# SBIM NEW TOWN KOLKATA NIT DATED 04-06-2016 PRE-QUALIFACATION OF CONTRACTORS FOR HOUSE-KEEPING & MAINTENANCE SERVICES AT SBIM, NEW TOWN , KOLKATA CORRIGENDUM

- 1. Page No. 15, SL No. 3(4.1) The area/location of cleaning will also include periodical cleaning of glass/quadroclad façade of the buildings/structure etc. wherever such glass/quadroclad façade will be there within the SBIM Campus.
- 2. The successful contractor will also be required to carry out periodical cleaning of the swimming pool within the campus including periodical draining out of water and filling of the pool with fresh water.
- 3. The successful contractor will be required to provide manpower for rescue operation of the users of swimming pool, in case of need, Therefore, Swimming pool attendant (trained swimmer) has to be provided by the contractor during the period the pool will be available to the users.
- 4. The word 'Academy' wherever mentioned in NIT dated 26-07-2017 should be read as 'Institute'
- 5. Green Building Consumables are to be used. Separate List is enclosed.
- 6. List of machineries are also enclosed. Rates to be calculated based on the list of machineries to be used.
- 7. In the Price Bid Envelop (Both Part I and Part II) are to be summarised and final rate to be given in words and figures.

## 8. Location Specifications

\*All figures are rounded off to the nearest integer

### a) Total Area: Sq Feet

Туре	Area in Sqm
Dry Stone Cladding outside	11090
Marble.Granite flooring/counters	4000
Glass Partitions	420
Mirror Panelling	60
Lacquered Glass Paneeling	415
Mirror	325
Kota Stone Flooring	5550
Ceramic Wall tiles	900
Ceramic floor tiles	355
vitrified tiles	23000

Glass mosiac tiles	187
Vinyl Flooring	180
Total	46482
Total Built Area ( G+5)	37700
Total Basement Area ( 3 )	45000
Total Plot Area	20875
European Water Closet	222 Nos
Urinals	100
Wash Basins	230
ACP + Structural Glazing	25000

## b) Total Façade: ..... Sq Feet

SI no	Façade Type	Area (Sqm)
1	Glass Area	As per details
2	ACP + Structural Glazing	25000
	Total	

## **1.** Green Building Norms

The Punjab National Bank is designed as a State of the Art, energy efficient Green Building, maximizing operational efficiency while minimizing environmental impacts.

The Building is planned to be a **Green rated Green Building** registered with U.S. Green Building Council (USGBC). Guidelines as issued by USGBC have been followed at the time of design and construction of the building, and shall also be followed during Operations and Maintenance of the building.

During execution of the Facility Management Services mentioned in the document, sustainability guidelines have to be followed for whole-building cleaning and maintenance, waste management, recycling programs and systems, pest management, energy performance, water consumption, indoor environment quality and materials use.

The Service Provider shall require to have all the requisite certifications and credentials for operating in a Green Building certified by the Indian Green Building Council or the US Green Building Council.

## 8 Scope of Work:

S. No.	Activity(s)	Equipment Required	Frequency
1	Floor Sweeping (External & Basements)	Rideon Sweeping Machine	Daily once
2	Floor Dry Mopping	Dry Mop set	Twice a shift
3	Floor Damp Mopping	Damp Mop Set	Once a shift
4	Auto Scrubbing	AutoScrubber and Drier Machine	Twice in Reception and once on other floors
5	Door/Glass Partitions	Glass Cleaning Kit / Spray & Wipe	Daily once
6	Dusting	Vacuum Cleaner & Microfiber spray & wipe method	Daily once
7	Side wall & Partition cleaning up-to Man height	Vacuum Cleaner & Microfiber spray & wipe method	Daily once
8	Door Cleaning	Vacuum Cleaner & Microfiber spray & wipe method	Daily once
9	Window Glass Cleaning (from Inside)	Glass Cleaning Kit	Daily once
10	Tube light, Fan , Exhaust Fan Cleaning	Dry dusting - Backpack Vacuum Cleaner	Weekly
11	Sidewall(above man height) & roof cleaning	Cleaning Kit & Safety Harness	Weekly
12	AC Duct Vacuuming	Vacuum Cleaner -	Weekly

