

**REPAIRING OF DGM BUNGLAW AT AO CHH SHAMBAJI NAGAR
ELECTRICAL WORKS : BOQ**

PART A		ESTIMATE			
SL NO	DESCRIPTION OF WORK	QTY	UNIT	RATE	AMT.
1	<p>Labour charges for dismantling of existing MSB, cabling, wiring, fan and light fittings, switch boards and conduits including telephone and data lines etc. and arranging temporary light & fans, UPS/Raw Power, telephone connections etc. for the functioning of the Branch during the course of renovation work. All wiring has to be taken through conduits through ELCB. Safety of the Staff & customers has to be ensured by the tenderer during and after the renovation work. All wall openings for switch boards, wiring/cabling/light fittings has to be neatly sealed using cement mortar.</p>	1	Job		
2	<p><u>COMPUTER DB/ATM DB : Supply, erection, testing and commissioning of wall mounted type double door dust and vermin proof 12 way SPN MCB DB fixed on wall comprising the following:</u> 20A DP MCB as Incomer - 1 No. 6A / 10A SP MCB - 10 Nos. The DB Earth Bench and DB enclosure should be directly connected to the UPS Main Earth Bench using 4 Sq.mm PVC insulated copper wire with copper lugs, SS Nuts and bolts etc. Complete with all inter connections and neat marking/identification of DB Name, I/C Cable Size and outgoing MCBs using good quality stickers /paint.</p>	1.00	Set		
3	<p><u>AC CONTROL: Supply and installation of modular type 25/32A Double Pole Two module switch with indicator. (Branch Cassette AC-4 Nos). All AC switches (excluding BM, CO & ATM) should be placed together but mounted on separate boxes.</u></p>	1	Nos.		
4	<p><u>AC PLUG SOCKET: Supply and installation of modular type 20/25A 3 Pin 3 module plug socket for Split AC Indoor unit (Server Room)</u></p>	1	Nos.		
5	<p>Supply and installation of 16A combined Power plug & 10A SP MCB in suitable PVC/metallic box. for Kitchen Power plug & ATM UPS Input. (corresponding MCB rating in PDB shall be 16A)</p>	2	Nos.		
6	<p><u>CABLE LAYING AND TERMINATIONS Supply, laying and dressing of the following size of 1.1 KV grade PVC insulated armoured cable with aluminium conductor concealed or clamped on wall / ceiling / trench / cable tray/lamps if necessary.</u> iv) 4 x 10 Sq.mm AYFY Cable (Essential DB to LDB)</p>	30	Mtr.		

iv) 3 x 4 Sq.mm Armoured Copper Cable (LDB-FF,PDB, UPS INPUT & OUTPUT DBs)	30	Mtr.
7 End termination of the following size of cables using flange type cable glands and heavy duty tinned aluminium crimping type cable sockets including gland earthing.		
iv) 4 x 10 Sq.mm AYFY	2	Nos.
v) 3 Core x 4 Sq.mm armoured Copper cable	2	Nos.
8 PIPE EARTHING: Supply and providing ISI pipe earthing as per IS 3043 with 2.5m long 40mm dia B class G.I. pipe providing GI clamp at the top of the GI pipe test joint, filling around the GI pipe at the radius of 15cm with homogeneous mixture of charcoal, commol salt and river sand up to height of 2.5m from the botton and the rest of the portion with excavated soil, providing brick work masonries, plastering, fixing cast iron/concrete cover of 30x30cm size etc. complete. (USE only SS Nuts, Bolts and washers along with copper sockets for giving connections).	1	Nos.
9 EARTH CONDUCTORS Supply and laying of the following size of bare copper conductor along with above cables, for interconnections between panels, DBs, change over switches etc.and also for interconnections between earth pits.		
ii) No.10 SWG (rate for single run) (From MVDB to Sub DBs) Total 2 runs 10SWG Cu for single and Independant DB Total 3 Runs 10 SWG Cu for two DBs placed nearby. (One run each to each DB and third one for interlinking) Total 4 Runs 10 SWG Cu for three or more DBs placed nearby. (One Run each to each DB and one for interlinking.	40	Mtr.
10 Supply and laying of 2 X No. 8 SWG copper conductor through 20mm PVC conduit for UPS earthing & Energy meter cubicle to VDB.	30	Mtr.
<u>WIRING FOR LIGHT, FAN, PLUG, SOCKETS ETC</u>		
11 <u>POINT WIRING Supply and wiring for light/fan/exhaust fan/calling bell/mirror lamp/bulk head light/wall fans etc.with 3 plate ceiling rose and by using 3 X 1.0 Sqmm FRLS PVC insulated copper conductor wire in 20mm dia 1.5mm thick rigid PVC conduit, controlled by 6 Amps modular type switch with provisions for modular type ceiling fan regulator on separately fabricated MS Box. The M. S. box should be earthed properly. One way point. (The switch boards shall be placed at user friendly locations for easy ON/OFF. Separate controls for EB/UPS lights for BM cabin and Cash Officer. All other counters including 1 row of customer area, 2 SBs + UPS SB on back side wall of counters. Separate SB near entrance & Visitors lounge).</u>		

