for additional geyser points in Inturn Hostel there in)							
S.N.	Description	Qty.	Rate in figure.	Rate in words Rupees	Unit	Amount	
1	Wiring for power plug with 2x4 Sq. mm. PVC insulated heat resistant flame retardant (HRFR) and low smoke single core (flexible) copper conductor cable in surface/recessed steel conduit along with 1 No.4 Sq.mm. HRFR/LS/PVC insulated single core copper conductor cable for earthing as required complete in all respect.	180	Metre		Per Metre		
2	Supplying & fixing following size modular base and cover plate on the existing modular metal boxes as required complete in all respect.	50	Metre		Per Metre		
i)	2 Module	50	Metre		Per Metre		
ii)	3 Module	30	Metre		Per Metre		
iii)	4 Module	50	Metre		Per Metre		
iv)	6 Module	20	Metre		Per Metre		
v)	12 Module	200	Nos.		Each		
3	Providing and fixing of surface mounted Luminaire LED 20/22 Watt batten, having high Quality design aluminium extruded decorative end caps and it should be compatible with specification i.e. Power Factor > .9, Harmonic Distortion <10% and efficiency>100 lumens per watt, CRI> 80 suitable for input voltage: AC 220-240 V, 50/60Hz, complete with all accessories, connections, testing and commissioning etc.as required complete in all respect.as approved by Engineer-in-charge. Make :- Philips,Havell,Crompton or its equivalent.						
4	Supplying and fixing bakelite batten/angle holder including connections etc. as required complete in all respect.	60	Nos.		Each		

5	Supplying and fixing LED Lamp 9 watt Havells make of base cap B-22 having Cat No LHLDEUEEML8R009 6500 k in the existing Batten holder. Pendant holder, wall bracket as required complete in all respect. Make Havell's, Philips, Crompton etc.	100	Nos.			Each
6	Supplying and fixing metal box of 180mmx100mmx60mm deep (nominal size) on surface/recess with suitable size phenolic laminated sheet cover in the front including providing and fixing 6 pin 15/16 amps socket outlet and 15/16 amps, piano type switch, connections, painting etc. as required complete in all respect..	20	Nos.			Each
7	Supplying and fixing of following way single pole and neutral sheet steel MCB distribution board, 240 volts, on surface / recess, complete with tinned copper bus-bar, wire-set, neutral link, earth bar, din-bar, detachable gland plate, blanking plate, cable, identification labels interconnections, phosphatized and powder painted, including earthing etc. as required complete in all respect. Make : L&T / Legrand / SIEMENS	4	Nos.			Each
8	Double door-8 way Supplying and erection of 6 amps. to 32 amps. rating, 10 KA breaking capacity, 240 volts, 'C' curves, miniature circuit breaker of following poles in the existing MCB DB complete with connections etc. as required complete in all respect. Make : L&T / Legrand / SIEMENS.	20	Nos.			Each
9	Single pole. Cat-A. Supplying and erection of 40/50/63 amps rating, 10 KA breaking capacity, 240 volts, 'C' curves, miniature circuit breaker of following poles in the existing MCB DB complete with connections etc. as required complete in all respect. Make : L&T / Legrand / SIEMENS.	4	Nos.			Each
10	Double pole. Cat-A. Supplying and fixing following rating, double pole (single phase & neutral) 240 volts, residual current circuit breaker (RCCB), having a sensitivity current up to 300 miliampers in the existing MCB DB complete with connections, testing and commissioning etc. as required complete in all respect. Make : L&T / Legrand / SIEMENS.	4	Nos.			Each
11	40 Amps. Cat-A. Supplying and fixing following rating Modular switch /socket in the existing switch box / cover plate including connections etc. as required complete in all respect.	80	Nos.			Each
i)	5/6 amps. 1-way Modular switch	40	Nos.			Each
ii)	15/16 amps. 1-way Modular switch	50	Nos.			Each
iii)	5 pin 5/6 amps. Modular socket outlet.					

iv)	6 pin 15/16 amps. Modular socket outlet.	30	Nos.			Each
12	Wiring for circuit / sub-main with 2x6 Sq. mm. PVC insulated heat resistant flame retardant (HRFR) and low smoke single core (flexible) copper conductor cable in surface/recessed PVC conduit along with 1 No.6 Sq.mm. HRFRLS/PVC insulated single core copper conductor cable for earthing as required complete in all respect.	50	Metre			Per Metre
Total						


 Executive Engineer,
 Electrical Division,
 HPPWD Mandi (HP).

Executive Engineer,
 Electrical Division,
 HPPWD Mandi (HP).

NAME OF WORK:- C/o PHC Building Level 1 at Bara [Chachid] District- Mandi HP. (Shr- Providing E.I. in there n.)		Schedule Of Quantity		Estimated Cost:- Rs. 201096/-only.	
Sr. No.		Description		Earnest Money :- Rs. 4050/-only.	
		Qty.		Time :- One Month.	
		Rate in figure.		Rate in words.	
		Unit		Amount	
1	Wiring for light point / fan point / exhaust fan / call bell point with 1.5 Sq. mm. PVC insulated heat resistant flame retardant (HRFR) and low smoke single core (flexible) copper conductor cable in surface/recessed PVC conduit and earthing the light point with 1.5 Sq.mm. HRFRLS/PVC insulated single core copper conductor cable as required complete in all respect. Cable make : PLAZA / FINOLEX / UNITECH / BONTON / KEI / BIYANI / GEMSCAB / CMI.	20 Nos.	Each		
2	Group A Group C Wiring for circuit/sub-main with following size PVC insulated heat resistant flame retardant (HRFR) and low smoke single core (flexible) copper conductor cable in surface/recessed PVC conduit along with 1 No.HRFRLS/PVC insulated single core copper conductor cable of same size for earthing as required complete in all respect. Cable make : PLAZA / FINOLEX / UNITECH / BONTON / KEI / BIYANI / GEMSCAB / CMI.	22 Nos.	Each		
	2x1.5 Sq. mm.	90	Per Metre		
	2x4.0 Sq. mm.	100	Per Metre		
	2x6.0 Sq. mm.	10	Per Metre		
3	Wiring for circuit / sub-main with 4x4 Sq. mm. PVC insulated heat resistant flame retardant (HRFR) and low smoke single core (flexible) copper conductor cable in surface/recessed PVC conduit along with 2 No.4 Sq.mm. (4x4+2x4)HRFRLS/PVC insulated single core copper conductor cable for earthing as required complete in all respect. Cable make : PLAZA / FINOLEX / UNITECH / BONTON / KEI / BIYANI / GEMSCAB / CMI.	45	Per Metre		
4	Supplying and drawing following size of PVC insulated, heat resistant, flame retardant (HRFR) and low smoke single core (flexible) copper conductor cable in existing surface / recessed, Steel/PVC conduit as required complete in all respect. Cable make : PLAZA / FINOLEX / UNITECH / BONTON / KEI / BIYANI / GEMSCAB / CMI.	40	Per Metre		
5	3x1.5 Sq. mm. Supplying and fixing metal box of 180mmx100mmx80mm deep (nominal size) on surface/recess with suitable size phenolic laminated sheet cover in the front including providing and fixing 5 pin 5/6 amps socket outlet and 5/6 amps, piano type switch, connections, painting etc. as required complete in all respect. Make- ESS KAY / COSMO/Anchor	14	Per Metre		

