

Index for

Any other relevant document to support the claim (if any)

Sl. No.	Name of the Activity	Documents Attached
1.	Alternative sources of energy and energy conservation measures	<ul style="list-style-type: none">i. Brief Report on alternate sources of energy and energy conservation.ii. Email from AMC service vendor regarding energy generation data of both the inverter.iii. Energy generation data sheet from January 2018 to March 2024 of 1st inverter.iv. Energy generation data sheet from January 2018 to March 2024 of 2nd inverter.v. Total Energy generation data sheet from January 2018 to March 2024 of both the inverters.
2.	Management of the various types of degradable and non- degradable waste	<ul style="list-style-type: none">i. Brief Report on management of the various types of degradable and non-degradable waste.
3.	Water conservation	<ul style="list-style-type: none">i. Mechanism of Rain Water Harvesting System and its technical specification.
4.	Green Campus	<ul style="list-style-type: none">i. Green Campus Initiatives Policy
5.	Disabled-friendly, barrier free environment	<ul style="list-style-type: none">i. Plan for ramp for easy access to class rooms.



Sammilani Mahavidyalaya

(NAAC ACCREDITED B++)

[AFFILIATED TO CALCUTTA UNIVERSITY]

E. M. BYPASS, BAGHAJATIN,
KOLKATA - 700 094

Phone : 2462-6869

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principal.sammilani@gmail.com

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Ref.No.....

Date

7.1.2 The Institution has facilities for alternate sources of energy and energy conservation measures

The Institution installed a solar power generating unit at the roof top of the college building on 3rd March, 2016 which was sponsored by the Ministry of Power, Government of West Bengal. The solar power generation unit of 20 KW comprising 80 solar panels generates 35 to 40 units of electricity per day. Installation of this solar panel has reduced the consumption of electricity to a considerable extent. The institution has an annual maintenance contract of the Solar PV System with Galilei Solar India Pvt. Ltd, Kolkata.

The institution has a sensor-based switch for energy conservation at the eastern entrance gate. The College has already taken the initiatives to replace the conventional lighting system into LED lighting system. Normal tube lights have been replaced with LED tube lights and also all incandescent bulbs have been replaced with LED bulbs. Besides, CESC Ltd. has installed a smart-meter in the college premises to ensure monitoring and managing electricity consumption and save money.

Jana
27.8.23

Principal

(Dr. Chandan Kumar Jana)
Principal
Sammilani Mahavidyalaya
E. M. Bypass, Baghajatin
Kolkata - 700 094

ATTESTED
Jana
Principal
Sammilani Mahavidyalaya
E.M. Bypass, Baghajatin
Kolkata-700 094

Fwd: Sammilani Mahavidyalaya _generation data

1 message

principal sammilani <principal.sammilani@gmail.com>

Mon, Apr 15, 2024 at 10:49 AM

To: SRIKANTA MALAKAR <srikanta.malakar75@gmail.com>, Sangitadey Sarkar <sds2310@gmail.com>

----- Forwarded message -----

From: **Service Centre GalileoSolar** <support@galileosolar.in>

Date: Sat, 13 Apr, 2024, 1:39 PM

Subject: Sammilani Mahavidyalaya _generation data

To: <principal.sammilani@gmail.com>

Cc: Satasri Dutta <contact@gptronics.com>, Prasun Neogy <prasun@pulsepower.net>, Sudipta Ghosh <sudipta.ghosh@pulsepower.net>

Respected sir,

Please find the attached generation data of both the inverter.

For any queries please feel free to contact us.

Thanks & Regards,**Sumita Paul****Service Coordinator****Mobile : +91 9051761100** Description: Description: Description: galileo solar logo 300.eps**4 attachments** galileosolar  image001.png
5K **Sammilani Mahavidyalaya_Total Generation data.xlsx**
19K **Sammilani 94.xlsx**
20K **Sammilani 95.xlsx**
20K

Energy generation data of 1st Trimester (Sammitani 94)

Sammitani 94

Date	Jan,18	Feb,18	Mar,18	Apr,18	May,18	June,18	July,18
1	26979	31974	44074	33842	42709	15571	40184
2	42080	38702	48647	34508	45384	40575	38118
3	39079	40690	44902	49915	47802	45570	19641
4	39183	43626	46478	50780	42557	31071	23889
5	43232	39684	40011	50619	47564	33181	9543
6	41055	41114	42446	45480	40286	45317	37027
7	42730	44476	51553	28654	36171	35824	38258
8	39265	25116	51015	49888	44337	44071	38144
9	42773	35476	43387	44834	39891	32847	28698
10	43625	33788	48892	46419	29894	28936	24662
11	36451	33144	48504	49219	43422	28496	43363
12	27828	48239	39483	41330	46729	32792	33722
13	29391	39768	45142	51275	32586	46532	34015
14	26477	44297	50178	49217	46868	45048	33654
15	33484	48944	41133	51321	49083	46315	40948
16	39428	48186	14830	50384	22597	47475	33659
17	40239	38423	46986	48620	46125	24037	28139
18	38295	43525	42231	35926	37023	45685	42559
19	38381	43773	50845	50817	48367	32436	18406
20	39666	38749	45578	50929	32961	18642	37490
21	38797	44333	48504	47162	43726	26442	20807
22	44570	41547	41292	33977	32789	31915	20269
23	40446	47505	38754	38746	23645	14995	16398
24	37006	46914	28287	50651	44032	9634	24483
25	36925	44075	33991	45371	39294	3807	11686
26	37161	42528	30608	40900	43267	27269	7778
27	36848	39627	38889	50777	47610	28949	22090
28	39374	36937	45365	41707	37974	38108	25489
29	40761		46388	49592	42283	38878	24259
30	40763		38304	33371	44426	35974	25051
31	40459		29296		33016		16095
Total generation in Wh	1182751	1145160	1305993	1346231	1254418	976392	858524
Total generation in kWh(Wh/1000)	1182.751	1145.16	1305.993	1346.231	1254.418	976.392	858.524