S. No.	Activity(s)	Equipment Required	Frequency
	(from Outside)	Backpack	
13	Common areas/cabins.	Vacuum Cleaner - Backpack	Weekly
14	Buffing & polishing of marble flooring at Common Area	Single Disc Scrubber & W/D Vacuum Cleaner	Once a week
18	Electrical Switches/Lighting Fixtures	Vacuum Cleaner	Once a week
20	Waste Disposal	Manual	Daily once or as and when required
21	Air Freshener/Automatic	Manual & Automatic dispenser	Every 2 Hrs.
22	Marble Polishing & Buffing	High Speed Burnisher & Single Disk Scrubber	Once a Quarter
23	External area pressure wash	High Pressure Jet	Twice a week

# 1.1.9 Toilets Cleaning Scope

S. No	Scope of Work	<b>Equipment Required</b>	Frequency
1	Floor Scrubbing	Single disc Scrubber & W/D Vacuum cleaner	Daily once
2	Floor Cleaning	Wet Mopping	Thrice a shift
3	Urinals Cleaning	Manual with Brush	Twice a shift
4	Commode Cleaning	Manual with Brush	Twice a shift
5	Wash Basin Cleaning	Manual with Brush	Twice a shift

S. No	Scope of Work	Equipment Required	Frequency
6	Glass Cleaning	Glass Cleaning Kit	Once a shift
7	Side wall & Partition cleaning up-to Man height	Microfiber Spray & Wipe	Once a week
8	Door Cleaning	Microfiber Spray & Wipe	Once a day
9	Window Glass Cleaning	Glass Cleaning Kit	Daily
10	Cleaning of Stainless Steel parts of door, separator, water tapes etc.	Microfiber Spray & Wipe	Daily
11	Tube light, Fan, Exhaust Fan Cleaning, Lighting Fixtures	, , ,	Weekly
12	Sidewall(above man height) & roof cleaning	Cleaning Kit & safety kit	Daily
13	Waste Disposal	Manual	Minimum Daily & as and when required
14	Air Freshener	Manual/Automatic	Every 1 Hours
15	Sterilizing	Steam Cleaner	weekly

## 1.1.10 General Guidelines for Chemical Reagents

- Chemical reagents should be GS 37 certified this ensures these items contain NO harmful or banned or non-biodegradable constituents
- Chemicals must be in super concentrated form this ensures the minimum possible water & carbon footprint, minimum plastic usage & disposal & minimum fossil fuel consumption during transportation.

- Chemicals must be in such packaging which either contains a pre diluted dispensing unit in itself or can be fitted in to a pre diluted dispensing system, i.e., when dispensing the chemicals, they would be released in water diluted form — this ensures no accidental spillage, safe handling and accurate dosing
- All chemicals should be supported with their Material Safety Data Sheet & GS – 37 certificate
- Any additional accessory which might be required to effectively & efficiently utilize the chemical dispensing system shall have to be supplied with the reagents free of cost.
- Preferred makes for Chemical reagents are as per the following:
  - a. M/s Sealedair
  - b. M/s Ecolab
  - c. M/s Henkel

Chemical reagents have to be of either of these three makes.

1.

SI no	Common Services Area	Frequency of cleaning
1	Meeting Rooms, Video Conference Rooms, Media Room, Management Centre	Daily, and at the end of every usage, during working days.
2	Auditoriums	Weekly, and before and after every usage.  Daily airing of the halls.
3	Canteen Area, Dining Area	Need to be kept clean at all times. Full cleaning to be done before close of the day on all working days.
4	Kitchen Block	Need to be kept clean at all times. Full cleaning to be done before close of the day on all working days.
5	Guest Rooms	Daily, and as per need.
6	Driver Rest Room	Daily two times, and as per need.
9	Lifts/ elevators	Twice a day – before 8AM and at 3PM, and as per need.
17	Store Area	Daily, and as needed.
8	Basement/ Parking area	Daily wet cleaning and sweeping, and as needed.

