B.S. Abdur Rahman Crescent Institute of Science & Technology
Deemed to be University u/s 3 of the UGC Act, 1956

17.3.14 a – Progress against SDG14 – Ecosystem

(i) Sewage Treatment Plant

(ii) Water Treatment Plant

(iii) Plastic Free Campus

(iv) Water Quality Report

(v) Certification

LIQUID WASTE MANAGEMENT - SEWAGE TREATMENT PLANT – 500KLD

- 2 nos. of Sewage treatment plants of 250KLD capacity are available, one for Men's Hostel and one for Institute campus. The STP is of Eco-Bio Block type. The treated water is used for landscaping and toilet flushing purpose.
- The sewage treatment plant is working on the principle of attached growth aerobic system (Eco-Bio bricks) followed by sand filter and carbon filter. The treated water is having a COD about 100 mg/L and BOD about 16 mg/L.

DETAILS OF SEWAGE TREATMENT PLANTS

Location	Capacity	Remarks
College campus	250KLD	Commissioned in 2003 as a 150KLd plant. Revamped and capacity increased to 250KLD in 2015
Men's Hostel	250KLD	Commissioned in 2014

DETAILS OF WASTEWATER GENERATION

S.No	Location	Total water collected	Water recycled	% of water reutilized
1	College campus	250 KL	220KL	90
2	Men's Hostel	250 KL	220KL	90

MIRA CARBON SEWAGE TREATMENT PLANT

Our Institute has established MIRA CARBON SEWAGE TREATMENT PLANT of **2** m^3 capacity in association with M/S.Kanyo Group of Companies to treat domestic wastewater generated from the Institute.

Mira carbon sewage treatment plant

POTABLE WATER SUPPLY

BSA Crescent Institute of Science and Technology has Reverse Osmosis (RO) Plant to provide drinking water to the college and hostel. The entire college campus is facilitated with pure Reverse Osmosis (RO) drinking water with water coolers in every block to cater to the need of pureand safe drinking water to all. We have 44,500 liters / day RO systems installed in the campus and water dispensers are available in each floor in every building. Our water treatment plants provide safe drinking water at every tap on the campus. A high level of maintenance attention and regular testing ensure the quality of the water. Water treatment plant with reverse osmosis technology is available to provide quality drinking water.

RO DRINKING WATER PLANTS

S.No	Location	Capacity Liters/Hr	Working Hours Per day	Qty. of Treated Water in liters
1	University Main Plant-Near to Main block	1500	6	9000
2	Science Block Terrace	1000	5	5000
3	Ladies Hostel New block Terrace	500	5	2500
4	Men's Hostel Dining Hall	2000	4	8000
5	Men's Hostel Service block	2000	5	10000
6	Aeronautical Block terrace	500	2	1000
7	Life Sciences block terrace	500	2	1000
8	New architecture terrace	2000	4	8000
Total treated Water		**10000**		**44500**