6	Supplying and fixing metal box of 180mmx100mmx60mm deep (nominal size) on surface/recess with suitable size phenolic laminated sheet cover in the front including providing and fixing 6 pin 15/16 amps socket outlet and 15/16 amps, piano type switch, connections, painting etc. as required complete in all respect. Make- ESS KAY / COSMO/Anchor	12	Nos.			Each	
7	Supplying and fixing bakelite batten/angle holder including connections etc. as required complete in all respect.. Make- ESS KAY / COSMO/Anchor	9	Nos.			Each	
8	Supplying and fixing Ding-Dong / Electronic musical bell, suitable for D.C./A.C. single phase, 230 volts complete as required complete in all respect. Make: ANCHOR, CONA, ESS KAY	3	Nos.			Each	
9	Supplying and erection of 6 amps. to 32 amps. rating, 10 KA breaking capacity, 240 volts 'C' curves, miniature circuit breaker of following poles in the existing MCB DB complete with connections etc. as required complete in all respect. Make : L&T / Legrand / SIEMENS.	20	Nos.			Each	
10	Single pole, Cat-A. Supplying and erection of 40/50/63 amps rating, 10 KA breaking capacity, 240 volts, 'C' curves, miniature circuit breaker of following poles in the existing MCB DB complete with connections etc. as required complete in all respect. Make : L&T / Legrand / SIEMENS.	2	Nos.			Each	
11	Supplying and fixing of following way, single pole and neutral sheet steel MCB distribution board, 240 volts, on surface / recess, complete with tinned copper bus-bar, wire-set, neutral link, earth bar, din-bar, detachable gland plate, blanking plate, cable, identification labels interconnections, phosphatized and powder painted, including earthing etc. as required complete in all respect. Cat-A. Make : L&T / Legrand / SIEMENS.						
	Double Door 12Way	1	No.			Each	
	Double Door 16Way	1	No.			Each	
12	Earthing with G.I earth pipe 4.5 mtr. long and 40mm dia. including accessories and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. (but without charcoal or coke and salt) complete as required complete in all respect.	2	Set			Per Set	
13	Extra for using salt and charcoal for pipe earth electrode complete as required, complete in all respect.	2	Set			Per Set	
14	Supplying and laying 6 SWG G.I. wire at 0.50 mtr. below ground level for earth electrode conductor, including soldering etc. as required complete in all respect.	30	Metre			Per Metre	
15	Providing, installation, testing and commissioning of ceiling fan with regulator, including wiring the down rods of standard length (up to 30 cm) with 16/0.20 mm twin core flexible, FRLS PVC, copper cable, including providing and fixing phenolic laminated sheet cover on the fan box and earthing etc. as required complete in all respect. Make : Usha / Bajaj / Anchor Panasonic.	7	Nos.			Each	
	Ceiling Fan 1200 mm sweep, Category-A						

		3	Nos.		Each
16	Providing and installation of exhaust fan of following sizes in the existing opening, including testing and commissioning etc. as required complete in all respect. Make : Usha / Bajaj / Anchor Panasonic.				
17	Exhaust Fan, Light duty, (Domestic) 300 mm sweep Supplying and erection of street light bracket made of G.I. pipe 'A' class of suitable length and dia. the pipe banded to give an angle of 100 to 110 degree fitted with bolt & nuts at the top of existing pole or wall including painting the pipe with two coats of approved paint over priming coat complete in all respects as required complete in all respect.	2	Nos.		Each
18	32 mm dia. G.I. pipe, heavy class Providing & fixing LED batten of 40 Watt of to enhance the delight of occupants with comfortable experience through its classic design & glare free illumination of make as per Cat no. ZD-LTD010-40W complete with Connection testing commissioning etc as required in all respect. Make: LED LUM, Twinkle, Jaquar, Bajaj, Clair	2	Nos.		Each
19	Providing & fixing surface LED 'IX1' of 20 Watt to enhance the delight of occupants with comfortable experience through its classic design & glare free illumination of Twinkle make as per Cat no. LUXOTICA-PL-003-(R) complete with Connection testing commissioning etc as required in all respect.	2			Each
20	Providing and fixing Glazed LED 20 Watt Batten high quality aluminium extruded with decorative end caps complete with connection testing commissioning as required complete in all respect Make: Bajaj/Sisal/Jaquar/Philips	12			Each
21	Supplying and Fixing LED Street Light 25 Watt LED made up of pressure die cast aluminium housing with high power LED as lighting source and lens embedded PC Cover having TOP OPENING separate driver compartment with IP 66 protection and impact resistance of IK 07 luminaire complete with connection testing commissioning etc as required complete in all respect. Make: Bajaj/Sisal/Jaquar/Philips	2			Each
	Total				


 Executive Engineer,
 Electrical Division,
 HPPWD Mandi (HP).