Deep cleaning of the above mentioned common areas shall be done every week, on Saturday/Sunday/holidays.

While executing the above schedule, it has to be ensured that Green Building norms are complied to, and resources are optimally utilized.

#### i) Outdoor Cleaning

- (a) Cleaning and maintenance of the Driveways, hard surface areas, backyards, water bodies, surrounding the building premises, shall be done on a daily basis.
- (b) The Road areas (driveways) and hard scape work areas shall be swept clean daily every morning by 8AM, and on need basis, to keep them free of litter, trash, dry leaves, soil, etc.. Wet cleaning with water shall be carried out once a week.
- (c) The water body (bodies) shall be kept clean of litter and trash.
- 2. The Service Provider shall have **Standard Operating Procedures** for each broad Housekeeping activity, duly approved by SBIM, and which shall be strictly adhered to at all times.
- 3. The Service Provider shall clean the premises as per schedules mentioned above. However, the cleaning shall have to be done more frequently, if required, for maintaining the high standards of cleanliness of the premises, meeting green cleaning standards, on the instructions of the authorized officer of SBIM, for which nothing extra shall be paid. Similarly, certain activities can only be done on Saturdays, Sundays or other holidays, or after-office hours, to avoid inconvenience to the users of the building, which shall also be carried out at no extra cost. The Service Provider shall work in close co-ordination with the authorized officer/ officials of SBIM and modify working schedule, if required, as per user's convenience/ needs. No claim whatsoever on this account shall be entertained.
- 4. If any other material is required, other than items mentioned above for house-keeping work, the same shall be brought by the Service Provider as recommended and approved by the authorized officer of the SBIM, at no extra cost
- 5. The existing building has very expensive and intricate sculptures, art-work, finishing on walls, ceilings & floors, etc. The Service Provider shall make necessary arrangements at his own cost to prevent any damage inside the building to the existing work, in the course of carrying out the services. The Service Provider and shall make good any damage caused at his own risk and cost. The decision of SBIM in this regard shall be final and binding on the Service Provider.
- 6. The Service Provider will carry out the Scope of work as mentioned in this document and ensure that the first round of daily cleaning work should be completed before 8.00 AM and work is done upto 8.00 PM atleast. Whenever meetings in the office takes place, the Service Provider has to ensure that the services are provided till the meeting is over and for which nothing extra is payable.

- 7. While carrying out cleaning during work-hours, adequate precautionary Hazard signs (viz. caution/wet floor/restroom closed signs) around the area, should be in place.
- 8. SBIM Administration should be provided prior intimation before commencement of non-routine cleaning operations.

## 9. List of Specified Chemicals to be Used

	3. List of Specified Chemicals to be osed			
SI.	Purpose	Chemical	Minimum	
No.			Quantity	
			per month	
			(Litres)	
1	Granite/Kota/Marble/Tiles and all	Stride – Jflex	143	
	other types of flooring except	or equivalent		
	wooden Floor Cleaning	of the		
	concentrate	mentioned		
		brand		
2	Bathroom/washroom/toilet floor	Aplha – Jflex	58	
	cleaning	or of		
		equivalent		
		brand		
3	General Washroom Cleaning	Alpha – J Flex	15	
		or equivalent		
		of the		
		mentioned		
		brand		
5	Glass / Mirror/ Acrylic Surface	Glance NA – J	78	
		Flex or		
		equivalent of		
		the		
		mentioned		
		brand		
7	Aluminum Surfaces	Suma Break	As	
		Up HD or	required	
		equivalent of		
		the		