KBA MEN'S HOSTEL RO PLANT

TBAK LADIES HOSTEL NEW BLOCK TERRACE RO PLANT

AERONAUCTICAL BLOCK RO PLANT

ARCHITECTURE BLOCK RO PLANT

WATER DISPENSER / COOLER

WATER TREATMENT PLANT

PROTECTED WATER SUPPLY

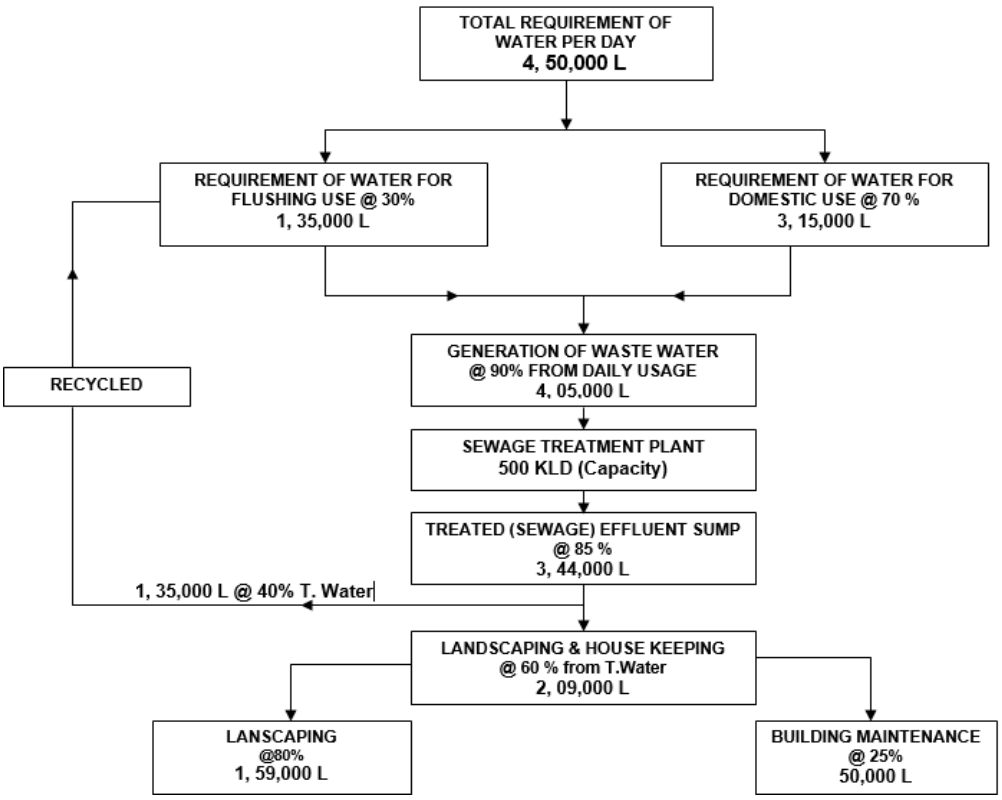
Water Treatment plants are provided - 5 Nos. at various places in the campus to treat the water before use in toilets, quarters, Men's Hostel & Ladies hostel.

The capacity and quantity of water treated by each plant is tabled below.

S.NO	LOCATION	CAPACITY	WORKING HOURS	REMARKS
1	New staff Quarters	$5m^3/hr$	10	Commissioned in Apr -2016
2	New ladies hostel	$5m^3/hr$	12	Commissioned in Aug -2016
3	Men's hostel service block	$10m^3/hr$	18	Commissioned in Aug -2016
4	VC Villa	$1m^3/hr$	4	Commissioned in Jan -2017
5	Life Science block	$5m^3/hr$	8	Commissioned in Aug -2017
Total Treated Water		**3,35,000 Liters per day**		

WATER TREATMENT PLANT

Water Balance Chart



sl. No	Water Consumption / Day Occupants	Occupancy in Nos	consumption/day in liters
1	College Student day scholars 45 lit/day @ 70% usage	3700	116550
2	Ladies Hostel 125 lit/day	470	58750
3	Men's Hostel 125 lit/day	1400	175000
4	Miscellaneous (1)College/ staff 45 lit/day	400	18000
	(2)Estate office staff 30lit/day	350	10500
	(3) General workers	280	8400
	(4) Kitchen and canteen	50	10000
5	Quarters 125lit/day	400	50000
		7050	447200
6	Floating @ 5%	**7403**	10575
	Total water consumption/day in liters		**4,57,775**
	Avg water consumption per capita/day		**62**

RAIN WATER HARVESTING

- B.S Abdur Rahman Crescent Institute of science and technology is one of the pioneers in implementing solutions to save water.
- The institute has implemented rain water harvesting system in the campus with a strong desire to utilize the rain water at maximum extent.
- The Institute has taken tremendous efforts to reduce the water consumption and also to treatthe wastewater generated within the campus so that it can be effectively reused for gardeningand toilet flushing.
- In the forefront to save water, our institute of science and technology has initiated and executed the rainwater harvesting in the campus.
- Rainwater harvesting facility is done in all blocks to collect rainwater from the roof of all buildings.
- The harvested water is diverted to open wells in institute campus, Men's Hostel and ladies hostel.
- The placement of rainwater facility within the campus is decided upon by considering the profile of the land so as to drain the maximum amount of water collected with ease.
- In the buildings, sufficient plumbing connections are provided to trap the rain water from theroof tops.
- Underground connections are ensured to connect the collected water from the roof top to therainwater recharge pit.
- It was also ensured that the rainwater harvesting structures are constructed as per the norms.
  The recharge pit provided to collect the rain water is series of filter bed.

- This initiative took shape when the institute faced shortage of water during summer. Cost of buying water was becoming a financial burden. The only alternative to the water crisis was to use the available water more effectively.
- The features of the recharge pit are described below.