Job 7		Estimated Cost:- Rs. 140439/-only.		Earnest Money :- Rs. 2850/-only.		Time :- One Month.	
Schedule Of Quantity		Rate in figure.		Rate in words.		Unit	
Name of work:- C/O Pre Engineered building for animal clinic and operation theater at veterinary polyclinic Mohal Kullu, (H.P.) (Prov. E.I. there in)		Qty.		Rate in words.		Unit	
Sr. No.	Description	Qty.	Rate in figure.	Rate in words.	Unit	Amount	
1	Wiring for light point / fan point / exhaust fan / call bell point with 1.5 Sq. mm. PVC insulated heat resistant flame retardant (HRFR) and low smoke single core (flexible) copper conductor cable in PVC casing & capping and earthing the light point with 1.5 Sq.mm. HRFRLS/PVC insulated single core copper conductor cable as required complete in all respect. Cable make : PLAZA / FINOLEX / UNITECH / BONTON / KEI / BIYANI / GEMSCAB / CMI .	40 Nos.			Each		
2	Group C. Wiring for circuit / sub-main with following size PVC insulated heat resistant flame retardant (HRFR) and low smoke single core (flexible) copper conductor cable in PVC casing & capping along with 1 No.HRFRLS/PVC insulated single core copper conductor cable of same size for earthing as required complete in all respect. Cable make : PLAZA / FINOLEX / UNITECH / BONTON / KEI / BIYANI / GEMSCAB / CMI .	53 Metre			Per Metre		
i	2x1.5 Sq. mm.	68 Metre			Per Metre		
ii	2x4.0 Sq. mm.	7 Metre			Per Metre		
iii	2x10 Sq. mm.	4 Nos.			Each		
3	Supplying and fixing G.I. Modular box of (140mmx78mmx50mm) size with modular plate and cover in recess including providing and fixing 5 pin 5/6 amps modular socket outlet and 5/6 amps, modular switch, connections etc. as required complete in all respect. Make : Legrand (Myritu) / L&T (Entice) / Anchor /SSK / ABB (Similar Class).	7 Nos.			Each		
4	Supplying and fixing G.I. Modular box of (140mmx78mmx50mm) size with modular plate and cover in recess including providing and fixing 6 pin 15/16 amps modular socket outlet and 15/16 amps, modular switch, connections etc. as required complete in all respect. Make : Legrand (Myritu) / L&T (Entice) / Anchor /SSK / ABB (Similar Class).	2 Nos.			Each		
5	Supplying and fixing G.I modular Box of suitable size with modular plate and cover in recess including providing and fixing 3 Nos 5 pin 5/6 Amps modular socket outlet, 3 Nos 5/6 Amps modular switch, as required etc. as required complete in all respect. (Computer Point) Make : Legrand (Myritu) / L&T (Entice) / Anchor /SSK / ABB (Similar Class).	1 Set			Per Set		
6	Earthing with G.I earth pipe 4.5 mtr. long and 40mm dia. including accessories and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. (but without charcoal or coke and salt) complete as required complete in all respect.	1 Set			Per Set		
7	Extra for using salt and charcoal for pipe earth electrode complete as required complete in all respect.	1 Set			Per Set		

		25	Metre	Per Metre
8	Supplying and laying 6 SWG G.I. wire at 0.50 mtr. below ground level for earth electrode conductor, including soldering etc. as required complete in all respect.			
9	Supplying and erection of 6 amps. to 32 amps. rating, 10 KA breaking capacity, 240 volts, 'C' curves, miniature circuit breaker of following poles in the existing MCB DB complete with connections etc. as required complete in all respect. Make:- L&T/Legrand/Siemens.	8	Nos.	Each
10	Single pole 10 Amp. Cat-A. Supplying and erection of 40/50/63 amps rating, 10 KA breaking capacity, 240 volts, 'C' curves, miniature circuit breaker of following poles in the existing MCB DB complete with connections etc. as required complete in all respect. Make:- L&T/Legrand/Siemens.	1	Nos.	Each
11	Double pole, Cat-A. Supplying and fixing of following way, single pole and neutral sheet steel MCB distribution board, 240 volts, on surface / recess, complete with tinned copper bus-bar, wire-set, neutral link, earth bar, din-bar, detachable gland plate, blanking plate, cable, identification labels interconnections, phosphatized and powder painted, including earthing etc. as required complete in all respect. Make:- L&T/Legrand/Siemens.	1	Nos.	Each
12	Double door-16 way Providing, installation, testing and commissioning of ceiling fan with regulator, including wiring the down rods of standard length (up to 30 cm) with 16/0.20 mm twin core flexible, FRLS PVC, copper cable, including providing and fixing phenolic laminated sheet cover on the fan box and earthing etc. as required complete in all respect. Make : Usha / Bajaj / Anchor Panasonic.	6	Nos.	Each
13	Ceiling Fan 1200 mm sweep, Category-A Providing and installation of exhaust fan of following sizes in the existing opening, including making the hole to suit the size of the above fan, making good the damages, connections, testing and commissioning etc. as required complete in all respect. Make : Usha / Bajaj / Anchor Panasonic.	2	Nos.	Each
14	Exhaust Fan, Light duty, (Domestic) 300mm sweep Supplying and fixing Ding-Dong / Electronic musical bell, suitable for D.C./A.C. single phase, 230 volts complete as required complete in all respect. Make: ANCHOR, CONA, ESS KAY.	1	Nos.	Each
15	Supplying and fixing bakelite batten/angle holder including connections etc. as required complete in all respect.. Make- ESS KAY / COSMO/Anchor	5	Nos.	Each
16	Providing and fixing LED BULB 10 W B22 / E27/E14 base cap connections, etc. as required complete in all respect. Make : Wipro / Bajaj / Phillips / Jaquar / Twinkle / Lux Max.	5	Nos.	Each
17	Supplying & fixing LED TUBE 22W/Aluminium BATTEN, complete with all accessories ,connections, testing and commissioning etc. as required complete in all respects and to the best satisfaction of Engineer-in-charge. Make : Wipro / Bajaj / Phillips / Jaquar / Twinkle / Lux Max.	14	Nos.	Each
18	Supplying & fixing 10 Watt LED bulk head comprising of pressure die cast housing with acrylic diffuser (IP65 protection) complete with all accessories ,connections, testing and commissioning etc. as required complete in all respects and to the best satisfaction of Engineer-in-charge. Make : Wipro / Bajaj / Phillips / Jaquar / Twinkle / Lux Max.	6	Nos.	Each

