On Plot	PROPOSED BMC GENERAL HOSPITAL & STAFF QUARTERS On Plot bearing CTS No. 11A/4,Chandivali, Sangharsha Nagar, Kurla 400072									
	SUMMARY - MGPS									
Sr. No.	Description	Amount(Rs.)								
A)	MGPS	₹ 11,46,43,042.00								
	TOTAL	₹ 11,46,43,042.00								

MUNICIPAL CORPORATION OF GREATER MUMBAI

PROPOSED BMC GENERAL HOSPITAL & STAFF QUARTERS

On Plot bearing CTS No. 11A/4, Chandivali, Sangharsha Nagar, Kurla 400072

BILL OF QUANTITIES - MGPS WORK

SR.NO	REF. CODE	DESCRIPTION	UNIT	QTY	S/I/T/C RATE	S/I/T/C TOTAL AMOUNT
		Medical Grade Copper Tube/Pipes including all type of accessories Like, Tee, Elbow, Valves, etc. complete. The piped distribution system shall use copper pipes manufactured from phosphorous de- oxidized non-arsenical copper grade CW024A (Cu-DHP), manufactured to metric outside diameters and having mechanical properties in accordance or in either R250 (half hard) or R290 (hard). Degreasing of pipe shall be such that there is less than 20 mg/m2 (0.002mg/cm2) of hydrocarbons on the degreased surface when tested by the method specified Norms. all copper tube suppliers are to have BSI kite mark and certificate number.				
1	KSS-MG-30	Supply, Installation, Testing & Commissioning of Copper Pipes of 76 mm OD x 1.5mm thk	Mtrs	200	12,937.00	25,87,400.00
2	KSS-MG-31	Supply, Installation, Testing & Commissioning of Copper Pipes of 54mm OD x 1.2mm thk	Mtrs	500	4,319.00	21,59,500.00
3	KSS-MG-32	Supply, Installation, Testing & Commissioning of Copper Pipes of 42mm OD x 1.2mm thk	Mtrs	1100	2,330.00	25,63,000.00
4	KSS-MG-33	Supply, Installation, Testing & Commissioning of Copper Pipes of 28mm OD x1.0mm thk	Mtrs	2100	1,734.00	36,41,400.00
5	KSS-MG-34	Supply, Installation, Testing & Commissioning of Copper Pipes of 22mm OD x1.0mm thk	Mtrs	2600	1,381.00	35,90,600.00
6	KSS-MG-35	Supply, Installation, Testing & Commissioning of Copper Pipes of 15mm OD x 1.0mm thk	Mtrs	3100	1,010.00	31,31,000.00
7	Fair-MGPS-OMH-1	SITC of 15 mm Single Port Ball Valve with Pipe line assembly (pre piped) : It should comply with NFPA 99 standards. Pre Piped Degreased Ball Valve with pipe extension. It should be full-port design. It should be blow-out proof stem. It should be lockable valve.	Nos.	60	9,240.00	5,54,400.00
8	Fair-MGPS-OMH-2	SITC of 22mm Single Port Ball Valve with Pipe line assembly (pre piped) : It should comply with NFPA 99 standards. Pre Piped Degreased Ball Valve with pipe extension. It should be full-port design. It should be blow-out proof stem. It should be lockable valve.	Nos.	40	11,803.00	4,72,120.00
9	Fair-MGPS-OMH-3	SITC of 28mm Single Port Ball Valve with Pipe line assembly (pre piped) : It should comply with NFPA 99 standards. Pre Piped Degreased Ball Valve with pipe extension. It should be full-port design. It should be blow-out proof stem. It should be lockable valve.	Nos.	10	19,650.00	1,96,500.00

10	Fair-MGPS-OMH-4	SITC of 42mm Single Port Ball Valve with Pipe line assembly (pre piped) : It should comply with NFPA 99 standards. Pre Piped Degreased Ball Valve with pipe extension. It should be full-port design. It should be blow-out proof stem. It should be lockable valve.	Nos.	16	35,441.00	5,67,056.00
11	Fair-MGPS-OMH-5	SITC of 54mm Single Port Ball Valve with Pipe line assembly (pre piped) : It should comply with NFPA 99 standards. Pre Piped Degreased Ball Valve with pipe extension. It should be full-port design. It should be blow-out proof stem. It should be lockable valve.	Nos.	10	1,19,928.00	11,99,280.00
12	Fair-MGPS-OMH-6	SITC of 76mm Dual Port Ball Valve with Pipe line assembly (pre piped) : It should comply with NFPA 99 standards. Pre Piped Degreased Ball Valve with pipe extension. It should be full-port design. It should be blow-out proof stem. It should be lockable valve.	Nos.	8	1,53,630.00	12,29,040.00
13	Fair-MGPS-OMH-7	SITC of 2 Gases Valve Box with pressure guage only for Oxygen & Vacuum. It Should fully complies with NFPA-99 standards or CGA standards. It should have zone valve box shall consist of the following components: A steel valve box which can house two to seven shut-off ball valves with tube extensions, an aluminum frame and a pull-out removable window. Pressure Gauges are included. The window shall be marked to prohibit unauthorized persons from tampering with the valves with the following silk- screen caution: "MEDICAL GAS CONTROL VALVES CLOSE ONLY IN EMERGENCY"	Nos.	20	50,000.00	10,00,000.00
