

AVIATION COMPLEX BLUE AREA, ISLAMABAD

BILL NO. 3.A: ELECTRICAL WORKS (INTERNAL)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
GENERAL NOTE.					
SCOPE : <i>(Applicable to all sections)</i>					
Supply, installation, testing and commissioning of the following items of work, including all labour, tools, plant, accessories, etc. required for completion of each item as per specifications and as approved by the Engineer.					
<u>HT SYSTEM</u>					
<u>(Ref. Specification Section-8001 8131)</u>					
E-B-01	Providing , fixing testing and commissioning of HT 11 KV 630 A VCB Wapda Industrial / Metering Panel as per Latest Wapda specifications complete in all respect as approved by the Engineer incharge	Each	2		
E-B-02	Providing , fixing testing and commissioning of HT 11 KV 630 A VCB (three Incoming and 1 out going) 11 KV sync. Panel as per Latest IEC specifications complete in all respect as approved by the Engineer incharge.	Each	2		
E-B-03	Providing , fixing testing and commissioning of HT 11 KV 630 A VCB (Two Incoming and 3 out going) 11 KV ATS. Panel as per Latest IEC specifications complete in all respect as approved by the Engineer incharge.	Each	2		
<u>HT CABLES & SYSTEM (8.7/15 kV)</u>					
<u>(Ref. Specification Section-8001 8211)</u>					
E-B-04	Supply & Installation of 1 core, 240 mm ² 8.7/15 kV aluminum unarmored conductors, XLPE cable laid in appropriate size uPVC conduits/Cable Tray as per requirements of the MV distribution system as per WAPDA standards complete in all respect.	Rft	9,500		
<u>TRANSFORMERS</u>					
<u>(Ref. Specification Section-8001 8121)</u>					
E-B-05	Supply & Installation Testing and comissioning of 2500kVA Dry Type Transformer (Al Winding) Indoor Type (IP-31) Enclosure for Dry Type Transformer complete in all respect including testing at factory Permisses expenditure as mentioned in Clause 13 of Section 8001 as approved by the Engineer.	Job	3		
E-B-06	Supply & Installation Testing and comissioning of 3500kVA Dry Type Transformer (Al Winding) Indoor Type (IP-31) Enclosure for Dry Type Transformer complete in all respect including testing at factory Permisses expenditure as mentioned in Clause 13 of Section 8001 as approved by the Engineer.	Job	1		

BILL NO. 3.A: ELECTRICAL WORKS (INTERNAL)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
E-B-07	Earth Electrode for earthing of DBs shall comprise of 75 mm x 4877 mm x 6 mm thick copper plate with 4 Nos. 6 mm dia brass nuts, bolts and washers 70 sqmm HDHC Copper wire as earthing leads. A 100 mm dia Medium Duty GI pipe shall be used with 10 mm dia holes @500 mm c-c. The total length of this GI pipe should be 45 ft. A 150 mm dia 60 ft long hole should be drilled in ground by percussion method and above mentioned 100 mm dia medium duty GI pipe should be fixed in this hole simultaneously up to the depth of 45 ft from NSL. When the drilling up to 60 ft depth is complete, The above mentioned earth electrode shall be drop down to the bottom of the hole with the help of 2 Nos 70 sqmm earth leads. Once the plate is in place fill in the hole with moisture retaining bentonite slurry with tremie method up to the top. When the bentonite settle down cast a (1:4:8) concrete manhole 700 mm x 700 mm & 500 mm deep as shown in the drawing. Place a medium duty CI cover as shown in the drawing.	Job	30		
E-B-08	305 mm long, 50 mm wide and 6mm thick copper busbar as ECP (Earth Connecting Point) complete with insulators, washers, nuts, bolts mounting installation and operational accessories as per site requirements.	Job	30		
<u>BUS BAR TRUNKING SYSTEM</u>					
Ref. Sec. 8213, 8132, 8240					
E-B-09	Supply, installation, testing and commissioning of Bus Bar trunking system, Bi-Metal Copper Contact Aluminum CONDUCTOR; 5000A rated, Class H 4(R, Y, B, N) + 1/2(E) conductors including testing at factory Permisses expenditure as mentioned in Clause 13 of Section 8001 as approved by the Engineer. Note: The All mounting accessories, Tees and bends, hangers are included in this cost. (T/F to PANEL)	RFT	3500		
E-B-10	Supply, installation, testing and commissioning of Bus Bar trunking system, Bi-Metal Copper Contact Aluminum CONDUCTOR; 2000A rated, Class H 4(R, Y, B, N) + 1/2(E) conductors including testing at factory Permisses expenditure as mentioned in Clause 13 of Section 8001 as approved by the Engineer. Note: The All mounting accessories, Tees and bends, hangers are included in this cost.	RFT	2500		
E-B-11	Supply, installation, testing and commissioning of Bus Bar trunking system, Bi-Metal Copper Contact Aluminum CONDUCTOR; 3200A rated, Class H 4(R, Y, B, N) + 1/2(E) conductors including testing at factory Permisses expenditure as mentioned in Clause 13 of Section 8001 as approved by the Engineer. Note: The All mounting accessories, Tees and bends, hangers are included in this cost.	RFT	4000		
E-B-12	Supply, installation, testing and commissioning of Bus Bar trunking system, Bi-Metal Copper Contact Aluminum CONDUCTOR; 1600A rated, Class H 4(R, Y, B, N) + 1/2(E) conductors including testing at factory Permisses expenditure as mentioned in Clause 13 of Section 8001 as approved by the Engineer. Note: The All mounting accessories, Tees and bends, hangers are included in this cost.	RFT	1200		
E-B-13	Supply, installation, testing and commissioning of Bus Bar trunking system, Bi-Metal Copper Contact Aluminum CONDUCTOR; 1000A rated, Class H 4(R, Y, B, N) + 1/2(E) conductors including testing at factory Permisses expenditure as mentioned in Clause 13 of Section 8001 as approved by the Engineer. Note: The All mounting accessories, Tees and bends, hangers are included in this cost.	RFT	1000		