- A mesh is provided at the inlets of rain water pipes so that solid waste/debris is prevented B.S.Abdur Rahman Crescent Institute of Science and Technology has taken initiatives to install rain water harvesting pits in the campus from entering the pit system.
- The recharge pits are of size 2m x 2m x 2m is excavated

- The recharge pit comprises different set of filter media. The filter media comprises of thick layers of boulders at the bottom followed by layers of gravels and coarse sand.
- This enables the filtration of water and also prevents the deposition of silt on the recharge pit.
- Access Manhole frames and covers are provided.

- The rain water is also stored in Underground sumps of Life Science block, Mechanical Science Block and New Staff Quarters.

RAIN WATER HARVESTING STRUCTURES AND UTILIZATION IN THE CAMPUS

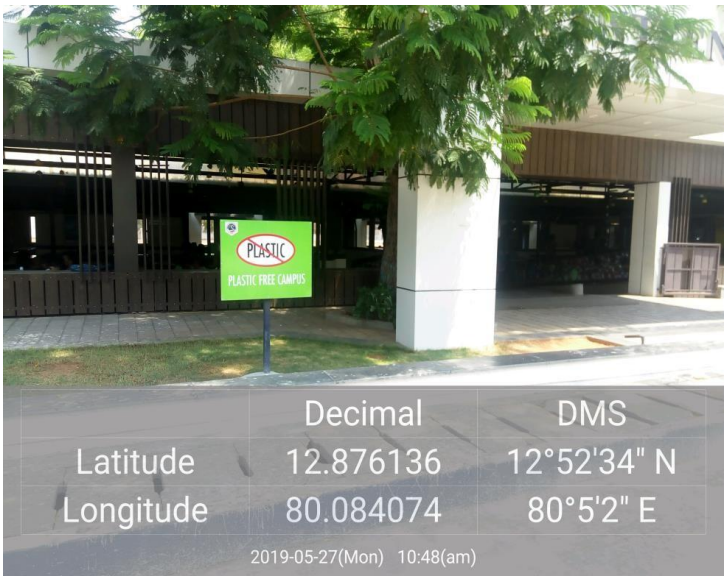
B.S.Abdur Rahman Crescent Institute of Science and Technology has taken initiatives to install rainwater harvesting pits in the campus.

Rain Water Harvesting

Rainwater harvesting facility is done in all blocks to collect rain water from the terrace. The harvested water is diverted to open wells in institute campus, Men's Hostel and ladies hostel. The rain water is also stored in Underground sumps of Life Science block, Mechanical Science Block and New Staff Quarters. The rain water is stored after passing through the pre-filter as shown in Figure below.

S.No	CAMPUS/BLOCKS	Number of Rain Water Harvesting	Quantity of Water Collected(L)
1	College/Life Sciences Block	1	10000(Approx)
2	New Architecture Block	1	10000 (Approx)
3	Computer Science block	1	10000 (Approx)
4	Pharmacy Block	1	10000 (Approx)

PLASTIC FREE CAMPUS



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- A policy is in place to convert our campus into a Plastic-free campus. Within the context of our Green campus policy we commit to ban the use of plastics, to reduce the environmentalimpact of waste plastics.
- Usages of plastics are avoided in the canteen by serving the food in the steel plates.

Policy for water reuse

B.S.Abdur Raham Crescent Institute of Science and Technology has a firm policy for water reuse. Water reuse generally denotes the process of capturing wastewater, stormwater, or greywater and treating it as required for a designated beneficial uses such as drinking, or surface or ground water replenishment. The water reuse in the Institute is looked upon in two aspects

(i) Recylcing of the treated water from the sewage treatment plant for benefial purposes like gardening and toilet flushing

(ii) Harvesting of the Rain water

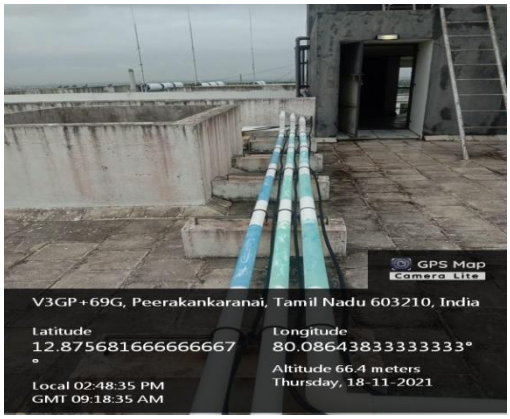
Some of the key points of the Policy is given below