[illegible]

Job-8		ESTIMATED COST :-Rs. 498554/- Only				
		EARNEST MONEY :- Rs. 10000/- Only				
		Time:- Along with civil work .				
SCHEDULE OF QUANTITY						
Name of work:- C/o CHC Building at Padhar Distt Mandi HP (SH:- Providing E.I. There in) Balance Work.						
Description						
S.N.	Description	Quantity	Rate in Words	Rate in Figure	Unit	Amount
1	Wiring for light point / fan point / exhaust fan / call bell point with 1.5 Sq. mm. PVC insulated heat resistant flame retardant (HFRF) and low smoke single core (flexible) copper conductor cable in surface/recessed steel conduit and earthing the light point with 1.5 Sq.mm. HFRFLS/PVC insulated single core copper conductor cable as required complete in all respect. Make:-PLAZA / FINOLEX / UNITECH / BONTON / KEI / BIYANI / GEMSCAB / CMI.	12 Nos.			Each	
2	Group C. Supplying and fixing metal box of 180mmx100mmx60mm deep (nominal size) on surface/recess with suitable size phenolic laminated sheet cover in the front including providing and fixing 5 pin 5/6 amps socket outlet and 5/6 amps, piano type switch, connections, painting etc. as required. as per entire satisfaction of Engineer- in- Charge. Make : Anchor /SSK /Conal Cosmo.	2 Nos.			Each	
3	Supplying and fixing metal box of 180mmx100mmx60mm deep (nominal size) on surface/recess with suitable size phenolic laminated sheet cover in the front including providing and fixing 6 pin 15/16 amps socket outlet and 15/16 amps, piano type switch, connections, painting etc. as required. as per entire satisfaction of Engineer- in- Charge. Make : Anchor /SSK /Conal Cosmo.	1 Nos.			Each	
4	Providing & fixing recess LED 2'X2' of 36 Watt to enhance the delight of occupants with comfortable experience through its classic design & glare free illumination of Twinkle make as per Cat no. LUXOTICA-PL-001-(R-1) complete with Connection,testing commissioning etc as required in all respect. Make : Wipro / Bajaj / Phillips / K-lite / (Twinkle) Lux Max / Jaquar.	8 Nos			Each	
5	Providing & fixing surface LED 1'X1' of 20 Watt to enhance the delight of occupants with comfortable experience through its classic design & glare free illumination of Twinkle make as per Cat no. LUXOTICA-PL-003-(R) complete with Connection,testing commissioning etc as required in all respect. Make : Wipro / Bajaj / Phillips / K-lite / (Twinkle) Lux Max / Jaquar.	23 Nos			Each	
6	Providing & fixing surface LED Downlight 12 Watt to enhance the delight of occupants with comfortable experience through its classic design & glare free illumination of Bajaj make as per cat no. BGSLO SLEEK 12W WH RD complete with Connection,testing commissioning etc as required in all respect. Make : Wipro / Bajaj / Phillips / K-lite / (Twinkle) Lux Max / Jaquar.	4 Nos			Each	
7	Providing and fixing Glazed LED 20 watt Batten High quality design aluminium extruded with decorative end caps complete with Connection,testing commissioning as required complete in all respect as per entire satisfaction of the Engineer in charge. Make : Wipro / Bajaj / Phillips / Jaquar / (Twinkle) Lux Max .	35 Nos			Each	

8	Providing & fixing LED street light of 30 Watt with pressure die-cast housing along with prismatic polycarbonate diffuser and LED's with secondary optics and IP65 protection complete with Connection, testing commissioning etc as required in all respect. Make:- Wipro / Philips / Anchor Panasonic / Bajaj .	6	Nos				Each
9	Supplying and erection of street light bracket made of G.I. pipe 'A' class of suitable length and dia, the pipe bent to give an angle of 100 to 110 degree fitted with bolt & nuts at the top of existing pole or wall including painting the pipe with two coats of approved paint over priming coat complete in all respects as required complete in all respect	6	Nos				Each
10	32 mm dia. G.I. pipe, heavy class Providing, Installation, testing and commissioning of ceiling fan with regulator, including wiring the down rods of standard length (up to 30 cm) with 16/0.20 mm twin twisted flexible, cotton braided, copper cable, including providing and fixing phenolic laminated sheet cover on the fan box and earthing etc. as required complete in all respect. Make : Usha / Bajaj / Anchor Panasonic.	17	Nos				Each
i)	Ceiling fan 1200 mm sweep (Category -A)	4	Nos				Each
ii)	Ceiling Fan 1400 mm sweep, Category-A.						
11	Providing and installation of exhaust fan of following sizes in the existing opening, including making the hole to suit the size of the above fan, making good the damages, connections, testing and commissioning etc. as required complete in all respect. Make: Bajaj , Usha, Anchor	5	Nos				Each
i)	Exhaust Fan, Light duty, (Domestic) 300 mm sweep	9	Nos				Each
ii)	Exhaust Fan, Light duty, (Domestic) 225 mm sweep	25	Nos.				Each
12	Providing & fixing LED Bulb 12 Watt complete with connection testing commissioning etc.as required complete in all respect. Make:- Wipro / Bajaj/Twinkle / Phillips / Anchor Panasonic.	2	Nos.				Each
13	Supplying and erection of 6 amps. to 32 amps. rating, 10 KA breaking capacity, 240 volts, 'C' curves, miniature circuit breaker of following poles in the existing MCB DB complete with connections etc. as required complete in all respect. Make : L&T / Legrand / Siemens.	1	No.				Each
14	Single pole, Cat-A. Supplying and erection of 40/50/63 amps rating, 10 KA breaking capacity, 240 volts, 'C' curves, miniature circuit breaker of following poles in the existing MCB DB complete with connections etc. as required complete in all respect. Make : L&T / Legrand / Siemens..						
	Double pole Cat-A						