BILL NO. 3.A: ELECTRICAL WORKS (INTERNAL)**BILL OF QUANTITIES**

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
E-B-14	Supply, Installation ,Testing and comisioning of TAP OFF UNIT (250 AMPS 415 V) Class H IP 55 protection class with Plug in holes complete in all respect as approved by the Engineer.	Job.	100		
E-B-15	150 sqmm, 4 core CU/PVC/PVC stranded copper conductor cable, 600/1000V grade in already installed conduit/on cable tray.	Rft	3000		
E-B-16	Supply, Installation ,Testing and comisioning of TAP OFF UNIT (160 AMPS 415 V) Class H IP 55 protection class with Plug in holes complete in all respect as approved by the Engineer.	Job.	100		
E-B-17	70 sqmm, 4 core CU/PVC/PVC stranded copper conductor cable, 600/1000V grade in already installed conduit/on cable tray.	Rft	3000		
	D.G. SET Ref. Spec. Sec. 8001, 8111, 8240.				
E-B-18	Supply, installation , testing and commissioning of 1000 kVA, Prime Rating 415 volt D.G. Set skid mounted including control / Instrument Panels, generator Panel, fuel day tank and all accessories along with Sound proof Canopy, manufactured for 1000 kVA Prime D.G. Set. etc. complete in all respect including testing at factory Permisses expenditure as mentioned in Clause 13 of Section 8001 as approved by the Engineer.(LIGHTS , POWER & EMERGENCY)	Job.	1		
E-B-19	Supply, installation , testing and commissioning of 2000 kVA, Prime Rating 11000 volt D.G. Set skid mounted including control / Instrument Panels, generator Panel, fuel day tank and all accessories along with Sound proof Canopy, manufactured for 2000 kVA Prime D.G. Set. etc. complete in all respect including testing at factory Permisses expenditure as mentioned in Clause 13 of Section 8001 as approved by the Engineer.	Job.	5		
E-B-20	Supply and installation of bulk fuel tank capable of storing 25,000 Litres diesel including all accessories , Piping from bulk fuel tank to day fuel tank of generators for Auto fueling system , Fuel Transfer pump, NRV's, strainers, ball valves, solenoid valves, level switches Including , Control Cables Motor Control Panel For Auto Fuel Filling System including Control Cables complete in all respects.	Job.	1		
E-B-21	400 sqmm, 1 core CU/PVC/PVC stranded copper conductor cable, 600/1000V grade in already installed conduit/on cable tray.	Rft.	9,000		
E-B-304	70 sqmm, 1 core CU/PVC/PVC stranded copper conductor cable, 600/1000V grade in already installed conduit/on cable tray.	Rft	3,000		
E-B-23	Earth Electrode for earthing of DBs shall comprise of 75 mm x 4877 mm x 6 mm thick copper plate with 4 Nos. 6 mm dia brass nuts, bolts and washers 70 sqmm HDHC Copper wire as earthing leads. A 100 mm dia Medium Duty GI pipe shall be used with 10 mm dia holes @500 mm c-c. The total lenght of this GI pipe should be 45 ft.A 150 mm dia 60 ft long hole should be drilled in ground by percussion method and above mentioned 100 mm dia medium duty GI pipe should be fixed in this hole simultaneously up to the depth of 45 ft from NSL. When the drilling up to 60 ft depth is complete, The above mentioned earth electrode shall be drop down to the bottom of the hole with the help of 2 Nos 70 sqmm earth leads.Once the plate is in place fill in the hole with moisture retaining bentonite slurry with tremie method up to the top. When the bentonite settle down cast a (1:4:8) concrete manhole 700 mm x 700 mm & 500 mm deep as shown in the drawing. Place a medium duty CI cover as shown in the drawing.	Job	30		

BILL NO. 3.A: ELECTRICAL WORKS (INTERNAL)**BILL OF QUANTITIES**

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
E-B-24	305 mm long, 50 mm wide and 6mm thick copper busbar as ECP (Earth Connecting Point) complete with insulators, washers, nuts, bolts mounting installation and operational accessories as per site requirements.	Job	30		
LT DISTRIBUTION BOARD (Ref. Spec. 8001 , 8133) LT 415V AC weather proof DBs shall be made from 14 SWG sheet steel and LT 415V AC indoor DBs shall be made from 16 SWG sheet steel. These shall be designed, fabricated and manufactured as a free standing floor type and recessed / surface mounted on wall (as per single line diagram shown on drawings). The sheet metal work shall be cleaned down to bare shining metal degreased, derusted and painted with TWO base coats of antirust RED paint. The sheet metal work shall be finished in TWO coats of powder paint. The color and shade shall be as approved by the Engineer. The distribution Board shall be complete with all internal wirings, tags, identification labels, TPN and E copper busbars, Energy analyzer accessories etc. The DB should be provided with the armored glands. The bus-bars shall be insulated in RED, YELLOW, BLUE and BLACK insulations. The insulation shall be heat shrinkable type or as directed by the Engineer.					
E-B-25	PHASE REVERSAL PANEL-1	Job	2		
E-B-26	PHASE REVERSAL PANEL-2	Job	2		
E-B-27	ATS PANEL WITH MOR FOR EMERGENCY PANEL	Job	1		
E-B-28	EMERGENCY PANEL	Job	1		
E-B-29	SMDB-BF6.(A)	Job	1		
E-B-30	SMDB-BF6.(B)	Job	1		
E-B-31	SMDB-BF5.(A)	Job	1		
E-B-32	SMDB-BF5.(B)	Job	1		
E-B-33	SMDB-BF4.(A)	Job	1		
E-B-34	SMDB-BF4.(B)	Job	1		
E-B-35	SMDB-BF3.(A)	Job	1		
E-B-36	SMDB-BF3.(B)	Job	1		
E-B-37	SMDB-BF2.(A)	Job	1		
E-B-38	SMDB-BF2.(B)	Job	1		
E-B-39	SMDB-BF1.(A)	Job	1		
E-B-40	SMDB-BF1.(B)	Job	1		
E-B-41	SMDB-GF.(A)	Job	1		
E-B-42	SMDB-GF.(B)	Job	1		
E-B-43	SMDB-1st.(A)	Job	1		
E-B-44	SMDB-1st.(B)	Job	1		
E-B-45	SMDB-2nd.(A)	Job	1		