Main objective : The Institute should be a Zero Dischrage campus

- Proper collection and treatment of wastewater generated in the Institute
- Regular monitoring for the quality of the treated water
- Recycling the treated water for gardeneing and toilet flushing by providing dual plumbing system
- Frequent inspection and maintenance of the STP
- Rainwater harvesting in all blocks of the Institute
- Maintenance of infrastructure facility provided for rain water harvesting
- Provision of sufficient storage structures to store rain water
- Ensuring that there are minimum wasteage of water in the campus by using advanced monitoring facilities such as sensors
- Ensuring the planting of drought tolerant plants for the water conservation
- Improving the landscapes of the Institute thereby ensuring a natural water conservation through plants

PRACTICES OF WATER REUSE ACROSS THE UNIVERSITY

SPRINKLER SYTEM- REUSE WATER



TOILET FLUSHING WITH REUSE WATER –DUAL PLUMBING

RAINWATER COLLECTION, STORAGE AND REUSE

B.S. Abdur Rahman Crescent Institute of Science & Technology
Deemed to be University u/s 3 of the UGC Act, 1956

RECYCLED WATER DETAIL 2016-2020				
S.No	Month/ year	No of Loads	Total Qty in Liters	Quantity of treated water in Ltrs
1	Nov'16	1709	17090000	12170000
2	Dec'16	1467	14670000	10576000
3	Jan'17	1269	12690000	10506800
4	Feb'17	1501	15010000	12429000
5	March'17	1765	17650000	13586000
6	April'17	1531	15310000	12124000
7	May'17	1539	15390000	12663000
8	June'17	1105	11050000	7745000
9	July'17	1278	12780000	7249000
10	Aug'17	1756	17560000	13668000
11	Sept'17	1608	16080000	13461000
12	Oct'17	1676	16760000	14585000
13	Nov. 2017	1318	1,31,80,000	1,35,86,000
14	Dec. 2017	1294	1,29,40,000	1,36,68,000
15	Jan. 2018	1213	1,21,30,000	1,11,60,000
16	Feb. 2018	1209	1,20,90,000	1,17,80,000
17	Mar. 2018	1281	1,28,10,000	1,20,90,000
18	Apl. 2018	1236	1,23,60,000	1,24,00,000
19	May. 2018	1301	1,30,10,000	1,34,61,000
20	June. 2018	954	95,40,000	81,24,000
21	July. 2018	1334	1,33,40,000	1,13,15,000
22	Aug. 2018	1327	1,32,70,000	1,16,25,000
23	Sep. 2018	1288	1,28,80,000	1,20,90,000
24	Oct. 2018	1427	1,42,70,000	1,10,05,000
25	Nov. 2018	1294	1,29,40,000	1,08,50,000
26	Dec. 2018	1026	1,02,60,000	9,54,000
27	Jan. 2019	1169	1,16,90,000	1,07,80,000
28	Feb. 2019	1527	1,52,70,000	1,19,35,000
29	Mar. 2019	1709	1,70,90,000	1,20,90,000
30	Apl. 2019	1374	1,37,40,000	1,21,52,000
31	May. 2019	1448	1,44,80,000	1,21,83,000
32	June. 2019	873	87,30,000	82,20,000
33	July. 2019	1305	1,30,50,000	1,00,75,000
34	Aug. 2019	1158	1,15,80,000	1,11,91,000
35	Sep. 2019	1360	1,36,00,000	1,12,84,000
36	Oct. 2019	1262	1,26,20,000	1,13,46,000
37	Nov. 2019	1233	1,23,30,000	1,15,94,000
38	Dec. 2019	963	96,30,000	76,56,000
39	Jan. 2020	1028	1,02,80,000	1,12,53,000
40	Feb. 2020	1403	1,40,30,000	1,14,39,000
41	Mar. 2020	1194	1,19,40,000	1,16,56,000
42	Apl. 2020	479	47,90,000	49,35,000
43	May. 2020	589	58,90,000	54,31,000
44	June. 2020	561	56,10,000	45,55,000
45	July. 2020	408	40,80,000	4,45,000
46	Aug. 2020	471	47,10,000	4,49,000