14	Fair-MGPS-OMH-8	SITC of 3 Gases Valve Box with pressure guage only for Oxygen, MA4 & Vacuum. It Should fully complies with NFPA-99 standards or CGA standards. It should have zone valve box shall consist of the following components: A steel valve box which can house two to seven shut-off ball valves with tube extensions, an aluminum frame and a pull- out removable window. Pressure Gauges are included. The window shall be marked to prohibit unauthorized persons from tampering with the valves with the following silk- screen caution: "MEDICAL GAS CONTROL VALVES CLOSE ONLY IN EMERGENCY"	Nos.	12	60,000.00	7,20,000.00
15	Fair-MGPS-OMH-9	SITC of 5 Gases Valve Box with pressure guage only for Oxygen, N2O,MA4,SA7 & Vacuum. It Should fully complies with NFPA-99 standards or CGA standards. It should have zone valve box shall consist of the following components: A steel valve box which can house two to seven shut-off ball valves with tube extensions, an aluminum frame and a pull-out removable window. Pressure Gauges are included. The window shall be marked to prohibit unauthorized persons from tampering with the valves with the following silk-screen caution: "MEDICAL GAS CONTROL VALVES CLOSE ONLY IN EMERGENCY"		4	80,000.00	3,20,000.00
16	FAIR ITEM	SITC of 6 Gases Valve Box with pressure guage only for Oxygen, N2O,MA4,SA7,CO2 & Vacuum. It Should fully complies with NFPA-99 standards or CGA standards. It should have zone valve box shall consist of the following components: A steel valve box which can house two to seven shut-off ball valves with tube extensions, an aluminum frame and a pull-out removable window. Pressure Gauges are included. The window shall be marked to prohibit unauthorized persons from tampering with the valves with the following silk-screen caution: "MEDICAL GAS CONTROL VALVES CLOSE ONLY IN EMERGENCY"	Nos.	6	85,000.00	5,10,000.00

17	Fair-MGPS-OMH-10	SITC of Digital Area Alarm (2 Services : Oxygen and Vacuum) with pressure sensor : It should fully comply and meet with NFPA-99 and It must be UL Listed with UL certificate must be submitted. Medical Gas LCD Alarm : It should comply with NFPA 99, CSA Z7396.1 and CSA Z305.1. It should be UL or ETL Listed. The LCD alarm shall be microprocessor based with a 10" (25.4 cm) screen and capable of monitoring medical gases.	Nos	20	1,36,400.00	27,28,000.00
18	Fair-MGPS-OMH-11	SITC of Digital Area Alarm (3 Services : Oxygen, MA4 Air and Vacuum) with pressure sensor : It should fully comply and meet with NFPA-99 and It must be UL Listed with UL certificate must be submitted. Medical Gas LCD Alarm : It should comply with NFPA 99, CSA Z7396.1 and CSA Z305.1. It should be UL or ETL Listed. The LCD alarm shall be microprocessor based with a 10" (25.4 cm) screen and capable of monitoring medical gases.	Nos	12	1,81,500.00	21,78,000.00
19	Fair-MGPS-OMH-12	SITC of Digital Area Alarm (5 Services : Oxygen,N2O, MA4 Air, SA4 Air and Vacuum) with pressure sensor : It should fully comply and meet with NFPA-99 and It must be UL Listed with UL certificate must be submitted. Medical Gas LCD Alarm : It should comply with NFPA 99, CSA Z7396.1 and CSA Z305.1. It should be UL or ETL Listed. The LCD alarm shall be microprocessor based with a 10" (25.4 cm) screen and capable of monitoring medical gases.	Nos	4	3,44,000.00	13,76,000.00
20	FAIR ITEM	SITC of Digital Area Alarm (6 Services : Oxygen,N2O, MA4 Air, SA7 Air, CO2 and Vacuum) with pressure sensor : It should fully comply and meet with NFPA-99 and It must be UL Listed with UL certificate must be submitted. Medical Gas LCD Alarm : It should comply with NFPA 99, CSA Z7396.1 and CSA Z305.1. It should be UL or ETL Listed. The LCD alarm shall be microprocessor based with a 10" (25.4 cm) screen and capable of monitoring medical gases.	Nos	16	3,70,000.00	59,20,000.00

21	FAIR ITEM	Central Alarm-LCD Alarm system -Ethernet Ready It should fully complies and meets with the requirements of the NFPA-99 standards. It should be UL or ETL Listed. Valid certificate must be submitted. NFPA-99 complies certificate mjust be submitted from original manufacturer. The LCD alarm shall be microprocessor based with a 10" (25.4 cm) screen and capable of monitoring medical gases.Each gas service shall be provided with a digital read-out comprising of 0-249 psi (0-1,717 kPa) for pressure and 0-30"Hg (-100-0 kPa) for vacuum. The digital read-out shall provide a constant indication of each gas being measured, indicating a green "NORMAL" and a red "HIGH" or "LOW" alarm condition. If an alarm occurs, the green indicator will change to red and a continuous audible alarm will sound. Pushing the (mute button/push to test button) will cancel the audible alarm, but the unit will remain in the alarm condition until the problem