Aug,18	Sept,18	Oct,18	Nov,18	Dec,18	Jan,19	Feb,19	Mar,19
9667	31504	46096	49831	25841	39233	34353	55203
20440	10683	47295	33604	32758	39441	35024	53845
18537	31399	44137	31358	30779	33980	41435	42111
37585	27301	45180	41748	37483	36862	40000	21607
16248	36335	38696	38154	35752	40630	44076	24744
26635	23315	34523	35367	28859	46338	37174	28719
33977	40234	28861	5843	30757	44446	31054	45797
41532	41285	37230	35476	33126	36057	31274	49821
30049	50431	36077	37437	36568	31295	27564	49618
34821	47510	19501	39896	38762	33409	49875	34009
39045	33082	22233	47022	30685	36978	50418	29752
38192	31691	7001	43639	30578	35444	47364	43338
34869	33705	17730	39532	34001	35696	43928	34711
35526	26013	41489	31003	33245	22189	39217	38595
28828	32758	40266	38091	21483	34157	37025	30574
29244	37117	49950	39875	11406	46676	25010	37206
41251	33017	43693	36768	9636	41676	40811	39899
47949	43666	44086	37465	8584	35674	39816	31899
6611	43548	42376	33907	46851	36248	41724	47146
32379	16627	44023	29751	39871	35655	37875	45563
27404	13100	43850	32910	39160	33302	44177	50944
30113	31904	42002	35942	36291	30902	43300	44881
41474	49772	40096	36166	35788	37098	43791	47353
22127	38995	24631	31490	37454	34671	46535	55943
13708	33105	46857	27920	39615	36518	14653	50855
46515	33730	42215	32919	38457	31040	13899	43068
31367	24101	42647	40134	35649	28338	35106	45791
34273	32701	26743	41848	38672	17752	21863	44831
31519	27943	15613	46480	40743	30958		45678
26713	49592	16616	26299	40655	43021		38794
21720		51334		39843	37097		48199
930318	1006164	1123047	1077875	1019352	1102781	1038341	1300494
930.318	1006.164	1123.047	1077.875	1019.352	1102.781	1038.341	1300.494

12.0TL01517194

Apr,19	May,19	June,19	July,19	Oct,22	Nov,22	Dec,22	Jan,23
47175	42511	45493	31548		44784	36697	14465
42767	27577	30253	28705		43718	33148	17241
47966	8051	44414	39066		30018	30884	19817
39471	25329	41366	44176		38847	33298	18862
29287	46394	8128	28769		41462	32875	22533
48947	48351	34773	28884		36937	32413	25790
45656	50076	23448	21914		32217	27983	23550
40475	49033	42152	36782	8950	39022	23070	23557
47701	47380	39396	38334	36345	33759	28549	23867
15	47171	37402	32659	46368	36372	21436	25459
42311	47583	41971	20735	39557	36759	28067	22356
41643	43478	37705	32959	44479	35113	26835	23488
49399	39514	43505	36916	42839	41280	25835	18615
44391	43705	36894	42614	21495	41998	25655	14645
37284	44762	25588	34213	48622	38287	29943	15290
38819	49448	45936	23698	47652	37308	32976	17497
38231	46120	20245	48505	48475	36180	29099	15965
45122	43912	29614		44614	34202	20479	11211
31625	37116	47685		27724	41848	22524	16416
48639	40794	36226		41294	32734	21230	19803
45137	43157	23636		45103	39729	21906	17093
49841	41934	39633		47507	39283	22230	15617
49761	37435	42555		20211	37470	27326	26891
49357	42200	43672		4899	39498	24136	28808
49671	27380	42319		45381	38767	23400	27775
46045	43869	49002		34613	37085	22955	35185
45461	48056	41580		34283	35686	21530	36999
48158	47225	22032		29333	36850	15595	37293
49136	45477	23058		39654	30203	27328	42632
49644	46092	30183		46460	36357	18873	35737
	42304			43497		21575	24908
1289135	1293434	1069864	570477	889355	1123773	809850	719365
1289.135	1293.434	1069.864	570.477	889.355	1123.773	809.85	719.365