The water quality reports for the well water, raw water and RO water is given below

QUALITY REPORT OF WELL WATER

EKDANT ENVIRO SERVICES (P) LIMITED

NABL Accredited & MoEF Recognised Laboratory

An ISO 9001 : 2008 and OHSAS 18001 : 2007 Certified Company

No.R-7/1, AVK Tower, North Main Road, Anna Nagar West Extn., Chennai - 600 101. India

Phone : 044 - 2615 3349 / 4856 2349 Mobile : 9444411178

E-mail : ekdantlab@gmail.com / info@ekdantlab.co.in

Web : www.ekdantlab.co.in

TEST REPORT

Sample Ref No. : EES/W/140/08	Report No. : 450/08
Issued To: **M/s. B.S. Abdur Rahman Crescent University, Seethakathi Estate, G.S.T Main Road, Vandalur, Chennai-600 048.**	Report Date : 28.08.19 Page 1 of 2
Sample Description : Water Sample Drawn By/ Date : EES / 23.08.19 Customer's Reference : Letter Dated on 23.08.19 Sample Mark : Well Water Sampling Procedure : EES/QM/MSP/02	Received On : 23.08.19 Commenced On : 23.08.19 Completed On : 28.08.19

Sl. No	PARAMETERS	UNITS	RESULTS	As Per IS 10500:2012 Requirement (Acceptable limit)	As Per IS 10500:2012 Permissible limit in the absence of alternate source	PROTOCOL: APHA 23rd Edition 2017
	Physical Properties					
1	Appearance When Analyzed After Filtration	-	Clear Clear	-	-	-
2	pH value at 25°C	-	6.53	6.5 – 8.5	6.5 – 8.5	4500 H^+ B
3	Color	Hazen	2.0	5	15	2120 B
4	Odor	-	Agreeable	Agreeable	Agreeable	IS 3025 P 5 1983 R 2012
5	Turbidity	NTU	0.2	1	5	2130 B
6	Electrical conductivity at 25°C	Micromhos/cm	2096	-	-	2510 B
	Chemical Properties					
7	Total Suspended Solids	mg/l	BDL (DL=1.0)	-	-	IS:3025: P.17:1984:R.2012
8	Total Dissolved Solids	mg/l	1290	500	2000	IS 3025 P 16:1984:R.2012

----End of Page 1----

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3. Unless informed by the customer the test items will not be retained for more than 10 days from The date of issue of test report (exceptional for Microbiology and wastewater for which retaining time 7 days.)

TEST REPORT – ADDITIONAL SHEET

Sample Ref No. : EES/W/140/08

Report No. : 450/08
Report Date : 28.08.19

Sl. No	PARAMETERS	UNITS	RESULTS	As Per IS 10500:2012		PROTOCOL: APHA 23rd Edition 2017
				Requirement (Acceptable limit)	Permissible limit in the absence of alternate source	
9	Total Hardness as $CaCO_3$	mg/l	776	200	600	2340 C
10	Calcium Hardness as $CaCO_3$	mg/l	545	-	-	3500 - Ca B
11	Magnesium Hardness as $CaCO_3$	mg/l	231	-	-	3500 – Mg^{2+} D
12	Calcium as Ca	mg/l	218	75	200	3500 - Ca B
13	Magnesium as Mg	mg/l	55.0	30	100	2340 C
14	Phenolphthalein Alkalinity as $CaCO_3$	mg/l	Nil	-	-	2320 B
15	Total Alkalinity as $CaCO_3$	mg/l	168	200	600	2320 B
16	Chlorides as Cl	mg/l	386	250	1000	4500 Cl^- B
17	Sulfates as SO_4	mg/l	255	200	400	4500 SO_4^{2-} E
18	Total Iron as Fe	mg/l	0.08	0.3	0.3	3500 Fe- B
19	Silica (Reactive) as SiO_2	mg/l	39.0	-	-	4500 SiO_2 C
20	Carbonate Hardness as $CaCO_3$	mg/l	168	-	-	2340 A
21	Non-Carbonate Hardness as $CaCO_3$	mg/l	608	-	-	2340 A
22	Free Residual Chlorine	mg/l	BDL (DL=0.1)	0.2	**1	4500 Cl B

BDL= Below Detectable Limit, DL= Detection Limit.