is rectified. The default set-points shall be +/- 20% variation from normal condition. In the calibration mode, High/Low set points shall be adjustable by Setup button and selecting set points with up and down buttons. To view the set points, press and hold the mute button for twenty (20) seconds. The box shall be fabricated from 18 gauge (1.3 mm) steel with a 3/8" (9.53 mm) O.D. type "K" copper pipe for connection to the service line. The box mounting brackets shall be adjustable to accommodate for different wall thickness. LCD alarm on a computer screen via the facility's ethernet or internet. In addition, an exact image of the alarm can be displayed on a mobile device. The LCD Alarm will update its status every second. It should have self diagnostic and error message display for ease of maintenance.	Nos	1	4,50,000.00	4,50,000.00
22	FAIR ITEM	Sensors for Digital Area Alarm for Oxygen, Nitrous Oxide, Medical Air, Surgical Air & Carbon Dioxide.Sensors : It shall be mounted locally (in the rough-in box) by installing the copper pipe provided or mounted remotely. Sensors will be automated for gas specific detection. Each sensor unit is gas specific, with an error message display for an incorrect connection. Each sensor unit is gas specific, with an error message display for an incorrect connection.Sensor operating pressure range: Mid-Pressure: (0 psi to 99 psi) - OXY, AIR, N ₂ O, CO ₂ High Pressure: (0 psi to 249 psi) - NIT, IAR,	Nos	52	22,000.00	11,44,000.00
23	FAIR ITEM	Sensors for Digital Area Alarm for Vacuum.Sensors : It shall be mounted locally (in the rough-in box) by installing the copper pipe provided or mounted remotely. Sensors will be automated for gas specific detection. Each sensor unit is gas specific, with an error message display for an incorrect connection. Each sensor unit is gas specific, with an error message display for an incorrect connection.Sensor operating pressure range: Vacuum: (0 to 30 inHG) - VAC, WAGD, AGSS	Nos	45	13,000.00	5,85,000.00
24	Fair-MGPS-OMH-13	SITC of Medical Gas Terminal Units (Gas Outlets) for Oxygen : It should fully complies and meets with the requirements of the UK DOH Health Technical Memorandum 02- 01 (HTM 02-01) standards only. It shall be duly CE marked to the Medical Device Directive 93/42/EEC under the auspices of notified body no. and under this directive, med gas products are classified as Class IIb Medical Devices.	Nos	468	6,490.00	30,37,320.00

25	Fair-MGPS-OMH-14	SITC of Medical Gas Terminal Units (Gas Outlets) for MA4 Air 4 Bar :It should fully complies and meets with the requirements of the UK DOH Health Technical Memorandum 02-01 (HTM 02-01) standards only. It shall be duly CE marked to the Medical Device Directive 93/42/EEC under the auspices of notified body no. and under this directive, med gas products are classified as Class IIb Medical Devices.	Nos	210	6,490.00	13,62,900.00
26	Fair-MGPS-OMH-15	SITC of Medical Gas Terminal Units (Gas Outlets) for SA7 Air 7 Bar : It should fully complies and meets with the requirements of the UK DOH Health Technical Memorandum 02-01 (HTM 02-01) standards only. It shall be duly CE marked to the Medical Device Directive 93/42/EEC under the auspices of notified body no. and under this directive, med gas products are classified as Class IIb Medical Devices.	Nos	21	7,690.00	1,61,490.00
27	Fair-MGPS-OMH-16	SITC of Medical Gas Terminal Units (Gas Outlets) for Vacuum :It should fully complies and meets with the requirements of the UK DOH Health Technical Memorandum 02- 01 (HTM 02-01) standards only. It shall be duly CE marked to the Medical Device Directive 93/42/EEC under the auspices of notified body no. and under this directive, med gas products are classified as Class IIb Medical Devices.	Nos	468	6,490.00	30,37,320.00
28	Fair-MGPS-OMH-17	SITC of Medical Gas Terminal Units (Gas Outlets) for Nitrous Oxide (N2O) :It should fully complies and meets with the requirements of the UK DOH Health Technical Memorandum 02-01 (HTM 02-01) standards only. It shall be duly CE marked to the Medical Device Directive 93/42/EEC under the auspices of notified body no. and under this directive, med gas products are classified as Class IIb Medical Devices.	Nos	27	6,490.00	1,75,230.00
29	FAIR ITEM	SITC of Medical Gas Terminal Units (Gas Outlets) for Carbon Dioxide (CO2) :It should fully complies and meets with the requirements of the UK DOH Health Technical Memorandum 02-01 (HTM 02-01) standards only. It shall be duly CE marked to the Medical Device Directive 93/42/EEC under the auspices of notified body no. and under this directive, med gas products are classified as Class IIb Medical Devices.	Nos	21	11,000.00	2,31,000.00