Feb,23	Mar,23	April,23	May,23	June,23	July,23	Aug,23	Sept,23	Oct,23
27292	38359	23570	26574	38438	11709	28974	34762	24447
45634	40342	51197	51043	34328	39843	22014	20159	16440
43967	45201	49621	30713	39817	36013	36506	37393	14261
44713	43986	48411	29405	42272	36598	30281	19125	10255
43501	43297	46350	43592	45785	38135	25371	31496	20980
42853	42061	46437	36288	40913	21297	9039	40137	27066
41429	40939	45517	47343	33555	28962	11028	25431	40453
36252	28471	41461	44232	23741	39830	24871	12677	39010
33555	31469	42429	39342	25553	43519	28275	40950	39657
37965	18074	41491	42241	30478	25964	16843	40739	41531
38927	27525	40929	44558	37871	30735	31733	35666	37879
40321	34819	46479	34211	29266	30586	22199	29726	27196
45726	34680	44223	29924	42811	36536	23211	31376	39885
39953	28511	43021	38181	42614	23896	33038	10895	31391
34886	30396	34893	40933	39078	32484	21497	20114	42868
33129	31444	35492	43772	37788	30349	30414	42306	32970
21703	15148	37868	45502	37171	26691	22692	51790	28147
10077	19130	34850	38566	13802	37028	29164	25822	28374
33735	20318	38650	42113	11812	31747	37088	36141	43982
33183	36593	38210	45024	27930	40933	42991	10372	46507
33701	34805	27217	43049	29130	24418	41285	8283	46223
42632	41857	40160	45648	22894	21056	26543	17011	35766
46520	41435	29852	40729	37887	38342	26218	24847	19231
36427	43182	28730	38344	28212	28565	26526	19118	31939
32469	44550	37908	45040	28940	28914	5287	38269	34230
38155	42137	44765	42643	19176	29791	17019	38204	34267
37122	37700	41142	34188	25068	34073	42619	39785	21122
37982	41993	43457	44838	7283	31224	39830	25297	29628
	36900	39016	37372	16444	19583	24348	8704	38238
	39378	36542	40497	36728	44435	32571	8337	34089
	20922		38351		27815	20928		42827
1033809	1075622	1199888	1244256	926785	971071	830403	824932	1000859
1033.809	1075.622	1199.888	1244.256	926.785	971.071	830.403	824.932	1000.859

Nov,23	Dec,23	Jan,24	Feb,24	Mar,24
40482	37771	36331	6910	39178
31367	32558	37660	30727	36285
27017	26440	41198	37826	35150
29927	14781	34224	42138	34659
27719	10297	34095	34438	44494
39767	14428	30936	25031	45935
32534	3978	30072	35526	15278
33483	10601	31309	43831	46844
31683	38234	35795	47707	50417
33866	37169	33419	46602	48037
32300	39810	30609	41241	45375
35423	35227	38228	32571	28224
41709	36615	38933	26102	34723
40472	30168	34927	32663	24137
34629	34990	27947	29791	40011
7712	37757	31299	34244	32344
13566	37671	28102	40458	25854
36614	32109	5571	35960	23633
42377	32240	23760	33712	22545
35288	34216	35473	33129	8220
31719	33405	9925	35539	34534
30917	29292	36028	22181	37812
32649	24885	36130	37947	42863
32163	31672	13502	32620	44119
32965	31647	27420	21229	39738
38613	29833	38858	41490	42411
27438	25622	37572	37531	42301
33568	27595	33809	42518	42436
20688	32956	36452	41210	36857
27650	35855	33341		35443
	40024	25072		39834
956305	919846	967997	1002872	1119691
956.305	919.846	967.997	1002.872	1119.691

Energy generation data of 2nd Inverter (Sammitani 95)

Date	Jan,18	Feb,18	Mar,18	April,18	May,18
1	27129	32805	44483	33982	42629
2	42275	38877	48964	34764	44819
3	39306	41012	45301	50348	47442
4	39462	44043	46437	51082	42056
5	43641	38402	38802	50956	47110
6	41657	39595	43380	45784	40118
7	43133	42717	52527	28980	37600
8	39137	24202	52002	50110	45921
9	42594	34194	44470	45177	41328
10	43582	32406	49942	46696	30984
11	36598	32005	49865	49467	45127
12	27904	48017	40493	41454	47070
13	29657	39667	46287	51538	32823
14	26742	44300	47902	49542	47381
15	33839	49039	41074	51847	49499
16	39453	48509	15045	50292	22904
17	40685	38867	48057	48570	46663
18	38647	43838	42403	35946	37169
19	38776	43755	51415	50628	48803
20	40105	38984	46024	50731	33217
21	39323	44499	48740	47217	44091
22	45008	42069	41526	33955	33020
23	40964	47782	39026	38522	23938
24	37560	47366	28519	50872	44485
25	37424	44479	34249	45238	39627
26	37651	42762	31017	40755	43724
27	37471	39643	39383	50704	48088
28	40109	37180	45972	41829	38493
29	41798		46959	49659	42531
30	41780		38808	33416	44889
31	41651		29581		33218
Total generation in Wh	1195061	1141014	1318653	1350061	1266767
Total generation in kWh(Wh/1000)	1195.061	1141.014	1318.653	1350.061	1266.767

June,18	July,18	Aug,18	Sept,18	Oct,18	Nov,18	Dec,18
15708	2505	5973	0	46406	49757	26206
40891	38285	16898	347	47732	33619	33140
45886	0	945	27505	45029	31259	31150
31237	339	2186	36616	45451	42037	37436
33375	0	14246	23431	38954	38393	36006
44558	0	0	40493	34826	35521	29061
35177	0	0	41550	29032	5973	30913
43913	0	0	50714	37381	35615	33378
32786	0	6359	47883	36124	37498	36821
29024	0	0	33218	19721	40200	38966
28745	0	0	31905	22369	46925	30946
32888	0	0	34044	7071	43633	31015
747	0	0	26129	17859	39594	34336
7981	0	0	32786	41821	31115	33583
5097	0	0	37240	40408	38383	21755
0	7669	0	33049	50273	40217	11598
0	0	0	43810	43786	36947	9732
0	0	0	43823	44286	37565	8685
0	37611	0	16866	42763	34064	46865
0	20982	0	13270	44263	30117	39758
0	0	0	32262	43917	33185	39376
0	0	0	50153	42220	36252	36441
0	0	0	39330	40360	36637	36015
192	0	0	33143	24751	32056	37650
0	0	0	33915	47077	28236	39928
0	0	0	24224	41961	32236	38806
0	0	0	32836	42929	40162	36015
0	0		28216	26906	42018	38630
0			50165	15754	46584	41066
				16749	26598	40737
				51169		39890
428205	107391	46607	938923	1129348	1082396	1025904
428.205	107.391	46.607	938.923	1129.348	1082.396	1025.904