** To be applicable only when water is chlorinated.

---End of Report---

EKO GANT ENVIRO SERVICES (P) CHENNAI 600 101.

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QUALITY REPORT OF RAW WATER

B.S. Abdur Rahman Crescent Institute of Science & Technology
Deemed to be University u/s 3 of the UGC Act, 1956

TEST REPORT – ADDITIONAL SHEET

Sample Ref No. : EES/W/141/08

Report No. : 451/08
Report Date : 28.08.19
Page: 2 of 2

Sl. No	PARAMETERS	UNITS	RESULTS	As Per IS 10500:2012		PROTOCOL: APHA 23rd Edition 2017
				Requirement (Acceptable limit)	Permissible limit in the absence of alternate source	
9	Total Hardness as $CaCO_3$	mg/l	1101	200	600	2340 C
10	Calcium Hardness as $CaCO_3$	mg/l	394	-	-	3500 - Ca B
11	Magnesium Hardness as $CaCO_3$	mg/l	707	-	-	3500 – Mg B
12	Calcium as Ca	mg/l	158	75	200	3500 - Ca B
13	Magnesium as Mg	mg/l	170	30	100	2340 C
14	Phenolphthalein Alkalinity as $CaCO_3$	mg/l	Nil	-	-	2320 B
15	Total Alkalinity as $CaCO_3$	mg/l	329	200	600	2320 B
16	Chlorides as Cl	mg/l	444	250	1000	4500 Cl^- B
17	Sulfates as SO_4	mg/l	510	200	400	4500 SO_4^{2-} E
18	Total Iron as Fe	mg/l	0.16	0.3	0.3	3500 Fe- B
19	Silica (Reactive) as SiO_2	mg/l	41.0	-	-	4500 SiO_2 C
20	Carbonate Hardness as $CaCO_3$	mg/l	329	-	-	2340 A
21	Non-Carbonate Hardness as $CaCO_3$	mg/l	772	-	-	2340 A
22	Free Residual Chlorine	mg/l	BDL (DL=0.1)	0.2	**1	4500 Cl B

BDL= Below Detectable Limit, DL= Detection Limit.
** To be applicable only when water is chlorinated.

---End of Report---

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Deemed to be University u/s 3 of the UGC Act, 1956

QUALITY REPORT OF RO WATER

EKDANT ENVIRO SERVICES (P) LIMITED

NABL Accredited & MoEF Recognised Laboratory
An ISO 9001 : 2008 and OHSAS 18001 : 2007 Certified Company
No.R-7/1, AVK Tower, North Main Road, Anna Nagar West Extn., Chennai - 600 101. India
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E-mail : ekdantlab@gmail.com / info@ekdantlab.co.in
Web : www.ekdantlab.co.in

TEST REPORT

Sample Ref No. : EES/W/142/08	Report No. : 452/08
Issued To: **M/s. B.S. Abdur Rahman Crescent University, Seethakathi Estate, G.S.T Main Road, Vandalur, Chennai-600 048.**	Report Date : 28.08.19 Page: 1 of 2
Sample Description : Water Sample Drawn By/ Date : EES / 23.08.19 Customer's Reference : Letter Dated on 23.08.19 Sample Mark : RO Water Sampling Procedure : EES/QM/MSP/02	Received On : 23.08.19 Commenced On : 23.08.19 Completed On : 28.08.19

Sl. No	PARAMETERS	UNITS	RESULTS	As Per IS 10500:2012 Requirement (Acceptable limit)	As Per IS 10500:2012 Permissible limit in the absence of alternate source	PROTOCOL: APHA 23rd Edition 2017
	Physical Properties					
1	Appearance When Analyzed After Filtration	-	 Clear Clear	 -	 -	-
2	pH value at 25°C	-	6.52	6.5 – 8.5	6.5 – 8.5	4500 H^+ B
3	Color	Hazen	1.0	5	15	2120 B
4	Odor	-	Agreeable	Agreeable	Agreeable	IS 3025 P.5 1983 R.2012
5	Turbidity	NTU	BDL (DL=0.1)	1	5	2130 B
6	Electrical conductivity at 25°C	Micromhos/cm	65.0	-	-	2510 B
	Chemical Properties					
7	Total Suspended Solids	mg/l	BDL (DL=1.0)	-	-	IS 3025: P.17:1984 R.2012
8	Total Dissolved Solids	mg/l	39.0	500	2000	IS 3025:P.16:1984 R.2012