BILL NO. 3.A: ELECTRICAL WORKS (INTERNAL)**BILL OF QUANTITIES**

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
E-B-46	SMDB-2nd.(B)	Job	1		
E-B-47	SMDB-3rd.(A)	Job	1		
E-B-48	SMDB-3rd.(B)	Job	1		
E-B-49	SMDB-4th.(A)	Job	1		
E-B-50	SMDB-4th.(B)	Job	1		
E-B-51	SMDB-5th.(A)	Job	1		
E-B-52	SMDB-5th.(B)	Job	1		
E-B-53	SMDB-6th.(A)	Job	1		
E-B-54	SMDB-6th.(B)	Job	1		
E-B-55	SMDB-7th.(A)	Job	1		
E-B-56	SMDB-7th.(B)	Job	1		
E-B-57	SMDB-8th.(A)	Job	1		
E-B-58	SMDB-8th.(B)	Job	1		
E-B-59	SMDB-9th.(A)	Job	1		
E-B-60	SMDB-9th.(B)	Job	1		
E-B-61	SMDB-10th.(A)	Job	1		
E-B-62	SMDB-10th.(B)	Job	1		
E-B-63	SMDB-11th.(A)	Job	1		
E-B-64	SMDB-11th.(B)	Job	1		
E-B-65	SMDB-12th.(A)	Job	1		
E-B-66	SMDB-12th.(B)	Job	1		
E-B-67	SMDB-13th.(A)	Job	1		
E-B-68	SMDB-13th.(B)	Job	1		
E-B-69	SMDB-14th.(A)	Job	1		
E-B-70	SMDB-14th.(B)	Job	1		
E-B-71	SMDB-15th.(A)	Job	1		
E-B-72	SMDB-15th.(B)	Job	1		
E-B-73	SMDB-16th.(A)	Job	1		
E-B-74	SMDB-16th.(B)	Job	1		
E-B-75	SMDB-17th.(A)	Job	1		
E-B-76	SMDB-17th.(B)	Job	1		
E-B-77	SMDB-18th.(A)	Job	1		
E-B-78	SMDB-18th.(B)	Job	1		

BILL NO. 3.A: ELECTRICAL WORKS (INTERNAL)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
E-B-79	SMDB-19th.(A)	Job	1		
E-B-80	SMDB-19th.(B)	Job	1		
E-B-81	SMDB-20th.(A)	Job	1		
E-B-82	SMDB-20th.(B)	Job	1		
E-B-83	SMDB-21st.(A)	Job	1		
E-B-84	SMDB-21st.(B)	Job	1		
E-B-85	SMDB-22nd.(A)	Job	1		
E-B-86	SMDB-22nd.(B)	Job	1		
E-B-87	SMDB-23rd.(A)	Job	1		
E-B-88	SMDB-23rd.(B)	Job	1		
E-B-89	SMDB-24th.(A)	Job	1		
E-B-90	SMDB-24th.(B)	Job	1		
E-B-91	SMDB-25th.(A)	Job	1		
E-B-92	SMDB-25th.(B)	Job	1		
E-B-93	SMDB-26th.(A)	Job	1		
E-B-94	SMDB-26th.(B)	Job	1		
E-B-95	SMDB-Roof.(A)	Job	1		
E-B-96	SMDB-Roof.(B)	Job	1		
E-B-97	LDB-GF.(A)	Job	1		
E-B-98	PDB-GF.(A)	Job	1		
E-B-99	UDB-GF.(A)	Job	2		
E-B-100	LDB-GF.(B)	Job	2		
E-B-101	PDB-GF.(B)	Job	2		
E-B-102	UDB-GF.(B)	Job	2		
E-B-103	LDB-1st.(A)	Job	2		
E-B-104	PDB-1st..(A)	Job	2		
E-B-105	UDB-1st..(A)	Job	2		
E-B-106	LDB-1st.(B)	Job	2		
E-B-107	PDB-1st.(B)	Job	2		
E-B-108	UDB-1st.(B)	Job	2		
E-B-109	LDB-2nd.(A)	Job	2		
E-B-110	PDB-2nd..(A)	Job	2		
E-B-111	UDB-2nd..(A)	Job	2		

BILL NO. 3.A: ELECTRICAL WORKS (INTERNAL)**BILL OF QUANTITIES**

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
E-B-112	LDB-2nd..(B)	Job	2		
E-B-113	PDB-2nd..(B)	Job	2		
E-B-114	UDB-2nd.(B)	Job	2		
E-B-115	LDB-3rd.(A)	Job	2		
E-B-116	PDB-3rd.(A)	Job	2		
E-B-117	UDB-3rd(A)	Job	2		
E-B-118	LDB-3rd.(B)	Job	2		
E-B-119	PDB-3rd.(B)	Job	2		
E-B-120	UDB-3rd(B)	Job	2		
E-B-121	LDB-4th.(A)	Job	2		
E-B-122	PDB-4th.(A)	Job	2		
E-B-123	UDB-4th.(A)	Job	2		
E-B-124	LDB-4th.(B)	Job	2		
E-B-125	PDB-4th.(B)	Job	2		
E-B-126	UDB-4th.(B)	Job	2		
E-B-127	LDB-5th.(A)	Job	2		
E-B-128	PDB-5th.(A)	Job	2		
E-B-129	UDB-5th.(A)	Job	2		
E-B-130	LDB-5th.(B)	Job	2		
E-B-131	PDB-5th.(B)	Job	2		
E-B-132	UDB-5th.(B)	Job	2		
E-B-133	LDB-6th.(A)	Job	2		
E-B-134	PDB-6th.(A)	Job	2		
E-B-135	UDB-6th.(A)	Job	2		
E-B-136	LDB-6th.(B)	Job	2		
E-B-137	PDB-6th.(B)	Job	2		
E-B-138	UDB-6th.(B)	Job	2		
E-B-139	LDB-7th.(A)	Job	2		
E-B-140	PDB-7th.(A)	Job	2		
E-B-141	UDB-7th.(A)	Job	2		
E-B-142	LDB-7th.(B)	Job	2		
E-B-143	PDB-7th.(B)	Job	2		
E-B-144	UDB-7th.(B)	Job	2		

