$\frac{\textbf{BILL OF QUANTITIES FOR AIR-CONDITIONING WORK FOR RACC AT SBI JEYPORE BRANCH,}{\textbf{JEYPORE REGION}}$

Sl No	DESCRIPTION	QTY	UNIT	RATE	AMOUNT				
				(in Rs)	(in Rs)				
AIR CONDITIONING WORKS									
1)	Supply and installation of 4 way 3.0TR Cassette Type Air conditioner with scroll / Rotary / Twin rotary, having R32 /R37/ R410A (Eco Friendly) refrigerant including indoor unit outdoor unit, decorative grille and cordless remote and machine shall have copper condenser unit (Mitsubishi/ O General/ Daikin/ Bluestar/ Carrier/ Hitachi/ Toshiba & Voltas)	3	No.s						
2)	Supply and installation of air cooled 1.5 TR HIGH WALL MOUNTED (BEE 3 STAR RATED) Type air conditioning units as specified; each unit shall comprise of separate Indoor and outdoor unit specified and as under: Indoor (fan coil) unit shall be Wall Mounted type and shall have proper insulated & leak proof condensate base connected. The outdoor (condensing unit) shall be of Corrosion resistant Galvanized powder coated or equivalent Sheet steel low vibration assembly installed on suitable vibration isolators and comprising of energy efficient Rotary compressor with copper condenser coils only. The rate shall include 3.0 mtr. of refrigerant pipe & electrical cabling for each machine. The above specified units shall be supplied & installed at locations as mentioned in the layout All machines shall be white in color. MACHINES SHALL HAVE LATEST STAR BAND VALIDITY (Mitsubishi/ O General/Daikin/ Bluestar/ Carrier/ Hitachi/ Toshiba & Voltas)	1	No.s						
3)	Providing & Fixing of M.S. Stand for cassette air-conditioner outdoor Condensing unit. It shall be made out of heavy gauge M.S channels, angles, flats etc. of appropriate size & thickness duly painted with anti-corrosive paint. The entire item has to be executed as / req. of the machine & site conditions.	3	No.s						
4)	Providing & Fixing of M.S. Stand for split airconditioner outdoor Condensing unit. It shall be made out of heavy gauge M.S channels, angles, flats etc. of appropriate size & thickness duly painted with anti-corrosive paint. The entire item has to be executed as / req. of the machine & site conditions.	1	No.s						

5)	Providing & Fixing of insulated PVC drain lines with Nitrile rubber insulation for various units in clamping manner above false ceiling & in concealed manner below false ceiling level. From the structural ceiling it should hanged using self threaded rods or shall be fixed on wall /beam etc. with clamps & the distance between 2 clamps shall be less than 1 meter. It shall not be placed over the false ceiling nor it shall be fixed with false ceiling members. It shall be laid required gradient for easy disposal of the drain water & testing shall be done before filling the zaries. The drain line shall not be laid in the floor (except toilets & other utility areas where there are no electrical lines in the floor). All drain pipes of split / Cassette air-conditioners should be PVC of suitable size as recommended by manufacturing company and it should be connected to the nearest rain water pipeline/ as per the site condition. (Make of PVC drain pipe: Precisions/ Modi/ AKG).	70	Mts		
6)	Supply & fixing 5kVA voltage stabilizer of stabilizing range 130V-270V of standard make as per direction of engineer in-charge (V-Guard/Livguard/Luminous/Microtek)	1	No.s		
7)	Providing & Fixing Refrigerant copper piping for Cassette AC laid between indoor & outdoor unit as per OEM's specifications duly insulated with Class "O" fire retardant sleeve type elastomeric nitrite rubber insulation. The item also includes copper electrical flexible cable of appropriate size. Alu. foil membrane shall be applied to provide resistance against breakdown due to UV radiation for exposed portion of the rubber insulation with Nitrogen testing (totally sealed - in case of proposed machine). It shall be in total clamping manner above false ceiling & in total concealed manner below false ceiling level. From the structural ceiling it should hanged or shall be fixed on wall / beam etc. with clamps & the distance between two clamp shall be less than 1 meter. It shall not be placed over the false ceiling nor it shall be fixed with false ceiling members. The diameter / gauge of the ref. pipe shall be as per the specifications of the Manufacturing company (OEM) only for each type of machine. The above item include the cost of 3 core copper flexible electrical cable as recommended by manufacturing company	45	Mts		
8)	Supply & laying FRLS PVC insulated copper cable between indoor and outdoor unit of cassette air-conditioners (5 core copper cable of size 6sq. mm) (Make: R R Kabels/ Havells/ Polycab/ Finolex)	60	Mts		
9)	Supply & laying 4 X 6 mm ² + 1 X 6 mm ² FRLS PVC insulated copper cable between outdoor unit and AC starter MCB (Make: R R Kabels/Havells/ Polycab/ Finolex)	60	Mts		
			T	OTAL	