		mentioned	
		brand	
8	Urinal & WC Cleaner	Crew J Flex or	As
		equivalent of	required
		the	
		mentioned	
		brand	
9	Urinal & WC Cleaner	Taski R6 or	90
		equivalent of	
		the	
		mentioned	
		brand	
10	Liquid Handwash	Softcare	70
		Enhance or	
		equivalent of	
		the	
		mentioned	
		brand	
11	Liquid Polishing Agent (for	Terranova or	15
	Vitrified Tiles/Granite and Kota	equivalent of	
	Polishing)	the	
		mentioned	
		brand	
12	CP Fittings cleaner & Polisher	Emerel Cream	5
		Cleanser or	
		equivalent of	
		the	
		mentioned	
		brand	
13	Hard water marks remover from	Suma Scale or	10
	façade	equivalent of	
		the	

		mentioned	
		brand	
14	Hard water scale marks remover	Taski R9 or of	15
	in washroom	the	
		mentioned	
		brand	
15	Stainless steel Polish	Suma Inox or	2
		equivalent of	
		the	
		mentioned	
		brand	
16	Degreaser	Spiral HD or	5
		equivalent of	
		the	
		mentioned	
		brand	
17	Crystalizing agent	Nobile or	As
		equivalent of	required
		the	
		mentioned	
		brand	
18	Auto odor control dispenser &	Good sense	1 each per
	refill	dispenser &	washroom
		refill	

## **DETAILS OF MACHINERY AND EQUIPMENTS TO BE DEPLOYED**

SI No.	Type of Equipment	Purpose	Minimum No. of Machinery deployed	Technical Specification
1	Steam Cleaner	Steam Cleaning of stubborn	1	<ul> <li>Steam temperature mentioned in the PI sheet is 145°C,</li> </ul>

		stains & sanitization		which is the temperature at the steam chamber
				<ul> <li>The actual steam temperature at the exit of the nozzle is usually 70-75°C.</li> </ul>
				<ul> <li>Should have multiple accessory nozzle for different applications</li> </ul>
2	Mechanical Sweeper – Battery Operated	Sweeping of Basement & External Area	1	<ul> <li>Cleaning path with</li> <li>2 side brooms</li> <li>should be mm</li> <li>1210 = m²/h 9680</li> </ul>
				<ul> <li>Cleaning path with</li> <li>1 side brooms</li> <li>should be mm</li> <li>1070 = m²/h 6955</li> </ul>
				<ul> <li>Cleaning path only main broom should be mm 700 = m²/h 4550</li> </ul>
				<ul><li>Forward speed should be 0 to 7,7 Km/h</li></ul>
				Reverse speed

	should be 0 to 4,5 Km/h
	<ul> <li>Real capacity of dirt container should be 85 Lts</li> </ul>
	<ul> <li>Max recommended gradients should be 0.04</li> </ul>
	<ul><li>Max gradients should be 15% - 18%</li></ul>
	<ul><li>Turning radius should be mm</li><li>1050</li></ul>
	<ul> <li>Width with 2 side brooms should be mm 1210</li> </ul>
	<ul> <li>Width with 1 side broom should be mm 1070</li> </ul>
	<ul> <li>Width without side broom should be mm 967</li> </ul>
	<ul> <li>Length without side broom should be mm 1430</li> </ul>

Length with side     brooms should be
mm 1560
<ul> <li>Height including driver's seat should be mm 1250</li> </ul>
<ul> <li>Main brush width and diameter should be mm 700 x Ø mm 285</li> </ul>
<ul><li>Rpm should be 500</li><li>- 520</li></ul>
<ul> <li>Side brush diameter should be Ø mm 500 (rpm 79)</li> </ul>
<ul> <li>Weight should be Kg 305 (without battery)</li> </ul>
<ul> <li>Weight with 4 x 6V- 180 Ah batteries should be Kg 426</li> </ul>
<ul> <li>Weight with 24V- 240 Ah heavy duty battery</li> </ul>
• should be Kg 505