30	KSS-MG-24	Supply,Installation,Testing & Commissioning of Imported AGSS outlets with probe/adaptor. Its hould belt should comply and fully meets with the latest standard certificate from notified body must be submitted. Certificate of Origin must be given. As per tender technical specifications and approved makes.	Nos	23	23,105.00	5,31,415.00
31	FAIR ITEM	SITC of Medical Gas Terminal Units (Gas Outlets) for Entonox :It should fully complies and meets with the requirements of the UK DOH Health Technical Memorandum 02-01 (HTM 02-01) standards only. It shall be duly CE marked to the Medical Device Directive 93/42/EEC under the auspices of notified body no. and under this directive, med gas products are classified as Class IIb Medical Devices.	Nos	13	11,000.00	1,43,000.00
32	Fair-MGPS-OMH-18	SITC of Stainless Steel Ventilator Probe for Oxygen.	Nos	468	1,320.00	6,17,760.00
33	Fair-MGPS-OMH-19	SITC of Stainless Steel Ventilator Probe for Medical Air/ Surgical Air	Nos	230	1,320.00	3,03,600.00
34	Fair-MGPS-OMH-20	SITC of Adaptor for connecting with oxygen flow meter	Nos	230	1,320.00	3,03,600.00
35	Fair-MGPS-OMH-21	SITC of Adaptor for connecting with N2O	Nos	27	1,320.00	35,640.00
36	Fair-MGPS-OMH-22	SITC of adapter for connecting with vacuum regulator	Nos	360	1,320.00	4,75,200.00
37	FAIR ITEM	SITC of Stainless Steel Probe for CO2	Nos	21	9,000.00	1,89,000.00
38	FAIR ITEM	SITC of Stainless Steel Probe for Entonox	Nos	13	9,000.00	1,17,000.00

39	Fair-MGPS-OMH-23	SITC of Oxygen Flow Meter 0-15lpm :It shall fully comply and meets with active medical device of class IIa and in compliance with the EN ISO 15002: 2008 standard. It should be duly CE marked and comply with 93/42/EEC Medical Devices: General. It shall be CE marked with the notified body number specified. The flow meters should be of 0-15 LPM range for oxygen and with inlet pressure 50-60psi. (4.5 bar).	Nos	300	7,645.00	22,93,500.00
40	Fair-MGPS-OMH-24	SITC of High Flow Oxygen Flow Meter 0- 70lpm :It shall fully comply and meets with active medical device of class IIa and in compliance with the EN ISO 15002: 2008 standard. It should be duly CE marked and comply with 93/42/EEC Medical Devices: General. It shall be CE marked with the notified body number specified. The flow meters should be of 0-70 LPM range for oxygen and with inlet pressure 50-60psi. (4.5bar).	Nos	69	20,606.00	14,21,814.00
41	Fair-MGPS-OMH-25	SITC of Humidifier Bottle : Polypropleyene or Polysulphone 250cc Humidifier bottle should be unbreakable, reusable to disinfectants and complements.	nos	370	2,145.00	7,93,650.00
42	Fair-MGPS-OMH-26	SITC of Vacuum Regulator Unit : It shall fully comply and meets with active medical device of class IIa and in compliance with the EN ISO 10079-3: 2009 standard. It should be duly CE marked and comply with 93/42/EEC Medical Devices: General. It shall be CE marked with the notified body number specified.	Nos	370	27,500.00	1,01,75,000.00
43	Fair-MGPS-OMH-27	SITC of Theatre vacuum unit trolley mounted complete with 1no. of 0-1000m/bar high suction regulator along with twin vacuum collection jar of Polysulphone of 4000ml with lid . It shall fully comply and meets with active medical device of class IIa and in compliance with the EN ISO 10079-3: 2009 standard. It should be duly CE marked and comply with 93/42/EEC Medical Devices: General. It shall be CE marked with the notified body number specified.	Nos	20	99,936.00	19,98,720.00
44	Fair-MGPS-OMH-28	SITC of Polysulphone Vacuum Collection Jar 1000ml with lid	Nos	370	8,807.00	32,58,590.00
45	Fair-MGPS-OMH-29	Supply of indigenous D type empty oxygen cylinder with cylinder valve and cap (46.7L water capacity) ISI Mark.	Nos.	60	27,500.00	16,50,000.00
46	Fair-MGPS-OMH-30	Supply of indigenous D type empty N2O cylinder with cylinder valve and cap (46.7L water capacity) ISI Mark.	Nos.	30	27,500.00	8,25,000.00
47	FAIR ITEM	Supply of indigenous D type empty CO2 cylinder with cylinder valve and cap (46.7L water capacity) ISI Mark.	Nos.	30	30,000.00	9,00,000.00
48	FAIR ITEM	Supply of indigenous D type empty Entonox cylinder with cylinder valve and cap (46.7L water capacity) ISI Mark.	Nos.	30	30,000.00	9,00,000.00
49	Fair-MGPS-OMH-31	SITC of Medical Gas Rubber tubing color coded throughout their length. All hoses shall incorporate an anti- static inner core (For All Gases)	Mtrs	650	440.00	2,86,000.00