BILL NO. 3.A: ELECTRICAL WORKS (INTERNAL)**BILL OF QUANTITIES**

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
E-B-145	LDB-8th.(A)	Job	2		
E-B-146	PDB-8th.(A)	Job	2		
E-B-147	UDB-8th.(A)	Job	2		
E-B-148	LDB-8th.(B)	Job	2		
E-B-149	PDB-8th.(B)	Job	2		
E-B-150	UDB-8th.(B)	Job	2		
E-B-151	LDB-9th.(A)	Job	2		
E-B-152	PDB-9th.(A)	Job	2		
E-B-153	UDB-9th.(A)	Job	2		
E-B-154	LDB-9th.(B)	Job	2		
E-B-155	PDB-9th.(B)	Job	2		
E-B-156	UDB-9th.(B)	Job	2		
E-B-157	LDB-10th.(A)	Job	2		
E-B-158	PDB-10th.(A)	Job	2		
E-B-159	UDB-10th.(A)	Job	2		
E-B-160	LDB-10th.(B)	Job	2		
E-B-161	PDB-10th.(B)	Job	2		
E-B-162	UDB-10th.(B)	Job	2		
E-B-163	LDB-11th.(A)	Job	2		
E-B-164	PDB-11th.(A)	Job	2		
E-B-165	UDB-11th.(A)	Job	2		
E-B-166	LDB-11th.(B)	Job	2		
E-B-167	PDB-11th.(B)	Job	2		
E-B-168	UDB-11th.(B)	Job	2		
E-B-169	LDB-12th.(A)	Job	2		
E-B-170	PDB-12th.(A)	Job	2		
E-B-171	UDB-12th.(A)	Job	2		
E-B-172	LDB-12th.(B)	Job	2		
E-B-173	PDB-12th.(B)	Job	2		
E-B-174	UDB-12th.(B)	Job	2		
E-B-175	LDB-13th.(A)	Job	2		
E-B-176	PDB-13th.(A)	Job	2		
E-B-177	UDB-13th.(A)	Job	2		

BILL NO. 3.A: ELECTRICAL WORKS (INTERNAL)**BILL OF QUANTITIES**

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
E-B-178	LDB-13th.(B)	Job	2		
E-B-179	PDB-13th.(B)	Job	2		
E-B-180	UDB-13th.(B)	Job	2		
E-B-181	LDB-14th.(A)	Job	1		
E-B-182	PDB-14th.(A)	Job	2		
E-B-183	UDB-14th.(A)	Job	2		
E-B-184	LDB-14th.(B)	Job	2		
E-B-185	PDB-14th.(B)	Job	2		
E-B-186	UDB-14th.(B)	Job	2		
E-B-187	LDB-15th.(A)	Job	2		
E-B-188	PDB-15th.(A)	Job	2		
E-B-189	UDB-15th.(A)	Job	2		
E-B-190	LDB-15th.(B)	Job	2		
E-B-191	PDB-15th.(B)	Job	2		
E-B-192	UDB-15th.(B)	Job	2		
E-B-193	LDB-16th.(A)	Job	2		
E-B-194	PDB-16th.(A)	Job	2		
E-B-195	UDB-16th.(A)	Job	2		
E-B-196	LDB-16th.(B)	Job	2		
E-B-197	PDB-16th.(B)	Job	2		
E-B-198	UDB-16th.(B)	Job	2		
E-B-199	LDB-17th.(A)	Job	2		
E-B-200	PDB-17th.(A)	Job	2		
E-B-201	UDB-17th.(A)	Job	2		
E-B-202	LDB-17th.(B)	Job	2		
E-B-203	PDB-17th.(B)	Job	2		
E-B-204	UDB-17th.(B)	Job	2		
E-B-205	LDB-18th.(A)	Job	2		
E-B-206	PDB-18th.(A)	Job	2		
E-B-207	UDB-18th.(A)	Job	2		
E-B-208	LDB-18th.(B)	Job	2		
E-B-209	PDB-18th.(B)	Job	2		
E-B-210	UDB-18th.(B)	Job	2		

BILL NO. 3.A: ELECTRICAL WORKS (INTERNAL)**BILL OF QUANTITIES**

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
E-B-211	LDB-19th.(A)	Job	2		
E-B-212	PDB-19th.(A)	Job	2		
E-B-213	UDB-19th.(A)	Job	2		
E-B-214	LDB-19th.(B)	Job	2		
E-B-215	PDB-19th.(B)	Job	2		
E-B-216	UDB-19th.(B)	Job	2		
E-B-217	LDB-20th.(A)	Job	2		
E-B-218	PDB-20th.(A)	Job	2		
E-B-219	UDB-20th.(A)	Job	2		
E-B-220	LDB-20th.(B)	Job	2		
E-B-221	PDB-20th.(B)	Job	2		
E-B-222	UDB-20th.(B)	Job	2		
E-B-223	LDB-21st.(A)	Job	2		
E-B-224	PDB-21st.(A)	Job	2		
E-B-225	UDB-21st.(A)	Job	2		
E-B-226	LDB-21st.(B)	Job	2		
E-B-227	PDB-21st.(B)	Job	2		
E-B-228	UDB-21st.(B)	Job	2		
E-B-229	LDB-22nd.(A)	Job	2		
E-B-230	PDB-22nd..(A)	Job	2		
E-B-231	UDB-22nd.(A)	Job	2		
E-B-232	LDB-22nd.(B)	Job	2		
E-B-233	PDB-22nd.(B)	Job	2		
E-B-234	UDB-22nd.(B)	Job	2		
E-B-235	LDB-23rd.(A)	Job	2		
E-B-236	PDB-23rd.(A)	Job	2		
E-B-237	UDB-23rd..(A)	Job	2		
E-B-238	LDB-23rd.(B)	Job	2		
E-B-239	PDB-23rd.(B)	Job	2		
E-B-240	UDB-23rd.(B)	Job	2		
E-B-241	LDB-24th.(A)	Job	2		
E-B-242	PDB-24th.(A)	Job	2		
E-B-243	UDB-24th.(A)	Job	2		