15	Supplying and fixing of following way, single pole and neutral sheet steel MCB distribution board, 240 volts, on surface / recess, complete with tinned copper bus-bar, wire-set, neutral link, earth bar, din-bar, detachable gland plate, blanking plate, cable, identification labels interconnections, photoshielded and powder painted, including earthing etc. as required complete in all respect. Make : L&T / Legrand / Siemens.	1	No.		Each	
16	Double door- 12 way Wiring for circuit/sub-main with following size PVC insulated heat resistant flame retardant (HFR) and low smoke single core (flexible) copper conductor cable in surface/recessed steel conduit along with 1 No.HFRLS/PVC insulated single core copper conductor cable of same size for earthing as required complete in all respect Make:-PLAZA / FINOLEX / UNITECH / BONTON / KEI / BIYANI / GEMSCAB / CMI.					
i)	2x1.5 Sq. mm.	10	Metre		Per Metre	
ii)	2x4.0 Sq. mm.	10	Metre		Per Metre	
17	Supplying and fixing bakelite batten/angle holder including connections etc. as required complete in all respect Make:- ANCHOR / CONA / SSK	14	Nos		Each	
18	Supplying and erection of wall mounted metal boards for switch gear mounting of suitable size, with permissible variation in size of plus minus 5mm, welded frame work made of M.S. angle iron 35 mm x 35 mm x 6 mm thick duly welded complete with 2.80mm thick M.S. sheet fixed with hinges as open able front, complete with locking arrangement including painting and bonding to the existing earth as required complete in all respect	1.2	Square Metre		Per Square Metre	
19	Supplying and erection of following depth sheet metal cubical pedestal of suitable dimensions with plus-minus 5 cm variation, made from 1.6 mm thick M.S. sheet duly fabricated in a segregated manner for housing of switch fuse units, by welding each compartment on five sides & front side hinged, complete with locking arrangement, with sufficient No. vertical and horizontal intermediate switchgear housing compartments. The cubical pedestal shall have cable entry box at one or two sides, with epoxy powder coated approved paint and bonding to the existing earth etc. The same shall be erected in the 1:2:4 cement concrete plat-form of suitable dimensions 15 cm high from ground level and 45 cm thick. The cubical pedestal shall be 15 cm from the top of cement concrete plat-form;(2100mmx1100 mm) 450 mm deep (nominal) including Copper Bus Bar 400 Amp=1.6mtrs,MCCB 400Amp=1No.,MCCB 63Amp=5No., Selector switch 2 Nos, Digital Ammeter 1 No., Digital Volt meter 1 No., phase indicator 3 Nos and C.T.Coil-3Nos and internal control wiring etc. as required complete in all respect Make : L&T / Legrand / ABB / SIEMENS.	1	No		Each	

	20	Providing, laying and fixing of one No. aluminium conductor, PVC insulated and PVC sheathed, armoured/XLPE power cable, working voltage 1100 volts grade on surface etc. of the required size-complete in all respect as per entire satisfaction of Engineer- in- Charge. Cable Make : CCI/ Universal/ Finolex / Polycab / Railison / Grandlay / KEI.	50	Metre		Per Metre	
	21	Armoured cable 25 sq. mm (3.5 core) Providing and installation of stationary storage type Electric water heater (Geyser) of various sizes by means of Expansion-bolts with nuts and washers, including embedding of expansion-bolts in the wall, providing and fixing of Non-return valve, Dead weight safety valve, 2 No C.P. connection rods 18" long, making good the damages, electrical connections, safety valve connections, testing and commissioning etc. as required complete in all respect as per entire satisfaction of Engineer- in- Charge. (Make : Racold / Venus / Crompton Grievies /Usha.)					
i)		25 Liter capacity water heater (Cat-A)	4	Nos		Each	
ii)		35 Liter capacity water heater (Cat-A)	2	Nos		Each	
		Total			Total	Total	

Executive Engineer,
Electrical Division,
HP.PWD. Mandi (HP)

NAME OF WORK :- Supplying, installing, testing and Commissioning of Networking Solution at HPPWD Divisional Office Manali at Katrain distt. Kullu HP.		Schedule Of Quantity		Office Manali at Katrain distt. Kullu HP.	
Sr. No.	Description	Qty.	Rate in figure.	Rate in words.	Unit
1	Supply and Erection of 24 port network Supply and Erection of 24 PoE / PoE+ ports (190W PoE budget), 2 x 1G SFP (Fiber) ports (Dedicated), 500 Mhz MIPS-4Kec CPU, 128MB RAM 32MB SPI FLASH, 52 Gbps Switching Rate, 38.68 Packet forwarding rate (64 byte packet size) (Mpps), 8 Priority queues, 128 Multicast groups, 256 DHCP snooping bindings, 100 shared for MAC, IP and UDP/TCP ACLs (ingress), DHCP snooping, IEEE 802.1x (EAP), Weighted Round Robin (WRR) and Strict Priority queuing, Auto-VoIP VLAN / Auto-Voice VLAN, IEEE 802.1w Rapid Spanning Tree Protocol, IEEE 802.1s Multiple Spanning Tree Protocol, L2 / L3 / L4 ingress Access Control Lists (ACLs), IEEE 802.3 Ethernet IEEE 802.3z Gigabit Ethernet 1000BASE-SX/LX, IEEE 802.3u 100BASE-T, IEEE 802.3x Full-Duplex Flow Control IEEE 802.1Q VLAN Tagging, IEEE 802.1AB LLDP with ANSI/TIA-1057 (LLDP-MED), IEEE 802.3ab 1000BASE-T IEEE 802.1p Class of Service, IEEE 802.3af PoE IEEE 802.1D Spanning Tree (STP), IEEE 802.3at PoE+, IEEE 802.1s Multiple Spanning Tree (MSTP), IEEE 802.3az Energy Efficient Ethernet (EEE), IEEE 802.1w Rapid Spanning Tree (RSTP), IEEE 802.3ad Trunking (LACP), IEEE 802.1x RADIUS Network Access Control, Operating temperature - 0° to 50°C (32° to 122°F), Power - Internal 100-240VAC 50-60Hz Make - Cisco/Netgear/Juniper make (Juniper/Cisco/Netgear) (With 3 year onsite warranty)	2	Nos.		Each
2	Supply and testing of Wireless Access Point 2x2(Transmit and Receive)Dual Bank IEEE 802.11a/b/g/n/ac. 2 internal dual-band 3 dBi omni antennas. Operating frequency • 2.4 GHz band: 2.4 to 2.4835 GHz. Make Netgear / Juniper/ Cisco (With 3 year onsite warranty)	3	Nos.		Each
3	SITC of SMB Box with Single Faceplate and I/O Make Dlink/R&M/Panduit	23	Nos.		Each
4	Supply and erection of 24 port Patch Panel with straight frame complete in all respect Make Panduit, Dlink, R&M	2	Nos.		Each