50	Fair-MGPS-OMH-32	SITC of Oxygen Digital Fully Automatic Control Panel of 2000lpm. Input power to the manifolds is 110 to 240 VAC, 50-60 Hz. It should have flow capacity 4,500 SCFH [2,000 L/min]. (Maximum tolearance allowed will be only 10%).	Nos	2	9,84,500.00	19,69,000.00
51	FAIR ITEM	SITC of N2O Digital Fully Automatic Manifold Control Panel with heater	Nos	2	4,00,000.00	8,00,000.00

Fair-MGPS-OMH-33	SITC of Manifold, Header Bars, Tail Pipes:Oxygen Manifold Supply System (Cylinder Manifold Unit) of 10+10 size : 10cylinder manifold bank as left side and 10cylinder manifold bank as right side complete with 20nos.pig tail pipes and 20nos. non- return valves, all header racks.	Nos	2	3,30,000.00	6,60,000.00
Fair-MGPS-OMH-34	SITC of Manifold, Header Bars, Tail Pipes: Nitrous Oxide Manifold Supply System (Cylinder Manifold Unit) of 10+10 size : 10 cylinder manifold bank as left side and 10 cylinder manifold bank as right side complete with 20 nos.pig tail pipes and 20 nos. non- return valves, all header racks.	Nos	1	3,30,000.00	3,30,000.00
Fair-MGPS-OMH-35	SITC of Manifold, Header Bars, Tail Pipes: Nitrous Oxide Manifold Supply System (Cylinder Manifold Unit) of 4 + 4 size : 4 cylinder manifold bank as left side and 4 cylinder manifold bank as right side complete with 8 nos.pig tail pipes and 8 nos. non-return valves, all header racks.	Nos	1	1,65,000.00	1,65,000.00
Fair-MGPS-OMH-36	SITC of Manifold, Header Bars, Tail Pipes: Liquid Oxygen (Cryogenic Dura Cylinders) Stainless Steel Manifold Supply System of 10+10 size : 10cylinder manifold bank as left side and 10cylinder manifold bank as right side.	Nos	1	7,98,570.00	7,98,570.00
FAIR ITEM	SITC of Manifold, Header Bars, Tail Pipes: Nitrous Oxide Manifold Supply System (Cylinder Manifold Unit) of 2+2 size : 2 cylinder manifold bank as left side and 2 cylinder manifold bank as right side complete with 4 nos.pig tail pipes and 4 nos. non-return valves, all header racks.	Nos	1	8,10,000.00	8,10,000.00
FAIR ITEM	SITC of CO2 Digital Fully Automatic Manifold Control Panel	Nos	2	5,20,000.00	10,40,000.00
FAIR ITEM	SITC ENTONOX System main manifold : It should consisit of manifold, header Bars, tail pipes, non return valves of 4+4 size 2 4cylinder manifold bank as left side and 4cylinder manifold bank as right side complete with 8nos.pig tail pipes and 8nos. non- return valves, all header racks.	Nos	1	1,80,000.00	1,80,000.00
FAIR ITEM	SITC ENTONOX System emergency manifold : It should consisit of manifold, header Bars, tail pipes, non return valves of 2+2 size 2 2cylinder manifold bank as left side and 2 cylinder manifold bank as right side complete with 4nos.pig tail pipes and 4nos. non- return valves, all header racks.	Nos	1	1,40,000.00	1,40,000.00
FAIR ITEM	SITC of ENTONOX Digital Fully Automatic Manifold Control Panel	Nos	2	7,10,000.00	14,20,000.00
Fair-MGPS-OMH-37	Aluminium Ambient Vaporiser Coil for Liquid O2 to gas conversion for a flow of 200 Nm3/hr	Nos.	2	4,00,000.00	8,00,000.00
Fair-MGPS-OMH-38	Liquid Oxygen Line Regulator	Nos.	2	1,00,011.00	2,00,022.00
Fair-MGPS-OMH-39	SITC of Free standing Modular Mounting Frame made of powder coated Section for providing Strength to manifold. The frame does not require any support from the wall and is free standing. The Frame should have the mounting plate to install the Panel. The frame should be assembled without welding using threaded nut and bolt connection and can be dismantled for relocation. It should have provision for grouting on the floor.Over all Length of Frame will be 3500 mm to provide sufficient space to accomodate 10 cylinders on each side.	Nos	9	86,900.00	7,82,100.00
	Fair-MGPS-OMH-34 Fair-MGPS-OMH-35 Fair-MGPS-OMH-36 FAIR ITEM	Fair-MGPS-OMH-33 10-10 size : 10cylinder manifold bank as left side and 10cylinder manifold bank as right side complete with 20nos.pig tail pipes and 20nos. non- return valves, all header racks. Fair-MGPS-OMH-34 SITC of Manifold, Header Bars, Tail Pipes: Nitrous Oxide Manifold Supply System (Cylinder Manifold Unit) of 10-10 size : 10 cylinder manifold bank as left side and 10 cylinder manifold bank as right side complete with 20 nos.pig tail pipes and 20 nos. non-return valves, all header racks. SITC of Manifold, Header Bars, Tail Pipes: Nitrous Oxide Manifold Supply System (Cylinder Manifold Unit) of 4 + 4 size : 4 cylinder manifold bank as left side and 4 cylinder manifold bank as right side complete with 20 nos.pig tail pipes and 8 nos. non-return valves, all header racks. Fair-MGPS-OMH-35 SITC of Manifold, Header Bars, Tail Pipes: Nitrous Oxide Manifold Supply System (Cylinder Manifold bank as right side. Fair-MGPS-OMH-36 SITC of Manifold, Header Bars, Tail Pipes: Liquid Oxygen (Cryogenic Dura