BILL NO. 3.A: ELECTRICAL WORKS (INTERNAL)**BILL OF QUANTITIES**

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
E-B-244	LDB-24th.(B)	Job	2		
E-B-245	PDB-24th.(B)	Job	2		
E-B-246	UDB-24th.(B)	Job	2		
E-B-247	LDB-25th.(A)	Job	2		
E-B-248	PDB-25th.(A)	Job	2		
E-B-249	UDB-25th.(A)	Job	2		
E-B-250	LDB-25th.(B)	Job	2		
E-B-251	PDB-25th.(B)	Job	2		
E-B-252	UDB-25th.(B)	Job	2		
E-B-253	LDB-26th.(A)	Job	2		
E-B-254	PDB-26th.(A)	Job	2		
E-B-255	UDB-26th.(A)	Job	2		
E-B-256	LDB-26th.(B)	Job	2		
E-B-257	PDB-26th.(B)	Job	2		
E-B-258	UDB-26th.(B)	Job	2		
E-B-259	LDB-27th.(A)	Job	2		
E-B-260	PDB-27th.(A)	Job	2		
E-B-261	UDB-27th.(A)	Job	2		
E-B-262	LDB-27th.(B)	Job	2		
E-B-263	PDB-27th.(B)	Job	2		
E-B-264	UDB-27th.(B)	Job	2		
E-B-265	LDB-BF1.(A)	Job	2		
E-B-266	PDB-BF1.(A)	Job	2		
E-B-267	UDB-BF1.(A)	Job	2		
E-B-268	LDB--BF1.(B)	Job	2		
E-B-269	PDB-BF1.(B)	Job	2		
E-B-270	UDB-BF1.(B)	Job	2		
E-B-271	LDB-BF2.(A)	Job	2		
E-B-272	PDB-BF2.(A)	Job	2		
E-B-273	UDB-BF2.(A)	Job	2		
E-B-274	LDB--BF2.(B)	Job	2		
E-B-275	PDB-BF2.(B)	Job	2		
E-B-276	UDB-BF2.(B)	Job	2		

BILL NO. 3.A: ELECTRICAL WORKS (INTERNAL)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
E-B-277	LDB-BF3.(A)	Job	2		
E-B-278	PDB-BF3.(A)	Job	2		
E-B-279	UDB-BF3.(A)	Job	2		
E-B-280	LDB--BF3.(B)	Job	2		
E-B-281	PDB-BF3.(B)	Job	2		
E-B-282	UDB-BF3.(B)	Job	2		
E-B-283	LDB-BF4.(A)	Job	2		
E-B-284	PDB-BF4.(A)	Job	2		
E-B-285	UDB-BF4.(A)	Job	2		
E-B-286	LDB--BF4.(B)	Job	2		
E-B-287	PDB-BF4.(B)	Job	2		
E-B-288	UDB-BF4.(B)	Job	2		
E-B-289	LDB-BF5.(A)	Job	2		
E-B-290	PDB-BF5.(A)	Job	2		
E-B-291	UDB-BF5.(A)	Job	2		
E-B-292	LDB--BF5.(B)	Job	2		
E-B-293	PDB-BF5.(B)	Job	2		
E-B-294	UDB-BF5.(B)	Job	2		
E-B-295	LDB-BF6.(A)	Job	2		
E-B-296	PDB-BF6.(A)	Job	2		
E-B-297	UDB-BF6.(A)	Job	2		
E-B-298	LDB--BF6.(B)	Job	2		
E-B-299	PDB-BF6.(B)	Job	2		
E-B-300	UDB-BF6.(B)	Job	2		
E-B-301	DB-Ser.	Job	60		
E-B-302	DB-EXT	Job	4		
E-B-303	DB-Pumps	Job	4		
E-B-304	DB-Server room	Job	4		
LT CABLES					
(Ref. Spec. 8001, 8212)					
Supply, install, testing and commissioning of low voltage power cables, 600/1000V, copper, as per drawings and specifications. The cost includes cable terminations, splices and all necessary materials and accessories needed to complete the work.					
E-B-305	300 sqmm, 1 core CU/PVC/PVC stranded copper conductor cable, 600/1000V grade in already installed conduit/on cable tray.	Rft.	500		