5	LAN (Data cabling and computer networking) SE of Information outlets connection to terminate the individual Cat - 6 cable from data switch to respective data node of the network and connect the node the server by making cat-6 cable back bone complete in all respect	23	Nos.			Each
6	SITC of Firewall Performance - 3700 MBPS, TLS Inspection - 375 MBPS, IPS - 1015Mbps, IPSEC VPN- 750 Mbps, Threat Protection- 240 Mbps, Connectivity - 4 GE Copper, 1X SFP Fiber, Management Interface- 1XCOM RJ 45 Make -Sophos, CISCO, Juniper	1	No.			Each
7	Supply and erection of Cat-6 UTP cable including tracing, numbering and termination on data switch and I/Os on other end complete in all respect as approved and desired by engineer in chief. Make : - Dlink/Schneider/R&M.	400	Metre			Per Metre
8	Supply and erection of 1 meter long patch cord Low Smoke Zero Halogen factory crimped comprising of make RJ-45 connectors on both end complete. Make Panduit,Dlink, R&M	23	Nos.			Each
9	Supply and erection of 2 meter long patch cord Low Smoke Zero Halogen factory crimped comprising of make RJ-45 connectors on both end complete Make Panduit, Schindler, R&M	23	Nos.			Each
10	Supply and erection of 9 U wall mount rack, Tinted Toughened Glass Door, High quality fan of High Cool brand,High quality PDU .Make APW/ Comrack/ Dlink	1	No.			Each
11	Supply and erection of 6 U wall mount rack, tinted Toughened Glass Door, High quality fan of high cool brand, high quality PDU. Make - APW/comrack/Dlink	1	No.			Each
12	Supply and Erection of 25 mm conduit (Medium Grade). Make - Diplast/AKG/Polycab	300	Metre			Per Metre
Total						


 Executive Engineer,
 Electrical Division,
 HPPWD Mandi (HP). D

Job- 10						Estimated Cost- Rs. 496380/-only. Earnest Money :- Rs. 9950/-only. Time :- One Month.
Schedule of quantity						
Name of work: Supply Installation Testing and Commissioning of Fire Alarm System at HPPWD Divisional Office building Manali at Katrain, Distt:- Kullu. H.P.						
Sr. No.	Description	Qty.	Rate in figure.	Rate in words.	Unit	Amount
1	SITC of UL268 6th and 7th edition compliance and FM approved Intelligent Addressable multi-criteria detector (optical and thermal sensors) complete with standard base, facility to mount in different comprehensive environment. Tri-color detector-status LED with 360 ° view, microprocessor circuitry with error check; detector self-diagnostics and supervision programs.Rate-of-Rise Detection: 15°F / min. (8.3°C / min.) - Fixed: 135°F (57°C). Field programmable as rate-of-rise or fixed temperature, Polarity insensitive, Superior EMI and RFI immunity, RoHS compliant. Detector shall have in-built isolator for better reliability, circuit integrity and advanced fault finding. Manufacturers not having in-built Isolator feature in detector shall consider Isolator base in place of standard base OR separate Isolator before and after every detector to comply the same without any extra cost. Make : Cerberus by Siemens/ Esser by Honeywell/Autonica	39			Each	
2	SITC of UL Listed Sounder cum Strobe rated at 75 dBA @ 3m for Audible annunciation and 75cd flashing at 1 Hz for visual indication. Make : Cerberus by Siemens/ Esser by Honeywell/Autonica	3			Each	
3	SITC of UL listed and FM approved Intelligent addressable Class X type (Style 7), Manual Pull Station Single Action, Shock and Vibration Resistant, with built in dual isolator, polarity insensitive, Tri color LED for status (Green for Normal, Yellow for Faulty and RED for activation), T-45 Key Reset lockset for easy maintenance, Operating Temp and RH: 0-49degC and <=95%. MCP shall have in-built isolator for better reliability, circuit integrity and advanced fault finding. Manufacturers not having in-built Isolator feature shall provide separate Isolator before and after every MCP to comply the same without any extra cost. Make : Cerberus by Siemens/ Esser by Honeywell/Autonica	3			Each	
4	SITC of UL listed and FM approved Intelligent addressable Class X type (Style 7), Control Module with built in dual isolator, polarity insensitive, Tri color LED for status (Green for Normal, Yellow for Faulty and RED for activation), Operating Temp and RH: 0-49degC and <=95%. Module shall have in-built isolator for better reliability, circuit integrity and advanced fault finding. Manufacturers not having in-built Isolator feature shall provide separate Isolator before and after every Module to comply the same without any extra cost. (For AHU & Staircase Pressurization Fans, Hooters / Sounders etc.) Make : Cerberus by Siemens/ Esser by Honeywell/Autonica	3			Each	