12.OTL01517195

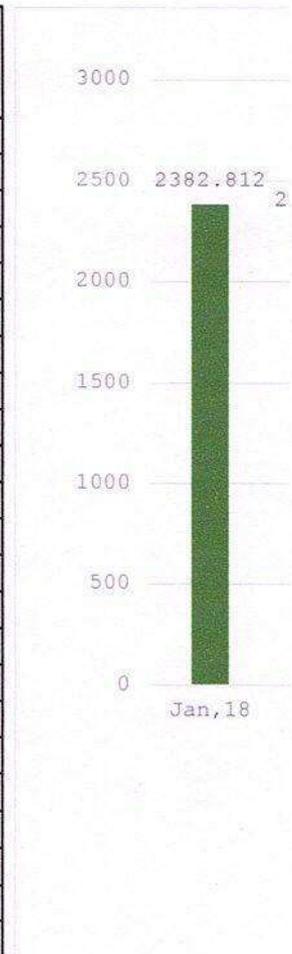
Jan,19	Feb,19	Mar,19	April,19	May,19	June,19	July,19	Oct,22	Nov,22
39333	34762	54768	46792	42353	45522	31531		43607
39659	35615	53525	42724	27622	30225	28745		42592
34152	40768	42209	47982	8140	44565	39078		29473
36955	39982	21702	39647	25283	41487	44070		38173
40723	44227	24599	29469	46329	8213	28684		40626
46358	37241	28597	48811	48471	34700	28979		36379
44553	31086	45648	45625	50031	23395	21950		31610
36344	31386	49942	40504	48989	42062	36706	8810	38113
31655	27741	50365	47472	47413	39580	38327	35298	32813
33560	49876	34190	16	47220	37665	32682	45332	35534
37223	50390	29787	42290	47699	42180	20786	38590	36051
35646	47386	43611	41782	43444	37872	32968	43395	34362
35879	44139	34827	49242	39629	43473	37005	41867	40380
22558	39495	38606	44500	43660	36829	42836	20988	41120
33826	37366	30535	37251	44717	25689	34232	47462	37600
46471	25216	37338	38897	49420	45974	23692	45761	36739
41859	40954	39640	38052	46143	20447	48369	47101	35585
35743	39841	32061	45182	44007	29648		43510	33728
36288	41935	47197	31936	36937	47543		27043	40940
35755	38184	45482	49088	40643	36090		40236	31982
33695	43901	50846	45199	43400	23677		43924	39023
31155	43408	44917	49653	41947	39635		46171	38951
37408	43570	47299	49823	37534	42497		19828	36942
35041	46287	55911	49341	42324	43698		4820	38990
36929	14734	50887	49692	27473	42391		44233	38397
31541	13862	43127	45918	43933	49034		33705	36955
28710	34809	45993	45380	48210	41641		33594	35689
18190	21689	44898	48124	47375	22153		28562	36794
31500		46184	49087	45493	23031		38711	29930
43478		38899	49687	46129	30103		45208	36499
37464		48157		42439			42603	
1109651	1039850	1301747	1289166	1294407	1071019	570640	866752	1105577
1109.651	1039.85	1301.747	1289.166	1294.407	1071.019	570.64	866.752	1105.577

Dec,22	Jan,23	Feb,23	Mar,23	April,23	May,23	June,23	July,23	Aug,23
15019	36685	26931	37903	23023	25928	37672	11475	28343
18085	33314	44905	40143	50087	49907	33640	39333	21771
20775	30962	43400	44620	48522	30014	39162	35303	36132
19762	33414	44185	43819	47232	28904	41347	35794	30000
23684	33069	43186	42967	45305	42741	45007	37307	25127
27159	32583	42653	41747	45560	35526	40023	20813	8994
24882	28195	41129	40443	44671	46363	32863	28372	10934
24942	22864	36155	28312	40630	43387	23211	39203	24658
25225	28857	33243	31226	41522	38465	24979	42555	28010
26973	21384	37702	17993	40790	41197	29738	25455	16716
23774	28565	38899	27225	40144	43487	37082	30200	31345
25041	27523	40303	34455	45754	33419	28706	30016	22044
19778	26603	45671	34373	43539	29278	41722	35877	23020
15529	26351	39885	28412	42508	37305	41851	23559	32816
16226	30849	34834	30308	34205	40636	38209	31667	21125
18613	34045	33020	31194	34800	42613	36913	29753	30058
16986	30142	21562	14840	37352	44406	36366	26054	22427
11795	21160	10069	18619	34259	37504	13529	36113	28857
17377	23275	33288	19855	38174	41102	11618	31111	36700
21103	21938	32678	35853	37766	43977	27247	40011	42548
18280	22613	33320	33986	26391	42081	28358	23755	40579
16724	23010	41940	40879	39159	44627	22311	20506	26355
26165	28379	45499	40698	29285	39813	36824	37645	25770
28437	25150	36036	42315	28151	37467	27546	28066	26295
27628	24196	31981	43907	36864	44032	28371	28269	5227
35056	23757	37492	41309	43737	41555	18842	29180	16908
36670	22417	36808	36998	40159	33393	24658	33374	42383
37052	16071	37406	41021	42504	43595	7272	30520	39380
42368	28479		36236	38014	36451	16274	19335	24033
35706	19758		38652	35515	39552	35935	43489	32176
24659	22538		20477		37435		27365	20685
741473	828146	1024180	1060785	1175622	1216160	907276	951475	821416
741.473	828.146	1024.18	1060.785	1175.622	1216.16	907.276	951.475	821.416