BILL NO. 3.A: ELECTRICAL WORKS (INTERNAL)**BILL OF QUANTITIES**

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
E-B-306	240 sqmm, 1 core CU/PVC/PVC stranded copper conductor cable, 600/1000V grade in already installed conduit/on cable tray.	Rft.	1,200		
E-B-307	95 sqmm, 1 core CU/PVC/PVC stranded copper conductor cable, 600/1000V grade in already installed conduit/on cable tray.	Rft	500		
E-B-308	35 sqmm, 1 core CU/PVC/PVC stranded copper conductor cable, 600/1000V grade in already installed conduit/on cable tray.	Rft	3,500		
E-B-309	25 sqmm, 1 core CU/PVC/PVC stranded copper conductor cable, 600/1000V grade in already installed conduit/on cable tray.	Rft	500		
E-B-310	16 sqmm, 1 core CU/PVC/PVC stranded copper conductor cable, 600/1000V grade in already installed conduit/on cable tray.	Rft	1,000		
E-B-311	10 sqmm, 1 core CU/PVC/PVC stranded copper conductor cable, 600/1000V grade in already installed conduit/on cable tray.	Rft	50,000		
E-B-312	10 sqmm, 4 core CU/PVC/PVC stranded copper conductor cable, 600/1000V grade in already installed conduit/on cable tray.(ESCLATORS	Rft	8,000		
E-B-313	16 sqmm, 4 core CU/PVC/PVC stranded copper conductor cable, 600/1000V grade in already installed conduit/on cable tray.(LIGHTS , UPS , SER)	Rft	35,000		
E-B-314	25 sqmm, 4 core CU/PVC/PVC stranded copper conductor cable, 600/1000V grade in already installed conduit/on cable tray.	Rft	7,000		
E-B-315	35 sqmm, 4 core CU/PVC/PVC stranded copper conductor cable, 600/1000V grade in already installed conduit/on cable tray.(ACP)(HVAC)	Rft	7,000		
E-B-316	70 sqmm, 1 core CU/PVC/PVC stranded copper conductor cable, 600/1000V grade in already installed conduit/on cable tray.	Rft	5,000		
E-B-317	16 sqmm, 1 core CU/PVC/PVC stranded copper conductor cable, 600/1000V grade in already installed conduit/on cable tray.(ACP)(HVAC)	Rft	7,000		
E-B-318	50 sqmm, 4 core CU/PVC/PVC stranded copper conductor cable, 600/1000V grade in already installed conduit/on cable tray.	Rft	500		
E-B-319	50 mm sq 4/c Cu.Mica Tape/Xlpe/LSZH/.6/1kv in already installed conduit/on cable tray.	Rft	500		
E-B-320	70 sqmm, 4 core CU/PVC/PVC stranded copper conductor cable, 600/1000V grade in already installed conduit/on cable tray.	Rft	500		
E-B-321	95 sqmm, 4 core CU/PVC/PVC stranded copper conductor cable, 600/1000V grade in already installed conduit/on cable tray.	Rft	1,000		
E-B-322	120 sqmm, 4 core CU/PVC/PVC stranded copper conductor cable, 600/1000V grade in already installed conduit/on cable tray.	Rft	300		
<u>POWER CABLES (FR)</u>					
NS-00	400 mm sq 1/c Cu.Mica Tape/Xlpe/LSZH/.6/1kv (FWP)	Rft	2200		
NS-00	35 mm sq 4/c Cu.Mica Tape/Xlpe/LSZH/.6/1kv (PWP)	Rft	2100		

BILL NO. 3.A: ELECTRICAL WORKS (INTERNAL)**BILL OF QUANTITIES**

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
LIGHT FIXTURES (Ref. Spec. 8001, 8150)					
	Supply, installation, testing & commissioning of the following types of professional light fixtures including LED Light with driver, internal wiring complete with all mounting accessories as per architectural arrangements/ requirements, dust & moisture protected and corrosion proof and suitable for this area as acceptably supplied and installed and as approved by the Engineer.				
E-B-325	Recessed LED light fixture (600mm by 600 mm), 4500 lumens minimum, suitable for gypsum board or aluminium panel/dampa false ceiling, IP20 rated, PF=.95 , (130 Lumen per watt) complete in all respects	No.	5,500		
E-B-326	(14-16) watt Surface mounted LED batten Light Fixture (1200mm) , fixed output LED driver, IP44 rated, complete in all respects.	No.	300		
E-B-327	(7-8) watt Surface mounted LED batten Light Fixture (600mm) , fixed output LED driver, IP44 rated, complete in all respects.	No.	400		
E-B-328	(15-17)W Recessed/Celing Mounted Round/square shape LED downlightwith integrated driver and frosted glass diffuser PF=.95	No.	4,500		
E-B-329	36/40 W LED Damp proof light of with integrated driver and frosted glass diffuser. IP20 rated, PF=.95 , (130 Lumen per watt) complete in all respects	No.	3,200		
E-B-330	10 W Recessed/Celing Mounted LED downlight of warm white color with integrated driver and frosted glass diffuser IP20 rated, PF=.95 , (130 Lumen per watt) complete in all respects	No.	2,500		
E-B-331	35/40W LED spot light with integrated driver and frosted glass diffuser IP20 rated, PF=.95 , (130 Lumen per watt) complete in all respects	No.	1,500		
E-B-332	(30-40) watt (0.5/0.6 ft x 4') Linear LED light Fixture IP20 rated, PF=.95 , (130 Lumen per watt) complete in all respects	No.	400		
E-B-333	LED RGB ROPE NEON/ , IP-20 rated for Indoor use with driver Complete in all respect as approved by the Engineer.	Rft	24,000		
E-B-334	Outdoor type LED bulkhead wall light of minimum 1200 lumens light output, IP-55 or better rated	No.	50		
E-B-335	200 watt led flood lights along with their fixing arrangments for the outdoor entrance Area.	No.	50		
E-B-336	100 watt led High bay along with their fixing arrangments	No.	100		
Helipad Lights					
E-B-337	Heliport Control Panel out door type IP66 as per requirement complete in all respect.	No.	1		
E-B-338	Heliport Beacon high-intensity, red flashing light Effective Intensity:>2500cd Input voltage:AC220V IP66 30FPM LED Color:White Power :30W LED Lifespan:100,000 Hours	No.	8		