5	SITC of UL 864 10th edition UL Listed and FM approved Analog addressable 2 Loop Fire Alarm Control Panel having the total panel capacity of 252 devices. The panel shall be able to give pin point location of all Fire /fault and Isolation conditions of addressable units via the address codes. The panel shall have the capacity of storing upto 10000 events. Further, the panel must be able to automatically switch ON /OFF respective control module whenever any alarm is triggered. The panel should have inbuilt common Alarm, Fault and monitored sounder output. The panel shall have a 2'x4-3/4" Size VGA monochrome LCD display and having maximum 320 (8 x 40) Characters in the display with optional 24 Zones LED indicators. The panel shall have a built in power supply of 170 Watts and battery charger. Battery charger shall be able to charge the system batteries of up to 33AH capacity. The Panel shall have the capacity of connecting additional 31 panels or Network terminals using network card, with redundancy in the network. The panel shall have the capacity of connecting maximum 16 Remote terminals /16 remote displays or combined by using 2 X RS 485 Card. Make : Cerberus by Siemens/ Esser by Honeywell/Autonica	1	No.			Each
6	Supply and erection of PVC insulated two core FR copper conductor cable ISI marked in PVC pipe recess/surface complete in all respect Make - Finolex / Polycab / Hawells					
a.	2 core x 1.5 sq. mm	800	Metre			Per metre
7	Supply and erection of PVC pipe 25mm dia ISI marked (Medium) recessed in wall / ceiling etc. including the cost of PVC bends , inspection boxes , iron hooks and cement concrete etc. complete in all respect upto the entire satisfaction of Engineer-in-charge of work. Make: BEC/Diplast /Polyplast	600	Metre			Per metre
8	Supply, Installation, Testing and commissioning of IEC 60849 Approved Glow Type EXIT/Stair /Emergency Exit Sign Board as finalized by Engineer In Charge, on both side showing marking (running man, Arrow and Exit) and hanged with the ceiling with chain and fastener complete the work upto the entire satisfaction of Engineer In Charge. Make: PES /HEINRICH/ OMEX/ COOPER/Agni/Falcon	3	Nos.			Each
TOTAL						


Executive Engineer,
Electrical Division,
HPPWD Mandi (HP).

Job 11		Estimated Cost:- Rs. 179647/-only.		Earnest Money :- Rs. 3600/-only.		Time :- One Month.	
Schedule Of Quantity							
Name of work:- C/o HPPWD Divisional Office Katrain, Distt:- Kullu, H.P. (SH:- Providing EPBAX system there in)							
Sr. N	Description	Qty.	Rate in figure.	Rate in words.	Unit	Amount	
1	Supplying and fixing of following sizes of PVC conduit along with the accessories in surface / recess including cutting the wall and making good the same in case of recessed conduit as required complete in all respect and to best satisfaction of engineer in charge. i) 25 mm. dia. Make : AKG/ BEC / NIC/ Diplast.	200 Metre			Per Metre		
2	Supplying, Installation, Testing and Commissioning of EPBAX with 2CO + 2DKP + 16 SLT Extension , Operator Console and expandable upto 48 TDM ports or as required to have complete solution in all respects and to best satisfaction of engineer in charge. Makes:- Matrix/Mitel/ Tadiran	1 No			Each		
3	Providing and fixing Corded Landline phone with adjustable Handset volume ,Missed call notification;incoming call memory;real time clock with date,time and year or as required to have complete solution in all respects and to best satisfaction of engineer in charge. Makes:- Matrix/Mitel/ Tadiran/ Beetle	2 Nos			Each		
4	Providing and fixing Corded Landline phone with Caller Line Identification or as required to have complete solution in all respects and to best satisfaction of engineer in charge. Makes:- Matrix/Mitel/ Tadiran/ Beetle	10 Nos			Each		
5	Providing and fixing 50 pair MDF box with krone or as required to have complete solution in all respects and to best satisfaction of engineer in charge. Makes:- Matrix/Mitel/ Tadiran/ Krone Type	1 No			Each		
6	Providing and fixing of 5 stage IPM per pair or as required to have complete solution in all respects and to be best satisfaction of engineer in charge. Makes:- Matrix/Mitel/ Tadiran/ Inotel	12 Nos			Each		
7	Supplying,Installation and fixing of 10 pair MDF or as required to have complete solution in all respects and to best satisfaction of engineer in charge. Makes:- Matrix/Mitel/ Tadiran / Krone Type	2 Nos			Each		
8	Supplying,Installation and fixing 2 Pair Multicore Telephone Cable 0.5 mm as required to have end-to-end solution complete in all respects and to best satisfaction of engineer in charge. Makes:- Finloex/Deltron/Plaza	600 Metre			Per Metre		
9	Supplying, Installation Testing and commissioning 10 Pair Multicore Telephone Cable 0.5 mm as required to have complete solution in all respects and to best satisfaction of engineer in charge.Makes:- Finloex/Deltron/Plaza	100 Metre			Per Metre		
10	Supplying,Installation, Testing and Commissioning Jumper Wire as required to have complete solution in all respects and to best satisfaction of engineer in charge. Makes:- Finloex/Deltron/Plaza	15 Metre			Per Metre		

11	Supplying, Installation Testing and commissioning Modular Telephone Socket with line cord as required to have complete solution in all respects and to best satisfaction of engineer in charge. Makes:- Dlink/REIT/Comscope	12	Nos				Each
12	Providing and fixing of 9U/500MMD 1 Section Wall mount Rack with 1x PDU (6 X 5A) and 1.5m feed cable and 3 pin plug, 1 x Cable Manager 1U PVC loops, 1 x Hardware pkt of 10, to the best satisfaction of engineer in charge. Makes:- Comrack / APC /Netrack/WBOX	1	No				Each
13	Supplying, installation, testing and commissioning of 1.0kva UPS with battery, or as required to have end-to-end solution complete in all respects and to the best satisfaction of engineer in charge. Makes:-Luminous/APC/Microtek/ Uniline	1	No				Each
14	Supplying, Installation Testing and commissioning of RJ-11 jacks as required to have complete solution in all respects and to best satisfaction of engineer in charge. Makes:- Standard Make)	12	Nos				Each
Total							


Executive Engineer,
Electrical Division,
HPPWD Mandi (HP).