<ul> <li>Motor model should be MP 100S</li> <li>IP 20 - 24 V - 1200</li> <li>W - 1,2 Kw</li> </ul>
<ul> <li>Power absorption         <ul> <li>(machine not working - brushes on) should be Ah</li> <li>35 - 40</li> </ul> </li> </ul>
<ul> <li>Power absorption working machine should be Ah 45 - 48 ( on a flat floor)</li> </ul>
<ul> <li>Running time with</li> <li>24V - 180 Ah</li> <li>battery should be</li> <li>About 2,30 hours in</li> <li>normal conditions</li> </ul>
<ul> <li>Drive wheel model should be CIMA 24V 850W</li> </ul>
<ul> <li>Power absorption with lifted front wheel should be 12-14Ah (forward);</li> <li>5-7Ah (back)</li> </ul>
• 4 x 6V - 180 Ah – heavy duty battery,

		1200 avalaa abayda
		1200 cycles should be 245x190x285
		mm ( 32,6 Kg each)
	•	24V -240 Ah heavy duty battery, 1500 cycles should be 219 Kg
	•	Type of filter (STANDARD) should be Polyester bag filter T352-SA, 350 g/m <sup>2</sup>
	•	Total filtering area should be 2.5 sq\mts.
		Type of filter (OPTIONAL) should be Polyester bag filter coated with polyurethane T452 NOVATES, 470 g/m²
	•	Total filtering area should be 2.5 sq\mts.
	•	Drive should be Drive on front

	wheels
	<ul> <li>Brake should be Drum breaks on rear wheels</li> </ul>
	<ul> <li>Type of wheels should be full rubber, non marking</li> </ul>
	<ul> <li>Number of wheels should be 3</li> </ul>
	<ul> <li>Front wheel should be Ø 250x101 (rubber tyre)</li> </ul>
	<ul> <li>Rear wheels should be Ø mm 250x80 (3004 super- elastics tyre)</li> </ul>
	<ul> <li>Average level of acoustic pressure should be Lpm = 72,07 Db</li> </ul>
	<ul><li>Acoustic power level should be Lwa = 87,45 Db</li></ul>
	<ul> <li>Granted acoustic power level should</li> </ul>

		be Lwa,g = 90 Db
		<ul> <li>Acoustic pressure level at the operator's ear should be 74 Db</li> </ul>
		<ul> <li>should have Reduction refuse boxes kit</li> </ul>
		<ul> <li>should have</li> <li>Second side brush</li> <li>(left)</li> </ul>
		<ul> <li>should have Reverse speed acoustic signal</li> </ul>
		<ul> <li>should have PVC bumper</li> </ul>
		<ul> <li>should have On- board vacuum cleaner</li> </ul>
		<ul><li>should have Hourmeter</li></ul>
		<ul> <li>should have</li> <li>Special polyester</li> <li>bag filter M- ex</li> <li>USGC" CLASS -</li> <li>coated with</li> </ul>

	T	T	
			polyurethane
			<ul> <li>should have Metal panel protection kit</li> </ul>
			<ul> <li>Should have a safety battery device: Should have a led indicator.</li> </ul>
			<ul> <li>After app one minute the brush motors should stop and shall have to go for battery recharge.</li> </ul>
			<ul> <li>Should be able to cover an area of 10,000 sq mtr per hour.</li> </ul>
			<ul> <li>Should have a polyester bag filter as it has longer life.</li> <li>Also, it filters fine dust.</li> </ul>
			<ul> <li>Should have a floating / self levelling main brush as it can be</li> </ul>

quickly adjusted. • should have atleast 85 Its debris container as it reduces downtime for debris disposal. Should have low noise not more then 80 Db. Thus ensures low noise. • Traction drive on front wheel helps reduction in power consumption, batte ry autonomy increases, reduction in sound level • Battery indicator to display amount of charge left, and red signal indicates need for immediate charging. • Chopper box for safety, in case of excess power