BILL NO. 3.A: ELECTRICAL WORKS (INTERNAL)**BILL OF QUANTITIES**

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
E-B-339	(Internally Illuminated Wind Cone (2.4m)) Input Voltage:AC220V,50/60Hz, power:20 Watt, Ingress Protection:IP65, Life expectancy:100.000+ hours, Light Color:Red/White, Obstruction light:Low Intensity 32 cd, Height:2.4m	No.	1		
E-B-340	Inset Heliport Perimeter Light Max Intensity:≥30cd, Optional voltage:AC220V, Average Power Consumption:10W, Supply Frequency:50HZ~60HZ, Working Mode:Steady-burning, Emitting Color:Green, IP Protection:IP68, Light Source:100,000hours	No.	12		
E-B-341	(Inset (FATO) Final Approach & Takeoff Light) Max Intensity:≥100cd Optional voltage:AC220V, Average Power Consumption:10W, Supply Frequency:50HZ~60HZ, Working Mode:Steady-burning, Emitting Color:White, IP Protection:IP68, Light Source:100,000hours	No.	20		
E-B-342	Led flood light 45W 5700K 100° 50000 Hrs IP66	No.	24		
	CENTRAL BATTERY SYSTEM FOR EMERGENCY LIGHTS Supply, Installation, Testing & Commissioning of Addressable Central Battery System wall mounted unit, with 60 mins battery backup sealed leak proof, lead acid batteries, including all accessories, complete in all respect as shown in the drawings.				
E-B-343	Central Battery Unit 220VAC/216VDC (24 Circuits) with Imported built-in UI charger and Dry Batteries for 60 mins power backup. Maintained addressable CBU supplied emergency exit signs including all required suspension and mounting accessories with self-adhesive pictograms as follows	No.	4		
E-B-344	Exit Luminaire, Ceiling mounted IP-41 rated, 30 mtr viewing distance (with double sided directional arrow)	No.	140		
E-B-345	Exit Luminaire, Surface mounted IP-41 rated, 30mtr viewing distance (with single sided Down Arrow) Non-maintained addressable CBU supplied emergency escape/route lights including all required suspension and mounting accessories as follows:	No.	170		
E-B-346	4W Wall/surface mounted emergency LED light having 300 above lumens, IP65 rated complete in all respect.	No.	1,200		
E-B-347	Web-based client/server architecture: Use of standard web browser on the client PC for monitoring of CBS panels, with the required license	No.	1		
E-B-348	Work Station (Core i5 Ultra Slim Desktop PC 3.4GHZ, 8GB DDR3 RAM, Windows 11 Prof 64bit, 1-TB HDD) including all necessary licenses, with keyboard and mouse.	No.	1		
E-B-349	2 core 2.5 mmsq Fire Resistant cable LPCB certified in appropriate size conduit for wiring of emergency and exit lights with CBS.	Rft	32,000		
E-B-350	Programming, testing and commissioning of complete system including on site demonstration and training of client's representative upto the entire satisfaction of consultant/client	No.	1		
	WIRING IN CONCEALED CONDUITS (Ref. Spec. Sec. 8001, 8220, 8230)				

BILL NO. 3.A: ELECTRICAL WORKS (INTERNAL)**BILL OF QUANTITIES**

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
E-B-351	Wiring of light circuit from Distribution Board to switch, including circuit wiring between switches on the same circuit with Two nos. single core 2.5 Sqmm and One no.1.5 sq mm PVC insulated 450/750 Volts grade stranded copper conductor cables LSZH in concealed 3/4 " PVC conduits including PVC conduit, conduit accessories (junction box, pull box, fan box etc) complete in all respects.	No.	2040		
E-B-352	Wiring from switch to light or fan point with 3 Nos. single core 1.5 Sqmm PVC insulated 300/500 Volts grade stranded copper conductor cables LSZH in concealed 3/4" PVC conduit including PVC conduit, conduit accessories (junction box, pull box, fan box etc) complete in all respects.	No.	15000		
E-B-353	Wiring from light to light with 3 Nos. single core 1.5 Sqmm PVC insulated 300/500 Volts grade stranded copper conductor cables LSZH in concealed 3/4" PVC conduit including PVC conduit, conduit accessories (junction box, pull box, fan box etc) complete in all respects.	No.	5000		
E-B-354	Wiring of circuit from Distribution Board to 13/15 A , 230 Volts, 3 pin switched socket outlet with Two nos. single core 4 sqmm and One no. 2.5 sqmm PVC insulated 300/500 Volts grade stranded copper conductor cables in 3/4" dia concealed PVC conduit laid underfloor including PVC conduit, conduit accessories, etc. complete in all respects.	No.	1500		
E-B-355	Wiring from 13 Amps, 3 pin socket to socket with Two nos. single core 2.5 Sqmm and One no. 1.5 sq mm PVC insulated 300/500 Volts grade stranded copper conductor cables LSZH in concealed 3/4" PVC conduit laid underfloor including PVC conduit, conduit accessories, etc.complete in all respects.	No.	8500		
E-B-356	Wiring of circuit from distribution board to 20A, 230 Volts, 3 Pin switched socket outlet with 2 Nos. one core 4 Sqmm and One no. 2.5 sq mm PVC insulated 300/500 Volts grade stranded copper conductor cables LSZH in concealed 3/4" PVC conduit laid underfloor including PVC conduit, conduit accessories, etc. complete in all respects (FOR AC and WATER GEYSERS)	No.	10		
WIRING ACCESSORIES (Ref. Spec. Sec. 8001, 8220)					
E-B-357	10 Amps, 250 Volts one way, ONE gang light control switches including appropriate size powder coated metallic concealed back box.	No.	400		
E-B-358	10 Amps, 250 Volts Two way, ONE gang light control switches including appropriate size powder coated metallic concealed back box.	No.	60		
E-B-359	10 Amps, 250 Volts one way, TWO gang light control switches including appropriate size powder coated metallic concealed back box.	No.	800		
E-B-360	10 Amps, 250 Volts one way, THREE gang light control switches including appropriate size powder coated metallic concealed back box.	No.	250		
E-B-361	10 Amps, 250 Volts one way, FOUR gang light control switches including appropriate size powder coated metallic concealed back box.	No.	600		
E-B-362	10 Amps, 250 Volts one way, FIVE gang light control switches including appropriate size powder coated metallic concealed back box.	No.	200		