Cylinders) Stainless Steel Manifold Supply System of 10+10 size : 10cylinder manifold bank as left side and 10cylinder manifold bank as right side. FAIR ITEM SITC of CO2 Digital Fully Automatic Manifold Control Panel FAIR ITEM SITC Cof CO2 Digital Fully Automatic Manifold Control Panel FAIR ITEM SITC Cof FUTONOX System emergency manifold bank as left side and 2 cylinder manifold bank as right side complete with 8 nos.pig tail pipes and 4 nos. non-return valves, all header racks. FAIR ITEM SITC Cof CO2 Digital Fully Automatic Manifold Control Panel FAIR IT	Fair-MGPS-OMH-33 10+10 size : 10-ylinder manifold bank as left side and 10-ylinder manifold bank as right side complete with 20 nos.pig tail pipes and 20 nos.nor. return valves, all header racks. Nos Fair-MGPS-OMH-34 SITC of Manifold, Header Bars, Tail Pipes: Nitrous Oxide Manifold Supply System (Cylinder Manifold Unit) of 10+10 size : 10 cylinder manifold bank as left side and 10 cylinder manifold bank as right side complete with 20 no.s.pig tail pipes and 20 nos. non- return valves, all header racks. Nos Fair-MGPS-OMH-34 SITC of Manifold, Header Bars, Tail Pipes: Nitrous Oxide Manifold Supply System (Cylinder Manifold Unit) of 10+10 size : 10 cylinder manifold bank as left side and 10 cylinder manifold bank as right side complete with 8 nos.pig tail pipes and 8 nos. non-return valves, all header racks. Nos Fair-MGPS-OMH-35 SITC of Manifold, Header Bars, Tail Pipes: Liquid Oxygen (Cryogenic Dura Cylinders) Stainless Steel Manifold Supply System of 10+10 size : 10 cylinder manifold bank as left side and 10 cylinder manifold bank as right side complete with 4 nos.pig tail pipes and 4 nos. non-return valves, all header racks. Nos FAIR ITEM SITC of O2 Digital Fully Automatic Manifold Control Panel Nos FAIR ITEM SITC C ENTONOX System main manifold bank as left side and 2 cylinder manifold bank as right side complete with 4 nos.pig tail pipes and 4 nos. non-return valves, all header racks. Nos FAIR ITEM SITC C CO2 Digital Fully Automatic Manifold Control Panel Nos FAIR ITEM SITC C FITONOX System main manifold bank as left side and	Fair-MGPS-OMH-33 10-10 size: 10-quinder manifold bank as left side and 10-quinder manifold bank as right side complete with 20nos.pig tail pipes and 20nos. non- return valves, all header racks. Nos 2 Fair-MGPS-OMH-34 SITC of Manifold, Header Bars, Tail Pipes: Nitrous Oxide Manifold Supply System (Cylinder Manifold Unit) of 10-10 size: 10 cylinder manifold bank as left side and 10 cylinder manifold bank as right side complete with 20 nos.pig tail pipes and 20 nos. non- return valves, all header racks. Nos 1 Fair-MGPS-OMH-34 Unit) of 4 + 4 size: 1 a cylinder manifold bank as left side and 4 cylinder manifold bank as right side complete with 8 nos.pig tail pipes and 8 nos. non-return valves, all header racks. Nos 1 Fair-MGPS-OMH-35 SITC of Manifold, Header Bars, Tail Pipes: Nitrous Oxide Manifold Supply System (Cylinder Manifold bank as right side complete with 8 nos.pig tail pipes and 8 nos. non-return valves, all header racks. Nos 1 Fair-MGPS-OMH-36 SITC of Manifold, Header Bars, Tail Pipes: Nitrous Oxide Manifold Supply System (Cylinder Manifold bank as right side complete with 4 nos.pig tail pipes and 4 nos. non-return valves, all header racks. Nos 1 FAIR ITEM SITC of CO2 Digital Fully Automatic Manifold Control Panel Nos 2 FAIR ITEM SITC of FONONOX System main manifold : It should consist of manifold, header Bars, tail pipes, non return valves of 2+2 size 12 cylinder manifold bank as left side and 2 cylinder manifold bank as right side complete with 8 nos.pig tail pipes and 4 nos. non- return valves	Fair-MGPS-OMH-33 10-10 size: 10 cylinder manifold bank as right side and 10 cylinder manifold bank as right side complete with 20 nos.pig tail pipes and 20 nos. non- return valves, all header racks. Nos 2 3,30,000.00 Fair-MGPS-OMH-34 SITC of Manifold, Header Bars, Tail Pipes: Nitrous Oxide Manifold Supply System (Cylinder Manifold complete with 20 nos.pig tail pipes and 20 nos. non- return valves, all header racks. Nos 1 3,30,000.00 Fair-MGPS-OMH-34 SITC of Manifold, Header Bars, Tail Pipes: Nitrous Oxide Manifold Supply System (Cylinder Manifold Unit) of 4 + 4 size: 4 cylinder manifold bank as left side and 4 cylinder manifold bank as right side complete with 8 nos.pig tail pipes and 8 nos. non-return valves, all header racks. Nos 1 1,655,000.00 Fair-MGPS-OMH-36 SITC of Manifold, Header Bars, Tail Pipes: Liquid Oxygen (Cryogenic Dura Cylinders) Stainless Steel Manifold Supply System of 10-10 size: 10 cylinder manifold bank as right side complete with 8 nos.pig tail pipes and 4 nos. non-return valves, all header racks. Nos 1 7,98,570.00 FAIR ITEM SITC of CO2 Digital Fully Automatic Manifold Control Panel Nos 1 8,10,000.00 FAIR ITEM SITC ENTONOX System main manifold bank as left side and 4 cylinder manifold bank as right side complete with 4 nos.pig tail pipes and 4 nos. non- return valves, all header racks. Nos 1 1,40,000.00 FAIR ITEM SITC of CO2 Digital Fully Automatic Manifold Control Panel Nos </td