Sept,23	Oct,23	Nov,23	Dec,23	Jan,24	Feb,24	Mar,24
34478	24170	39998	38024	35822	6797	38700
19921	16249	30982	32929	38191	30342	35986
36888	14073	26768	26729	41198	37257	34951
18885	10062	29770	14584	33949	42081	34342
31139	20772	27560	10150	33993	34232	43966
39621	26744	39162	14265	30893	24945	45125
25125	40082	32319	3884	30305	35223	14988
12567	38424	33258	10505	31679	43527	45848
40367	39354	31526	38146	36058	47406	49520
40129	41112	33636	37220	33304	46378	47204
35076	37520	32091	39675	30704	41110	44607
29241	26808	35250	35471	38585	32370	27813
30692	39564	41228	37168	40109	25847	34286
10736	31188	40279	30539	34564	32319	23825
19804	42579	34421	35145	27479	29525	39280
41337	32527	7634	37857	31291	33873	31833
50613	27633	13398	37504	27950	40281	25423
25368	27956	36416	32184	5494	35779	23250
35417	43262	42309	32433	23517	33667	22188
10209	45714	35347	34633	35376	32969	8123
8222	45394	31821	35153	9807	35133	33535
16856	35203	30936	29705	36441	21935	36976
24541	18958	32627	25392	36122	37176	42082
18868	31327	32144	31919	13552	31919	43330
37759	33873	32969	32215	27125	20829	39252
37447	33889	38746	30583	38836	40698	41573
39187	20834	27762	26144	37575	36950	41653
25013	29151	34027	27783	33777	42194	41844
8608	37843	20938	32962	36382	40582	36307
8206	33570	27859	35223	33235		34824
	42325		39409	24603		39179
812320	988160	953181	925533	967916	993344	1101813
812.32	988.16	953.181	925.533	967.916	993.344	1101.813

Total Energy generation data of both the Inverters (162)

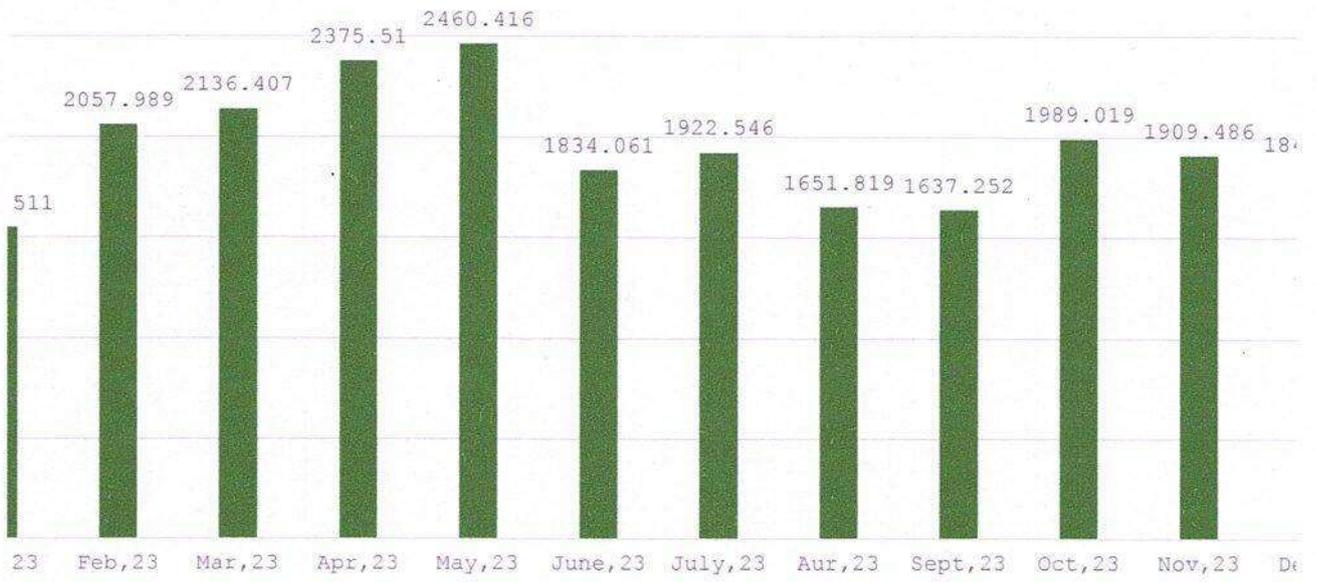
	Inverter 1(12.0TL01517194)	Inverter 2(12.0TL01517195)	Total generation(kWh)
Jan,18	1187.751	1195.061	2382.812
Feb,18	1145.16	1141.014	2286.174
Mar,18	1305.993	1318.653	2624.646
Apr,18	1346.231	1350.061	2696.292
May,18	1254.418	1266.767	2521.185
June,18	976.392	428.205	1404.597
July,18	858.524	107.391	965.915
Aug,18	930.318	46.607	976.925
Sept,18	1006.164	938.923	1945.087
Oct,18	1123.047	1129.348	2252.395
Nov,18	1077.875	1082.396	2160.271
Dec,18	1019.352	1025.904	2045.256
Jan,19	1102.781	1109.651	2212.432
Feb,19	1038.341	1039.85	2078.191
Mar,19	1300.494	1301.747	2602.241
Apr,19	1289.135	1289.166	2578.301
May,19	1293.434	1294.407	2587.841
June,19	1069.864	1071.019	2140.883
July,19	570.477	570.64	1141.117
Oct,22	889.355	866.752	1756.107
Nov,22	1123.773	1105.577	2229.35
Dec,22	809.85	741.473	1551.323
Jan,23	719.365	828.146	1547.511
Feb,23	1033.809	1024.18	2057.989
Mar,23	1075.622	1060.785	2136.407
Apr,23	1199.888	1175.622	2375.51
May,23	1244.256	1216.16	2460.416
June,23	926.785	907.276	1834.061
July,23	971.071	951.475	1922.546
Aur,23	830.403	821.416	1651.819
Sept,23	824.932	812.32	1637.252
Oct,23	1000.859	988.16	1989.019
Nov,23	956.305	953.181	1909.486
Dec,23	919.846	925.533	1845.379
Jan,24	967.997	967.916	1935.913
Feb,24	1002.872	993.344	1996.216
Mar,24	1119.691	1101.813	2221.504