BILL NO. 3.A: ELECTRICAL WORKS (INTERNAL)**BILL OF QUANTITIES**

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
E-B-363	10 Amps, 250 Volts one way, SIX gang light control switches including appropriate size powder coated metallic concealed back box.	No.	170		
E-B-364	Universal Switch outlet with switch 13/15 A, 230V. Mounting Height as per site including appropriate size powder coated metallic back box.	No.	9,600		
E-B-365	20 Amps, 250 Volts flex outlet with double pole switch & neon indication lamp including appropriate size steel back box & fuse protection	No.	100		
E-B-366	16 Amps, 400 Volts TP isolator	No.	50		
MISCELLANEOUS ITEMS					
Ref. Spec. Sec. 8001, 8290					
E-B-367	Supply, installation, testing & commissioning of 56 inch (1400 mm) dia Ceiling fan NEECA Approved. The 56" dia ceiling fan shall be suitable to give an air displacement of minimum 11700 Cu. Ft/min. The ceiling fan shall comprise circular fan body metallic fan blades, down rod of suitable dia and length, AC capacitor, internal wiring, terminals all installation & operational accessories as per tender specifications, as per site requirements and as directed by the Engineer.	No.	5		
E-B-368	Supply, installation, testing & commissioning of 12 inches dia exhaust fan including back draft dampers and all accessories.	No.	5		
E-B-369	Supply & installation of 18" sweep wall bracket fan complete with pulling cord switch, fitted on wall or column with GI clip including connection arrangement as required.	No.	10		
E-B-370	Supply of Plastic body Pedestal Fan (24") with all accessories.	No.	5		
	Following sizes of Ladder G.I. sheet powder coated cable trays with cover including joints, bend, mounting brackets hanger complete with all accessories.				
E-B-371	300mm x 75mm	Rft.	1000		
E-B-372	150mm x 75mm	Rft.	1000		

BILL NO. 3.A: ELECTRICAL WORKS (INTERNAL)**BILL OF QUANTITIES**

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
	Following sizes of perforated G.I. sheet powder coated cable trays with cover including joints, bend, mounting brackets hanger complete with all accessories.				
E-B-373	600 mm x 150mm	Rft.	1000		
E-B-374	450mm x 100mm	Rft.	1000		
E-B-375	300mm x 75mm	Rft.	1000		
E-B-376	300mm x 100mm	Rft.	12000		
E-B-377	150mm x 75mm	Rft.	3000		
E-B-378	Supply and Installation of Powder Coated G I Floor Box for four face plate for data / power. As approved by the Engineer.	No.	1,250		
E-B-379	Wiring of HDMI Cable 1 Meter Ultra High Speed 8K including appropriate size concealed or surface PVC conduit or PVC channel and all accessories with cutting/making holes in walls making surface good complete in all respect.	Rft	25,000		
	PVC PIPES & DUCTS (Ref. Spec. Sec. 8001 8230)				
E-B-380	Supply and Installation of 6" dia PVC Class 'D' pipe including excivation , backfilling complete in all respect.	Rft	1,500		
E-B-381	Supply and Installation of 4" dia PVC Class 'D' pipe including excivation , backfilling complete in all respect.	Rft	1,200		
E-B-382	Supply and Installation of 3" dia PVC Class 'D' pipe including excivation , backfilling complete in all respect.	Rft	1,100		
E-B-383	Supply and Installation of 2" dia PVC Class 'D' pipe including excivation , backfilling complete in all respect.	Rft	1,250		
E-B-384	Supply and Installation of 1-1/2" dia PVC Class 'D' pipe including excivation , backfilling complete in all respect.	Rft	1,950		
	UNINTERRUPTED POWER SUPPLY (UPS) Ref.Spec.Sec. 8001, 8300				
E-B-385	Supply, installation, testing & commissioning of UPS System of rating 50 KVA three phase 400 V 50 Hz with 30 minutes back up time with lead acid batteries (VRLA) 05 years life, CD with Software, Network Management Card, power module UPS Cable Rs 232 Fabricated according to IP 51 for industrial environment complete in all respect as per technical specifications.	Job	10		
	ELECTRIC VEHICLE CHARGER Ref.Spec.Sec. 8001, 8290				
E-B-386	Supply, Installation, testing , Commissioning, of Single Phase Ev charger up to 7.4 KW/32 A (110....240)V Over current , over voltage under voltage ground fault including integrated surge protection , interlocking, user interface(wifi, blue tooth, charger cab be tun on/off from mobile , real time monitoring) IP 54 , IK 10 . As per All Latest IEC Standards complete in all respect. It shall also include the cost of mounting and installation material.	Job	40		
	<u>LIGHTNING PROTECTION SYSTEM</u> (Ref. Specification Section-8250)				

BILL NO. 3.A: ELECTRICAL WORKS (INTERNAL)**BILL OF QUANTITIES**

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
	Supply and installtion of LPS with product compliance as per NFC 17 102 standard.				
E-B-387	Early Streamer Emission (ESE) stainless steel AIR TERMINAL with 79 mtr protection radius at level 1 including Navar Brass adpater and lightning Event Counter as well complete in all respect.	Job	1		
E-B-388	5 meter high Mast consisting of Galvanized steel pipe in three sections, vertically oriented wall mounting bolted GS brackets for installation of ESE Air Terminal OR Floor stand as per site condtions complete with stay wires and accessories including stainless steel mast collars for down conductor.	Job	1		
E-B-389	High conductivity Tinned Bare Copper Tape 25x3mm for Down Conductor Copper with clamps and Square Tape clamps with appropriate fixing distance as per NFC 17 102 standard.	Mtr	1,200		
E-B-390	Galvanized steel guard tube for Copper Tape protection, length 2m with fixing collars. Make: Local	Job	1		
E-B-391	Polypropylene Earth Pit, 4" dia 11ft depth including copper bonded earth rod, 2m length, cable clamp, backfill material Bentonite	Job	8		
E-B-392	Earth Test Link. Test clamp for Copper tape conductor	Job	4		
E-B-393	Lightning event Counter	Job	4		
E-B-394	Testing of ESE Air terminal at site by authorized distributor of Pakistan with letter confirming after-sales-service.	Job	1		
				Total Amount (Rs.) =	<u> </u>