64	FAIR-AMH-MGPS-01	SITC of Vacuum Pump. : It should be oil lubricated rotary vane vacuum pump, having each vacuum pump capacity of 1500lpm with IEC Motor rating of minimum 7.5 HP @ 50 Hz or above. Vacuum pump shall comprise of air cooled, oil lubricated vacuum pumps suitable for both continuous and frequent start / stop operation at inlet vacuum vessels between 525mm Hg and 700 mm Hg. The ultimate vacuum of pump shall be 0.1 mbar with gas ballast valve closed. (3 W + 1 S)	Nos	4	6,45,890.00	25,83,560.00
65	FAIR-AMH-MGPS-02	SITC of Vacuum Filter (Bacteria Filter) of 50cfm to 60cfm – 3" Filter housing with drain flask.: It fully complies and meets with requirements of UK HTM medical standards. It should have BS 3928 sodium flame test certificate based on requirements of HTM standards.The bacteria filter should be designed for critical application involving removal of dry and wet dust, particulars, oil aerosol and water droplest, high efficiency glass fiber, fieece media from suction side of vacuum pump system. It should have efficiency of at least 99.995% when tested by sodium flame test and that should be according to BS 3928:1969.	Nos	4	1,86,000.00	7,44,000.00
66	Fair-MGPS-OMH-42	SITC of Vacuum Receiver Tank of 2000 Litres water capacity	Nos	2	1,59,500.00	3,19,000.00
67	Fair-MGPS-OMH-43	SITC of Pressure Guage (*4inchi)	Nos	40	4,400.00	1,76,000.00
68	Fair-MGPS-OMH-44	SITC of Electrical Control Panel for Vacuum pumps with time totalizer and phase preveneter and cascading	Mtrs	1	2,47,500.00	2,47,500.00
69	Fair-MGPS-OMH-45	SITC of Electrical wiring inside plant room only for interconnection of vacuum pumps and air compressors (*Hospital will provide 3 phase & single phase power supply with cable inside the gas manifold and plant room. Hospital will provide DG back up and phase preventer + Isolation Transformer. Hospital will provide all electrical fixtures like exahust fan, light, power sockets inside gas manifold and plant room)	Nos	1	1,52,900.00	1,52,900.00
70	Fair-MGPS-OMH-46	SITC of Oil Free Rotary Screw/Scroll Air Compressor : Oil free Rotary Screw/scroll air compressor. It should be 50Hz, 3 Phase, 440volts. 11 Bar, 116 Psig. 99cfm or more at 11 Bar. 22 Kw & 30 Hp. The 99 cfm flow capacity for each compressor unit having suitable motor rating of Rotary Screw/scroll air cooled compressor. Compressors shall be oil free Rotary Screw/scroll compressors suitable for both continuous and frequent start/stop operation at a nominal outlet pressure of 800 kPa (8 bar). The air quality shall be 100% oil free, certified ISO8573-1. The compressor shall have a sound insulating enclosure. (2W + 1S)	Nos	3	30,00,000.00	90,00,000.00
71	FAIR-AMH-MGPS-05	SITC of 60cfm Heatless Air Dryer : Heatless Air Dryer : It should have air dryer desiccant type with ½" end BSP connection. It should have pre filter and post filter. It should be designed for ISO:7183- 1986 (E) standards. It should have dryer quality class -ISO 8573-1 standards. It should be made of aluminum construction. It should have purge loss 15+/- 1%. Active and Regenerative tower.	Nos	2	3,50,000.00	7,00,000.00

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72	FAIR-AMH-MGPS-06	SITC of Coarse coalescing filter 1" of 50cfm to 60 scfm filter . It should comply with air quality standard ISO 8573-1: 2010. It should have profiled bowl design and push fit elements ensure quick and for reliable maintenance. It should have particle removal 1 micron. It should have maximum particle size class 2 micron as per ISO 8573-1: 2010.	Nos	2	1,10,760.00	2,21,520.00
73	FAIR-AMH-MGPS-07	SITC of Fine coalescing filter 1" of 50cfm to 60 cfm filter. It should comply with air quality standard ISO 8573-1: 2010. It should have particle retention of up to 99.999%, and significantly reduced pressure loss. It should have particle removal 0.01 micron. It should have maximum particle size class 1 micron as per ISO 8573-1: 2010. It should have maximum oil content 1 micron ISO 8573-1: 2010.	Nos	2	1,10,760.00	2,21,520.00