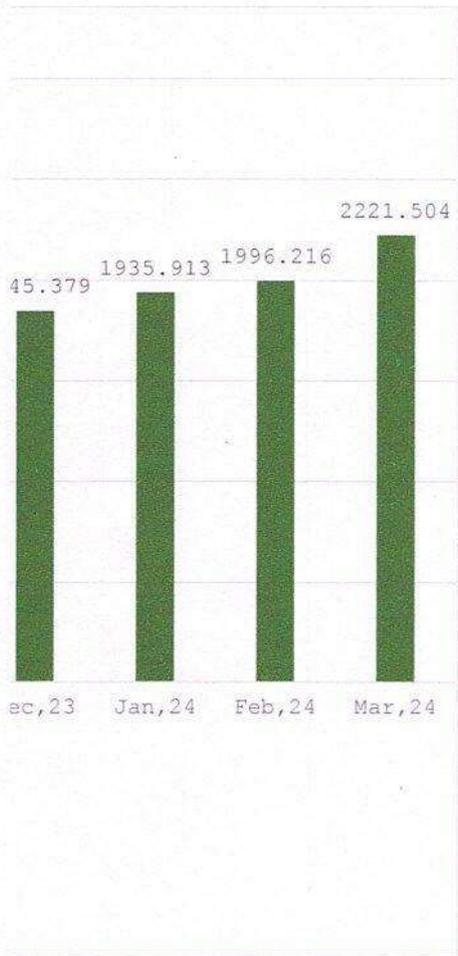




Total generation(kWh)









Sammilani Mahavidyalaya

(NAAC ACCREDITED B++)

[AFFILIATED TO CALCUTTA UNIVERSITY]

E. M. BYPASS, BAGHAJATIN,
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Phone : 2462-6869

E-mail :

principal.sammilani@gmail.com

info@sammilanimahavidyalaya.org

Website :

www.sammilanimahavidyalaya.org

Ref.No.....

Date

Management of the various types of degradable and non- degradable waste

Our institution has adopted various measures to protect the environment, health and well-being of all through implementation of effective waste management practices. Effort has been made to grow consciousness among the students and the staff regarding generating minimum waste. Our house-keeping staff, gardeners, and sweepers are always at work to keep the environment safe and clean.

Solid Waste Management: Solid waste is segregated at the point of collection and then collected by the Kolkata Municipal Corporation. Wastes like plastic, papers, newspapers, metals, glass are properly collected in different waste bins and sold to the appointed agency for recycling. Dustbins of different colours have been installed throughout campus for collection of solid waste. Organic waste from canteen like vegetable peels are used in the vermi-compost production pits.

Liquid waste management: Liquid waste released from toilets and canteen is collected in waste chamber through proper piping and drainage system. Hazardous liquid waste from Chemistry and other laboratories are collected separately and disposed off accordingly.

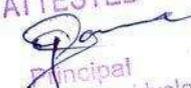
E-waste management: Regular maintenance and repairing of minor defects of electronic gadgets are done. To ensure proper upkeep of computers, laptops, projectors, etc., they are maintained and serviced time to time by appointed agencies. A MoU has been signed between our college and M/S Redivivus Recyclers Private Limited on 20.06.2022 regarding Recycling and Waste Management Services for degradable and non-degradable waste such as paper, cardboard, plastic, metal, led lamp, E-waste and hazardous waste.


27.8.23

Principal

(Dr. Chandan Kumar Jana)
Principal
Sammilani Mahavidyalaya
E. M. Bypass, Baghajatin
Kolkata - 700 094

ATTESTED


Principal
Sammilani Mahavidyalaya
E.M. Bypass, Baghajatin
Kolkata-700 094



ENVIROSPEC
77A/72 Raja S. C. Mullick Road
P.O. Regent Estate
Kolkata – 700 092
Phone: 033 - 2412 1573
E-mail: enspek@gmail.com

Ref: ENPQ/2019 - 21
Date: 08.07.2019

To
The Principle
Sammilani Mahavidyalaya
EM Bypass, Baghajatin
Kolkata : 700094

Sub: Offer for rainwater harvesting system

Dear Sir,

Please refer to discussion had with you regarding rainwater harvesting at your college and our subsequent visit, we are submitting follows our offer.

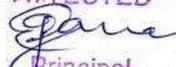
Rainwater Harvesting System:

Rain water harvesting is the process for optimum utilization of rainwater by direct uses in productive system or redirection in storage. As per our preliminary observation and study, the total rooftop catchment area of the building and shed is approximately 340 sq. m and the minimum runoff volume available from the rooftop area is approximately 370 cu. m per annum. This rooftop rainwater can be easily harvested either by reuses or recharges to aquifer subject to techno economical evaluation.