----End of Page 1----

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TEST REPORT – ADDITIONAL SHEET

Sample Ref No : EES/W/142/08

Report No. : 452/08
Report Date : 28.08.19
Page: 2 of 2

Sl. No	PARAMETERS	UNITS	RESULTS	As Per IS 10500:2012		PROTOCOL: APHA 23rd Edition 2017
				Requirement (Acceptable limit)	Permissible limit in the absence of alternate source	
9	Total Hardness as $CaCO_3$	mg/l	4.0	200	600	2340 C
10	Calcium Hardness as $CaCO_3$	mg/l	2.0	-	-	3500 - Ca B
11	Magnesium Hardness as $CaCO_3$	mg/l	2.0	-	-	3500 – Mg B
12	Calcium as Ca	mg/l	0.80	75	200	3500 - Ca B
13	Magnesium as Mg	mg/l	0.48	30	100	2340 C
14	Phenolphthalein Alkalinity as $CaCO_3$	mg/l	Nil	-	-	2320 B
15	Total Alkalinity as $CaCO_3$	mg/l	12.0	200	600	2320 B
16	Chlorides as Cl	mg/l	17.0	250	1000	4500 Cl^- B
17	Sulfates as SO_4	mg/l	2.0	200	400	4500 SO_4^{2-} E
18	Total Iron as Fe	mg/l	BDL (DL=0.05)	0.3	0.3	3500 Fe- B
19	Silica (Reactive) as SiO_2	mg/l	3.0	-	-	4500 SiO_2 C
20	Carbonate Hardness as $CaCO_3$	mg/l	4.0	-	-	2340 A
21	Non-Carbonate Hardness as $CaCO_3$	mg/l	Nil	-	-	2340 A
22	Free Residual Chlorine	mg/l	BDL (DL=0.1)	0.2	**1	4500 Cl B

BDL= Below Detectable Limit, DL= Detection Limit.

** To be applicable only when water is chlorinated.

Report Opinion: The above submitted water sample complies with acceptable limits of drinking water specification as per IS 10500:2012 with respect to the above tests.

—End of Report—

EKOANT ENVIRO SERVICES (I) LTD. CHENNAI 600 101

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EKDANT ENVIRO SERVICES (P) LIMITED

NABL Accredited & MoEF Recognised Laboratory
An ISO 9001 : 2008 and OHSAS 18001 : 2007 Certified Company
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E-mail : ekdantlab@gmail.com / info@ekdantlab.co.in
Web : www.ekdantlab.co.in

TEST REPORT

Sample Ref No : EES/W/142/08	Report No : 452/08
Issued To: **M/s. B.S. Abdur Rahman Crescent University, Seethakathi Estate, G.S.T Main Road, Vandalur, Chennai-600 048.**	Report Date : 28.08.19 Page: 1 of 1
Sample Description : Water Sample Drawn By/ Date : EES/ 23.08.19 Customer's Reference : Letter Dated on 23.08.19 Sample Mark : RO Water Sampling Procedure : EES/SOP/MB/006	Received On : 23.08.19 Commenced On : 23.08.19 Completed On : 28.08.19

Sl. No	PARAMETERS	UNITS	RESULTS	Requirement as per IS 10500: 2012 Second revision (Acceptable Limit)	PROTOCOL
			MICROBIOLOGICAL EXAMINATION		
1	Total Coliforms	MPN / 100ml	Absent	Shall not be detectable in any100 ml	IS:1622-1981 Amd.4 RA 2012
2	E.coli	MPN / 100ml	Absent	Shall not be detectable in any100 ml	IS:1622-1981 Amd.4 RA 2012

MPN- Most Probable Number
Report Opinion: The above submitted water sample meets the requirement of drinking water specification as per IS 10500:2012 with respect to the parameters tested.

---End of Report---

EKDANT ENVIRO SERVICES (P) LTD CHENNAI 600 101

★ Authorized Signatory

NOTE: 1. Test results shown in this test report relate only to the items tested.
2. This test report shall not be reproduce anywhere except in full and in same format without the Approval of the laboratory
3. Unless informed by the customer the test items will not be retained for more than 10 days from The date of issue of test report (exceptional for Microbiology and wastewater for which retaining time 7 days.)