74	FAIR-AMH-MGPS-08	SITC of Activated Carbon Filter 1" of 50cfm to 60 scfm Filter. It should comply with air quality standard ISO 8573-1: 2010. It should have particle retention of up to 99.999%, and significantly reduced pressure loss. It should have particle removal 0.01 micron. It should have maximum particle size class 1 micron as per ISO 8573-1: 2010. It should have maximum oil content 1 micron ISO 8573-1: 2010.	Nos	2	1,10,760.00	2,21,520.00
75	FAIR-AMH-MGPS-09	SITC of Fine Dust Filter 1" of 50cfm to 60 scfm. It should comply with air quality standard ISO 8573-1: 2010. It should have particle retention of up to 99.999%, and significantly reduced pressure loss. It should have pipe size connection 1" = 105scfm and 144nm3/hr.It should have particle removal 0.01 micron. (Maximum tolearance allowed will be only 15%).	Nos	2	1,10,760.00	2,21,520.00
76	Fair-MGPS-OMH-52	SITC of Air Receiver Tank of 1500 Litres water capacity	Nos	2	1,50,000.00	3,00,000.00
77	Fair-MGPS-OMH-53	SITC of Pressure Reducing Station from 11 bar to 4 bar (for MA4 Air) and 7 bar (for SA7 air)	Nos	2	96,800.00	1,93,600.00
78	Fair-MGPS-OMH-54	SITC of Electrical Control Panel for Air Compressors with time totalizer and phase preveneter and cascading	Nos	1	2,47,500.00	2,47,500.00
79	BAH-MGPS-RA-01	Supply,Installation,Testing & Commissioning of (Imported)Duplex AGSS Plant 2400LPM capacity. Complete in all aspect. It should comply and fully meets with the latestst and certificate from notified body must be submitted. Certificate of Origin must be given. As per tender technical specifications and approved makes.	Set	1	55,13,831.00	55,13,831.00
80	KSS-MG-26	Supply,Installation,Testing & Commissioning of AGSS Remote Indicator(Imported) Complete in all aspect. It should comply and fully meets with the latestst and certificate from notified body must be submitted. Certificate of Origin must be given. As per tender technical specifications and approved makes.	Nos	13	98,095.00	12,75,235.00
81	KSS-MG-25	Supply,Installation,Testing & Commissioning of AGSS Hose assembly(Imported) Complete in all aspect. It should comply and fully meets with the latestst and certificate from notified body must be submitted. Certificate of Origin must be given. As per tender technical specifications and approved makes.	Nos	13	34,151.00	4,43,963.00
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82	KSS-MG-27	Supply, Installation, Testing & Commissioning of AGSS Reservoir as per tender technical specifications and approved makes.	Nos	13	2,51,311.00	32,67,043.00
83	FAIR ITEM	SITC Electrical Wiring From AGSS Pump to All OT's	Nos	13	45,400.00	5,90,200.00
84	MGPS-MTA-FAIR-04	Supply, Installation, Testing and Commissioning of copper pipes of 35mm dia as per specifications including required accessories clamps, nut bolts, etc. Complete. Painting the medical gas pipeline wit h the approved colour.	rmt	250	5663.52	14,15,880.00
85	MGPS-MTA-FAIR-22	Supply, Installation, Testing and Commissioning of Lockable Line ball valve dia 35mm.	nos	10	26201.23	2,62,012.30
86	Fair-MGPS-OMH-55	SITC of Double duct Bed Head Horizontal Wall Panel 1200 mm. Separete duct for gas outet and seperate duct for electricals. (made up from Aluminum powder coated profiles) with double duct. Separate duct for electrical sockets and separate duct for gas outlet points. Each bed head panel should be pre piped and pre wired. It should have pre wired 6nos. electrical sockets in separate duct (3 nos. 5 A sockets and 3 nos. 15 A sockets). Gas outlet points 6nos. pre piped to be fitted in the bed head panel. Gas outlet points cost not to be included in the bed head panel cost since it is separate line item. It should have provision for RJ45 connector and Nurse call system bedside switch with partition between LV and ELV system.	Nos	40	33,600.00	13,44,000.00
87	Fair-MGPS-OMH-56	SITC of Double duct Bed Head Horizontal Wall Panel 600 mm. Separete duct for gas outet and seperate duct for electricals. (made up from Aluminum powder coated profiles) with double duct. Separate duct for electrical sockets and separate duct for gas outlet points. Each bed head panel should be pre piped and pre wired. It should have pre wired 4 nos. electrical sockets in separate duct (2 nos. 5 A sockets and 2 nos. 15 A sockets). Gas outlet points 2nos. pre piped to be fitted in the bed head panel. Gas outlet points cost not to be included in the bed head panel cost since it is separate line item. It should have provision for RJ45 connector and Nurse call system bedside switch with partition between LV and ELV system.	Nos	50	16,800.00	8,40,000.00
		TOTAL AMOUNT MGPS SYSTEM (In Rs)				11,46,43,041.30
		Say				11,46,43,042.00