Job No 12		Estimated Cost:- Rs. 428798/-only.				
		Earnest Money :- Rs. 8600/-only.				
		Time :- One Month.				
Schedule Of Quantity						
Name of work:- C/o Additional Accommodation to Circuit house at Manali., Distt:- Kullu. H.P. (SH:- Providing EPBAX system there in) (SH:- Providing EPBAX system						
Sr. No	Description there in)	Qty.	Rate in figure.	Rate in words.	Unit	Amount
1	Supplying and fixing of following sizes of PVC conduit along with the accessories in surface / recess including cutting the wall and making good the same in case of recessed conduit as required complete in all respect and to best satisfaction of engineer in charge. i) 25 mm. dia. Make : AKG/ BEC / NIC/ Diplast.	450	Metre		Per Metre	
2	Supplying, Installation, Testing and Comissioning of EPBAX with 2CO + 2DKP + 44 SLT Extension, Operator Console and expandable upto 64 TDM ports or as required to have complete solution in all respects and to best satisfaction of engineer in charge. Makes:- Matrix/Mitel/ Tadiran	1	No		Each	
3	Providing and fixing Corded Landline phone with adjustable Handset volume, Missed call notification, incoming call memory, real time clock with date, time and year or as required to have complete solution in all respects and to best satisfaction of engineer in charge. Makes:- Matrix/Mitel/ Tadiran/ Beetle	44	Nos		Each	
4	Providing and fixing 50 pair MDF box with kronex or as required to have complete solution in all respects and to best satisfaction of engineer in charge. Makes:- Matrix/Mitel/ Tadiran/ Krone Type	1	No		Each	
5	Providing and fixing of 5 stage IPM per pair or as required to have complete solution in all respects and to best satisfaction of engineer in charge. Makes:- Matrix/Mitel/ Tadiran/ Inotel	44	Nos		Each	
6	Supplying, Installation and fixing 30 pair IDF or as required to have complete solution in all respects and to best satisfaction of engineer in charge. Makes:- Matrix/Mitel/ Tadiran / Krone Type	1	No		Each	
7	Supplying, Installation and fixing of 10 pair MDF or as required to have complete solution in all respects and to best satisfaction of engineer in charge. Makes:- Matrix/Mitel/ Tadiran / Krone Type	4	Nos		Each	
8	Supplying, Installation and fixing 2 Pair Multicore Telephone Cable 0.5 mm as required to have end-to-end solution complete in all respects and to best satisfaction of engineer in charge. Makes:- Finloex/Deltrom/Plaza	1500	Metre		Per Metre	
9	Supplying, Installation Testing and commissioning 10 Pair Multicore Telephone Cable 0.5 mm as required to have complete solution in all respects and to best satisfaction of engineer in charge. Makes:- Finloex/Deltrom/Plaza	100	Metre		Per Metre	

10	Supplying, Installation, Testing and Commissioning Jumper Wire as required to have complete solution in all respects and to best satisfaction of engineer in charge. Makes:- Finloex/Deltrom/Plaza	25	Metre				Per Metre
11	Supplying, Installation Testing and commissioning Modular Telephone Socket with line cord; as required to have complete solution in all respects and to best satisfaction of engineer in charge. Makes:- Dlink/REIT/Comscope	44	Nos				Each
12	Providing and fixing of 9U/500MMD 1 Section Wall mount Rack with 1x PDU (6 X 5A) and 1.5m feed cable and 3 pin plug, 1 x Cable Manager 1U PVC loops, 1 x Hardware pkt of 10, to the best satisfaction of engineer in charge. Makes:- Comrack / APC / Netrack/WBOX	1	No				Each
13	Supplying, installation, testing and commissioning of 1.0kva UPS with battery, or as required to have end-to-end solution complete in all respects and to the best satisfaction of engineer in charge. Makes: Luminous/APC/Microtek/ Unifine	1	No				Each
14	Supplying, Installation Testing and commissioning of RJ-11 jacks as required to have complete solution in all respects and to best satisfaction of engineer in charge. Makes:- Standard Make)	44	Nos				Each
Total							

Do not take note of quantity checked by person

Executive Engineer,
Electrical Division,
HPPWD Mandi (HP).

Feb 16/13		Estimated Cost:- Rs. 424736/-only.			
		Earnest Money:- Rs. 8500/-only.			
		Time :-		One Month	
Schedule of quantity					
NAME OF WORK: Providing of Centrifugal Compressor Oil in the 5 no. Chiller Machines (38 ltr capacity each) installed in HVAC Plant Carrier Make installed in the campus of SLBSGMC&H at Nerchowk Distt. Mandi (HP)					
S.N.	Description	Qty.	Rate in figure.	Rate in words.	Unit
	Providing of Centrifugal Compressor Synthetic Oil in the existing Chiller Machine installed in HVAC Plant Make Carrier testing and commissioning etc. as required complete in all respect as per entire satisfaction of E-in - charge.	4	Nos.		Each
TOTAL					


 Executive Engineer,
 Electrical Division,
 HPPWD Mandi (HP), D

Job 15		Estimated Cost:- Rs. 356000/-only.				
		Earnest Money:- Rs. 7200/-only.				
		Time :-		One Month		
SCHEDULE OF QUANTITY						
Name of work:- Annual Repair and Maintenance (AMC) of HVAC system(Chiller plant) of Carrier Make installed at Shri Lal Bahadur Shastri Govt. Medical College and Hospital Nerchowk, District Mandi HP. (Sh:- Servicing/Descaling of HVAC Plant System (Chiller Plant) and minor repair in chilling plant)						
S.N	Description of items	Qty.	Rate	Rate in words	UNIT	Amount
1	Servicing/Descaling of HVAC Plant System (Chiller Plant) and minor repair including AHU, FCU, all pumps, cooling tower, all electrical panels, axial fan, all fan section and all concern equipments etc. as required complete in all respect as per entire satisfaction of Engineer - in - charge as given below.	5 Nos.			Each	
i)	Descaling of chiller plant-700tr (carrier)	5 Nos.			Each	
ii)	VFD for chiller plant	4 Nos.			Each	
iii)	cooling tower service	20 Nos.			Each	
iv)	Gasket & Pipe joint service / repair					
Total						

Executive Engineer,
Electrical Division,
HPPWD Mandi (HP). D