				drawn due to any issues chopper box will turn of switch  and defuse power to protect eleccircuit from damage,
				<ul> <li>Easy access to remove main brush assembly,saves time and labour during brush maintainence.</li> </ul>
				<ul> <li>Fibre core of main brush in creases durability</li> </ul>
				<ul> <li>separate switch for forward and reverse movement</li> </ul>
3	Cold Water High Pressure Jet	Pressure Washing	1	<ul> <li>Should have a Total Stop System, i.e., On the release of the gun trigger, the motor should stop immediately to avoid damage during the by pass</li> </ul>

Т	 T	T
		phase.
		<ul> <li>On pulling trigger the jet should start automatically immediately to provide maximum pump protection.</li> </ul>
		<ul> <li>Should have a         wobble plate         system to minimise         moving elements         and prevent wear         &amp; tear</li> </ul>
		<ul> <li>Should have a separate detergent tank with low pressure detergent suction through VENTURI effect, to lower the operating pressure of the machine.</li> </ul>
		<ul> <li>The motor pump should have Three ceramic pistons brass pump</li> </ul>
		Should have     Glycerine pressure

gauge  Should have Hi-Pressure Hose Reel.  The machine should have an option of sand blasting.  Operating pressure should be between 725 to 1740 psi  Delivery rate should be between 650 to 700 l/h  Power consumption should be upto 3.2 kW  Machine RPM should be between 2500 to 3000 (Min and Max respectively)  Machine weight should be between 28 KG to 32 KG  Operating voltage	 	 	
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should be between 28 KG to 32 KG			should be between 2500 to 3000 (Min and Max
Operating voltage			should be between
			<ul> <li>Operating voltage</li> </ul>

				should be 240 V ~ 50 Hz
				<ul> <li>Power cable length minimum 5 Meter</li> </ul>
				<ul> <li>Should be a         pressure regulator         installed to         increase or         decrease pressure         based on surface         type to prevent         damage to the         surface</li> </ul>
				<ul> <li>Detergent tank should be inbuilt</li> </ul>
				<ul><li>Motor should be of 4 HP</li></ul>
				<ul> <li>Machine dimension should be of 59 x 37 x 87 cm</li> </ul>
4	Battery operated Walk Behind automatic scrubber drier	Automatic Scrubbing & Drying	4	Theoretical perfomance - 1290 m²/h Working width - 43 cm
	With Remote monitoring system enabled.			Squeegee width 69 cm Forward Cleaning speed
				-3.5Km/Hr

Solution tank (nominal) -40 Ltr Recovery tank (nominal) 40 Ltr Nominal consumption 900 W Rated Voltage 24 V Battery Capacity -50-70 Ah/C5 Battery run time -2 h Machine weight ready for use 155 to 160 Kg Dimensions (L x W x H) 116x47.5x119.5 cm Turning circle 1.12 m Brush system 1 x 43 cm Brush pressure 40 /43 Kg Brush diameter 43cm Cable length of battery charger 3 m Sound level 58 dB(A) Intelliflow and Intellitrail System Enabled The Auto Scrubber should be **Enabled with Intellitrail** and Intelliflow System so as to save maximum water and have proper fleet management system Brush Design-Shuould

follow floor profile, Asymmetric position allows edge close cleaning in right side Squeegee - V shaped squeezee and Flexible suspension. Four side usage of blade. Manuarability- Dual axle system and ball bearing wheels. Daily maintenance points- are marked with yellow color. Dirt sieve available and recovery tank is plain to clean easily. Bigger chemical filling opening in Tank and integrated product dosing device. 3cm clearance of Brush while transport managed by foot pedal **Automatic** water/solution stoppage while machine stop. Operator can controll all the functions without leaving working position. Vacuum motor is

				positioned top on machine and Suction motor is covered with single & joint free material, so high protection from water spillage.  Click mechanism to remove the squeezee easily.
5	Single disc floor scrubbing machine	Floor Scrubbing	8	Should have closed handle, with ergonomic design which Gives protection to hands. Also, gives high electrical safety due to double insulation.
				<ul> <li>Double safety lock to ensure safety, and wire loop to prevent damage to the wire/machine</li> </ul>
				<ul> <li>Adjustable and foldable handle for easy mobility and ease of use</li> </ul>
				Should have a