B.S. Abdur Rahman Crescent Institute of Science & Technology
Deemed to be University u/s 3 of the UGC Act, 1956

EKDANT ENVIRO SERVICES (P) LIMITED

NABL Accredited & MoEF Recognised Laboratory
An ISO 9001 : 2008 and OHSAS 18001 : 2007 Certified Company
No.R-7/1, AVK Tower, North Main Road, Anna Nagar West Extn., Chennai - 600 101. India
Phone : 044 - 2615 3349 / 4856 2349 Mobile : 9444411178
E-mail : ekdantlab@gmail.com / info@ekdantlab.co.in
Web : www.ekdantlab.co.in

TEST REPORT

Sample Ref No. : EES/W/141/08 | Report No. : 451/08

Issued To: **M/s. B.S. Abdur Rahman Crescent University, Seethakathi Estate, G.S.T Main Road, Vandalur, Chennai-600 048.** | Report Date : 28.08.19 | Page 1 of 2

Sample Description : Water
Sample Drawn By/ Date : EES / 23.08.19
Customer's Reference : Letter Dated on 23.08.19
Sample Mark : Raw Water
Sampling Procedure : EES/QM/MSP/02

Received On : 23.08.19
Commenced On : 23.08.19
Completed On : 28.08.19

Sl. No	PARAMETERS	UNITS	RESULTS	As Per IS 10500:2012 Requirement (Acceptable limit)	As Per IS 10500:2012 Permissible limit in the absence of alternate source	PROTOCOL: APHA 23rd Edition 2017
	Physical Properties					
1	Appearance: When Analyzed / After Filtration	-	Clear / Clear	- / -	- / -	-
2	pH value at 25°C	-	7.43	6.5 – 8.5	6.5 – 8.5	4500 H^+ B
3	Color	Hazen	5.0	5	15	2120 B
4	Odor	-	Agreeable	Agreeable	Agreeable	IS 3025 P.5 1983 R.2012
5	Turbidity	NTU	0.4	1	5	2130 B
6	Electrical conductivity at 25°C	Micromhos/cm	2716	-	-	2510 B
	Chemical Properties					
7	Total Suspended Solids	mg/l	BDL (DL=1.0)	-	-	IS 3025: P.17:1984 R.2012
8	Total Dissolved Solids	mg/l	1780	500	2000	IS 3025:P.16:1984 R.2012

—End of Page 1—

EKDANT ENVIRO SERVICES (P) LTD. CHENNAI 600 101

Authorized Signatory

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CERTIFICATE

The Institute has also received sanitary certificate from Department of Public health, Tamilnadu Government. It has been certified that there is a good water management and sanitation in the Institute.

DEPARTMENT OF PUBLIC HEALTH AND PREVENTIVE MEDICINE

SANITARY CERTIFICATE

(Under the Tamilnadu Education Rules)

Appendix - 3

(Chapter III Rules - 24)

I hereby declare that I have inspected the **B.S. ABDUR RAHMAN CRESCENT INSTITUE OF SCIENCE & TECHNOLOGY,** located at G.S.T. Road, Vandalur, Chennai–600048, Chengalpattu Taluk, Kancheepuram District -as been inspected on 13th Wednesday November 2019 and certify

- That the accommodation provided for each of the several division is sufficient and is properly ventilated and lighted.
- That the building is maintained in substantial repair.
- That is neat and clean.
- That the supply of drinking water is wholesome.
- That the latrine and urinal arrangements are adequate for both sex and good.
- That in all other necessary aspects the sanitation is good.

Conditions:

- The College Authority should banned the Cigarette and other Tobacco products in the campus and visible board to be displayed – COTP Act 2003.
- This certificate is valid for one year from the date of issue.

R. No. : **4807 / A2 / 2019**
Dated : **15.11.2019**

Block Health Supervisor,
Kattankulathur Block,
Nandhivaram - 603 202

15 NOV 2019

COUNTERSIGNED

15/11/19

DEPUTY DIRECTOR OF HEALTH SERVICES,
KANCHEEPURAM DISTRICT,
SAIDAPET @ CHENGALPATTU

To

The Principal,
B.S. ABDUR RAHMAN CRESCENT INSTITUE OF SCIENCE & TECHNOLOGY,
G.S.T. Road, Vandalur, Chennai–600048,
Chengalpattu Taluk,
Kancheepuram District.