A considerable quantity of water is required in school & colleges and major portion is used in many applications i.e. laboratory, bathroom, toilet, canteen etc. Rooftop rainwater can be easily utilized in these applications by implementing a proper harvesting system. Rain water is basically a natural gift and its quality is as good as RO. So we are proposing here a harvesting system only by reuses in your own applications. We are submitting an offer for a system for rainwater collection & treatment for re-uses based on following considerations.

Basis of consideration

Method of harvesting	: Rooftop runoff water harvesting for reuses
Proposed reuses areas	: Laboratory, Canteen Bathroom & Gardening
Total rooftop catchment area	: 340 Sq. M (approx)
Average annual rainfall	: 1600 mm (considered)
Rooftop RWH potential	: 370 Cu. M per annum (approx)
Peak hourly rainfall intensity	: 25mm/hr at 20 min duration
System description	: Screening, first-flush, collection & filtration
Component	: Drain pipe, strainer, first flush drain, filter, storage.


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Kolkata-700 094

System details:

The roof top rainwater shall be conveyed through a proper piping system by interconnecting raindrop line and the water will be collected in a HDPE storage tank through first flush arrangement. The first part of the rain carries mainly dist particles which will be discharged through the first flush and discharged quantity shall be accordingly adjusted as per design based on study and observation. The collected water will be filtered next through a well design pressure filter for arresting colloidal particles. The filtered water will be transferred to a distribution tank on roof of the canteen building for utilization.

Technical Specification with scope of supply for recycling system

Sr. No	Description	Qty.	Scope of Supply
1	PVC rain pipe laying for interconnection of the rain drop for conveying rainwater from rooftop to de-silting cum storage tank.	60M	Envirospec
2	Incorporating first flush system with leaf strainer at inlet of the primary storage tank	1No.	Envirospec
3	HDPE tank of capacity 2000 liter for de-silting cum primary storage	1 No.	Envirospec
4	Forced filtration system comprising a pressure filter of capacity 1000 liter/hr with feed pump, necessary valve & fittings complete	1Set	Envirospec
5	HDPE tank of capacity 500 liter for filtered water storage at roof of the canteen building	1No.	Envirospec
4	Pipe laying from the final storage to respective building uses as per design	1No	By Customer

Price Schedule

Description	Price
Price for rainwater harvesting system (RWS) comprising pressure filter with feed pump, 2000 liter HDPE primary storage, 500 liter filtered water storage including 60M connecting pipeline with first flush arrangement complete as per scope of work.	Rs. 59,300/-
GST @18%	Rs. 10,674/-
Total	Rs. 69,974/-

NB: 1. The price for conveying pipeline length has been considered 60m. Additional piping if required during final design and installation shall be charged extra at actual.
2. Chlorination system if required for disinfection shall be extra at actual.