Floating pad drive to ensure a constant working pressure and enables the machine to be used on uneven floors • Cleaning solution distribution shall be from the centre of the pad. This ensures that the whole surface of the pad is utilised. Machine should be capable of multiple applications, so that wet scrubbing, Stripping, Buffing, spray cleaning and crystallisation can be done. Vacuum Unit and Suction Skirt facility should be available. This ensures, that the dust emission in to

the air is prevented

				and can operate without vacuum cleaner also.
				Working width    should be of 43 cm
				<ul> <li>165 RPM speed         with 42 Kg of         weight</li> </ul>
				<ul> <li>Vertical clearance should be 31.5 cm</li> </ul>
				<ul> <li>Nominal consumption to be 1100 watts</li> </ul>
				<ul> <li>Cable length should be at least 15 meter</li> </ul>
				<ul> <li>Must be free from HAVS (WEF), with certification ENV 25349</li> </ul>
				<ul> <li>Noise level should not be more that 57db</li> </ul>
6	Wet & Dry vacuum cleaner	Wet & Dry vacuum cleaning	3	<ul> <li>Container capacity should be 22Liter in wet operation</li> </ul>

	<ul> <li>Container capacity in dry operation should be 28 Liter</li> </ul>
	<ul> <li>Machine Container volume should be 45 Liter</li> </ul>
	<ul> <li>Machine Weight with cable should be 10.5 Kg</li> </ul>
	<ul> <li>Sound level should be maximum 64 db</li> </ul>
	<ul> <li>Nominal consumption of power should be 1000Watts</li> </ul>
	<ul> <li>Vacuum created should be 22KPa</li> </ul>
	<ul> <li>Max air flow should be 60 L/S</li> </ul>
	<ul> <li>Dimensions should be 390x630x440</li> </ul>
	<ul><li>Cable length minimum</li><li>10m</li></ul>
	<ul> <li>Suction hose length should</li> </ul>

				<ul> <li>be 2.2m</li> <li>Must have         Castors, 5 in             number for easy             and smooth             portability     </li> </ul>
				<ul> <li>Castor diameter should be 50mm</li> </ul>
				<ul><li>Protection class must be Class II</li></ul>
				<ul> <li>SEV, OVE certifications are must</li> </ul>
7	Backpack Dry vacuum Cleaner	Above floor surface/false roof/ electrical fixture etc dry	8	<ul> <li>Machine should be with multiple nozzle system for different applications.</li> </ul>
		vacuuming		<ul> <li>For easy carrying, weight with cable should not be any more than 5.9 KG</li> </ul>
				<ul> <li>Should have inbuilt strap system for easy wearing</li> </ul>

				<ul> <li>Dustbag should be of 4.7 Liter capacity.</li> </ul>
				<ul> <li>Sound level should not be more than 78 db</li> </ul>
				<ul> <li>Vacuum pressure shall not be less than 20 KPa</li> </ul>
				<ul><li>Power consumption should be 900 Watts</li></ul>
				<ul> <li>Suction hose length should be minimum 2 meters</li> </ul>
				<ul> <li>Electric cable length shall be 15 meters or more.</li> </ul>
				<ul> <li>Sound level should be than 79db</li> </ul>
8	Upright Vacum Cleaner	Carpet Vacumming	2	Working Width cm 50 Dust bag capacity 4 Ltr
				Weight with cable 8.3 kg Sound level 69 dB(A)
				Power consumption