<p>The Raw Power & UPS Power Supply to Strong Room and Locker Room shall be taken through 16A S/S (Raw Power) and 6A S/S (UPS Power) fixed outside the respective entrance and to be taken to SBs inside Strong Room & locker Room using 6/16A plug Top with 3 core 2.5 Sq.mm flexible cable. Similarly 16A S/S for record Rooms (Raw Power Only)</p>	10	No.
<p>12 Supply and fixing of Modular type 6A, 2/3 pin plug points controlled 6A modular switch mounted on suitable box. (on common switch board)</p>	4	No.
<p>13 Same as above but for modular type 6A 2/3 pin plug points with 6A modular type switch in separate location.</p>	4	No.
<p>14 Same as above but for 2 Nos. modular type 6 A 2/3 pin plug points with 2 nos. 6A modular type switch in separate location.</p>	2	No.
<p>15 Same as above but for 2 Nos. modular type 6 A 2/3 pin plug points with 1 nos. 6A modular type switch in separate location.</p>	1	Nos.
<p>16 Supply and fixing of modular type 6/16A, 3 module plug socket with 16A modular type switch mounted on suitable Box.</p>	2	No.
<p>17 Same as above but for 2 Nos. modular type 6/16A, 3 module plug points with 2 nos. 16A modular type switch in separate location.(for Data Rack-1 No. & ATM-2 Nos.)</p>	1	Nos.
<p>18 RAW POWER STATION : Supply and installation of combined 6A, 3pin modular plug socket & 16A combined 3 module modular plug socket in suitable single PVC box.</p>		
<p>for raw power supply in counters, tables etc. 1 No. each in all counters and tables including BM & Cash Officer.</p>	2	Nos.
<p>19 <u>CIRCUIT WIRING Supply and wiring wall / floor etc. / recessed / surface as per colour code with 3 runs of 1.1KV grade 1.5 Sqmm FRLS PVC insulated flexible copper wire for phase neutral and earth conductor with standard colour coding, through ISI marked 20mm dia rigid PVC conduit with all accessories. The rate includes the cost of complete wiring from switch box to switch box. (For lighting circuit & sub circuit & Outside lights)</u></p>	50	Mtr.
<p>20 Same as above but with 3 x 2.5 Sq.mm FRLS PVC Insulated copper wire. (UPS Circuit- Max 3 Computers per circuit, Raw Power Circuit- Max 3 tables per circuit, Name Board, Water pump, etc.)</p>	50	Mtr.
<p>21 Same as above but with 3 x 4 Sq.mm FRLS PVC Insulated copper wire. (for 1.5/2Tonne AC and UPS I/P & O/P to COS to Computer DB and for Name Boards if there are multiple Nameboards or extra ordinarily lengthy Name Boards)</p>	30	Mtr.
<p>22 <u>UPS POWER STATIONS Supply, install, test and commissioning of computer power stations with 4 Nos. 6A modular type two module 2/3 pin sockets mounted on suitable PVC / M.S.Box. The boxes should be fixed on wall / partitions (wooden) consealed or open as required at site. (2 Sets per table / counter including BM and</u></p>	1	No.

cash officer)

23	Marking of Panels, DBs, its switch and fuse ratings, cable size, location etc (Neat identification from top to extreme load end of both light and power distribution including Raw Power / UPS plug sockets and generator switch boards) using white / black paint and stencil. (free hand writing not allowed). Good quality stickers may also be used.	1	LS
24	<u>LIGHT FIXTURES & FANS</u>		
b	Supply & installation of 1 X 13.5 Watts Philips Greenperform sleek DN 296B LED 15S-6500 PSU WH led Down Light fitting with lamps and white reflector on false ceiling or Osram Luxstar 13/14Watts.(including UPS Lights)	8	Nos.
c	Supply and Installation of 21 watts LED type weather proof Yard lighting Luminaire with suitable angle GI pipe support for wall mounting. Philips GreenLine Smart Hi power LED BRP 022	2	Nos.
d	Supply and Installation of 20 / 21W, 4 Feet LED Batten Light fitting with suitable mounting clips. Philips Slimline / Panasonic Harrow AL	6	Nos.
e	Supply and providing IP 20 type, 4.8w / Metre LED Strip light (Blue Colour) with the corresponding driver of 5/10A including cost of driver unit. Wipro Garnet make.	10	Mtr.
g.	Supply & installation of Mains power operated electronic calling bell	1	No.
k	Supply and installation of 5 Star BLDC 1200mm Sweep ceiling fan with out remote	2	Nos.
l	Charges for reinstallation of existing ceiling after thorough cleaning.	0	nos.
m	Supply and Installation of step type modular electronic regulator.	2	No.
n	Supply and providing fan rod with painting (upto 1m length) (other than that supplied with fan and if required)	2	Nos.
o	Supply and providing fan hook on ceiling.	2	No.
p	Supply and providing tinned copper earth bench using 25 x 3 mm copper strip (25 Cm in length)	2	Nos.

PART - B

TELEPHONE

25	Supply and wiring using 2 pair telephone cable 20mm PVC conduit from the EPABX to the individual points. One separate cable for each point. Number of cables in one conduit limited to 5.		
a.	2 pair telephone cabling (0.50 Sq.mm)	30	m
b.	10 pair Armoured telephone cabling (0.50 Sq.mm)	15	m
26	Supply and fixing of RJ 11 type modular telephone socket on suitable PVC / metal boxes.		

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|---|---|-----|
| a. Telephone socket - single (modular type) | 2 | No. |
| b Telephone socket - double (modular type) | 1 | No. |

GRAND TOTAL