920 W Vacuum 16 kPa Air flow up to 45 Itr/sec **Dimensions** 260 x 500 x 1200 mm Cable length minimum 10 m Brush speed 4500 rpm Brush adjustment variable max 10 mm

Special features Filtration 5 stage (Double filter paper dust bag, washable filter, exhaust air filter and carbon brush filter) Heigh to be adjustable Should have a provision for height adjustment. Hepa filter should be available Motor system Dual motor system should be available so as to ensure excellent airflow along with mechanical action. should be Usage able to use in vertical and horizontal position

				too. System indications to show when dustbag is full or the brush setting in incorrect.
9	Foam Generator	Carpet Shampooing	1	Tank Capacity 1.7 gallon Power 230 V Sound Level 62 dB(A) Key Features Carpet dry time under 30 minutes for interim cleaning Dry foam brush with glide plate help in protecting the carpet by reducing drag and increasing cleaning and drying efficiency. Efficiency - water reduction should reduce water reduction over > 80 % as compared to traditional wet extraction method. Down time reduction > 80% Allows quicker room occupancy / usage of the treated carpet. Carpet and Rug Institute approval Assures the performance and quality cleaning.

		Foam Volume Control
		Should have
		mechanisim to control
		the amount of dry foam
		coming out of the
		machine.
		In built filter mechanism
		To remove
		impurities from the
		solution which improves
		machines usage life /
		performance.

Details of tools to be Deployed.

1.			Manual	
			Use as per	TASKI / FILMOP
	Dry Mop Set	24	schedule	
2.			Manual	
			Use as per	TASKI / FILMOP
	Damp Mop Set	24	schedule	
3.			Manual	
	Microfibre Duster		Use as per	TASKI / FILMOP
	– Red	24	schedule	
4.			Manual	
	Microfibre Duster		Use as per	TASKI / FILMOP
	– Blue	330	schedule	
5.			Manual	
	Microfibre Duster		Use as per	TASKI / FILMOP
	- Green	10	schedule	
6.			Manual	
			Use as per	TASKI / FILMOP
	Wet Mop set	24	schedule	
7.	Wringer Trolley	24	Manual	TASKI / FILMOP

			Use as per	
			schedule	
			Manual	
8.	Taski By Diversey		Use as per	TASKI / FILMOP
	- Smart Trolley	5	schedule	,
	,		Manual	
9.			Use as per	TASKI / FILMOP
	Telescopic Pole	2	schedule	·
			Manual	
10.			Use as per	TASKI / FILMOP
	Glass Cleaning Kit	5	schedule	
			Manual	
11.	Hi roof cleaning		Use as per	TASKI / FILMOP
	kit	5	schedule	
			Manual	
12.	Window Washer		Use as per	TASKI / FILMOP
	& Squeezee	24	schedule	
			Manual	
13.	Signages	24	Use as per	TASKI / FILMOP
			schedule	
	Glass Scraper-Clip		Manual	
14.	scraper with 10	1	Use as per	TASKI / FILMOP
	blades		schedule	
			Manual	
15.		5	Use as per	TASKI / FILMOP
	Jobby Dust Pan		schedule	
			Manual	
16.		5	Use as per	TASKI / FILMOP
	Carry Basket		schedule	
17.	Bio degradable	As	As per	Bio Degradable
	garbage bag	required	schedule	DIO DEBIGGORE
18.	Metal Ladder	As	As per	ISI Mark

		Required	schedule	
19.	Bucket	As Required	As per schedule	Standard Product
20.	Mug	As Required	As per schedule	Standard Product
21.	Spray Bottle with trigger	40	As per schedule	TASKI / UNGER
22.	Squeezee Bottle	30	As per schedule	TASKI / UNGER
23.	Floor Squeezee	30	As per schedule	TASKI / UNGER
24.	Sonet Disinfection system	2	As per schedule	TASKI / UNGER

9.