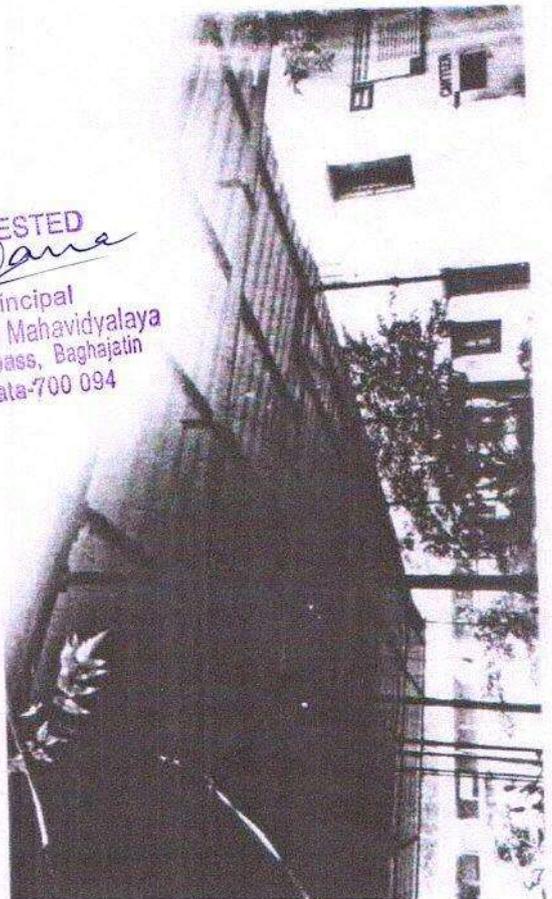
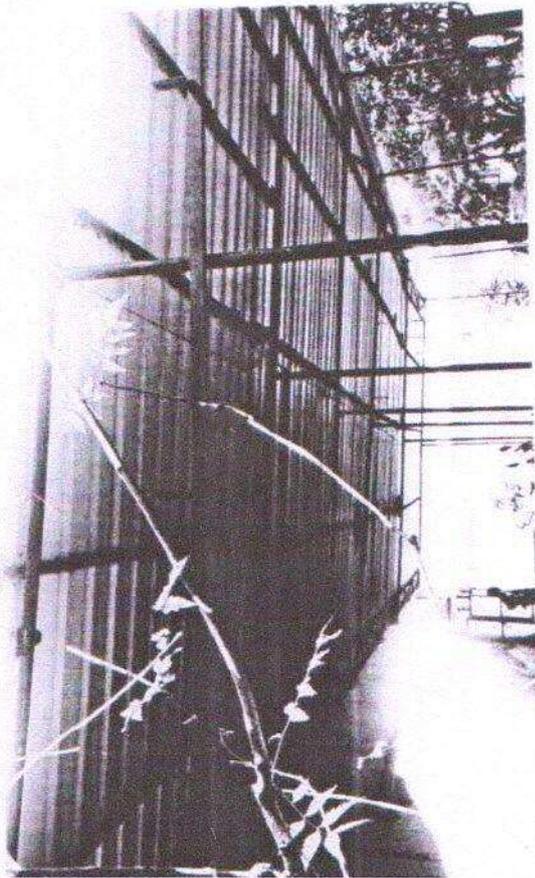
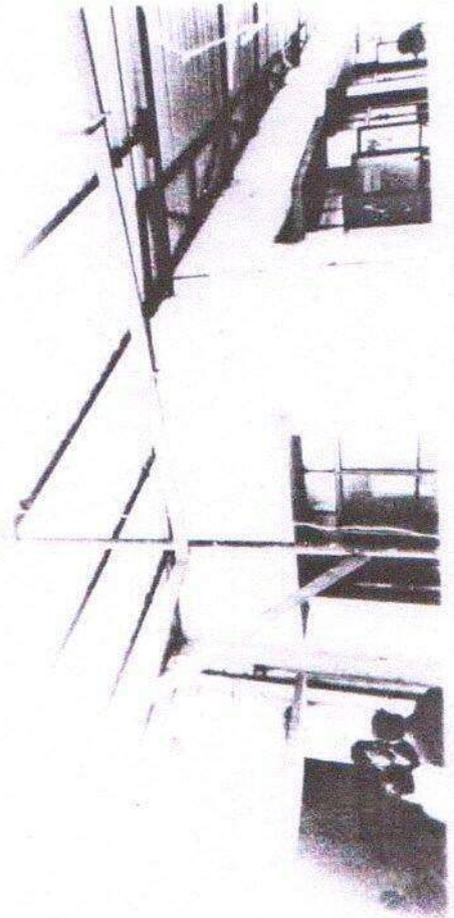
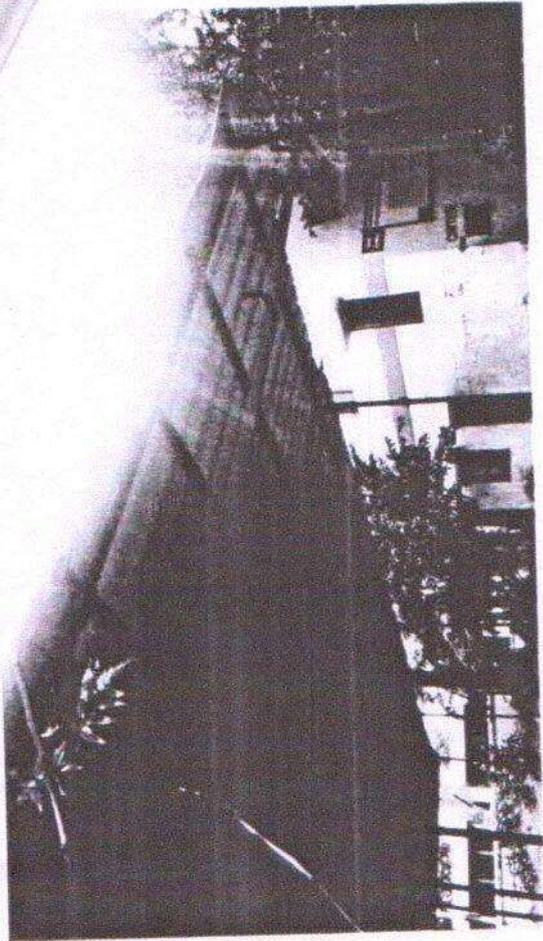
Commercial terms & conditions

Completion period	4 weeks from the date of PO.
Validity	30 days
Payment Terms	70% as advance along with your confirmation. 30% against completion of work.

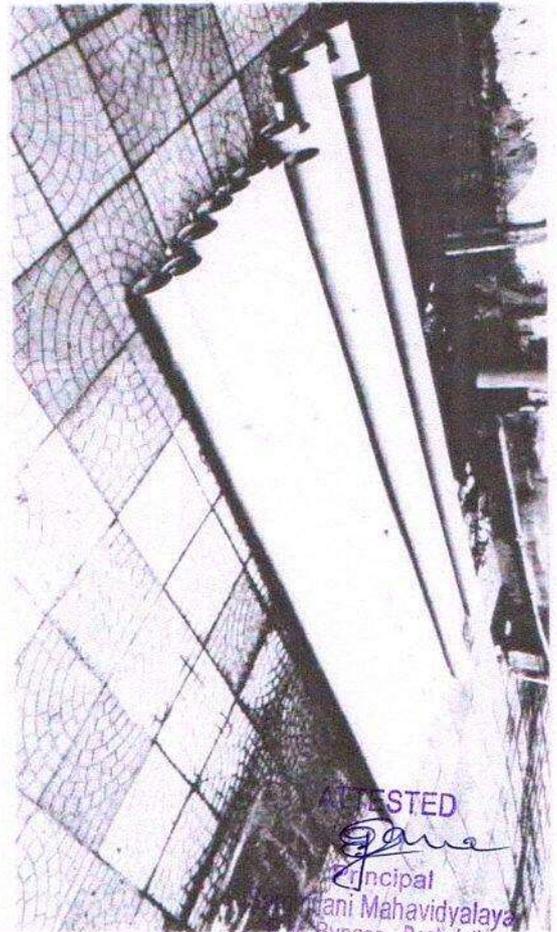
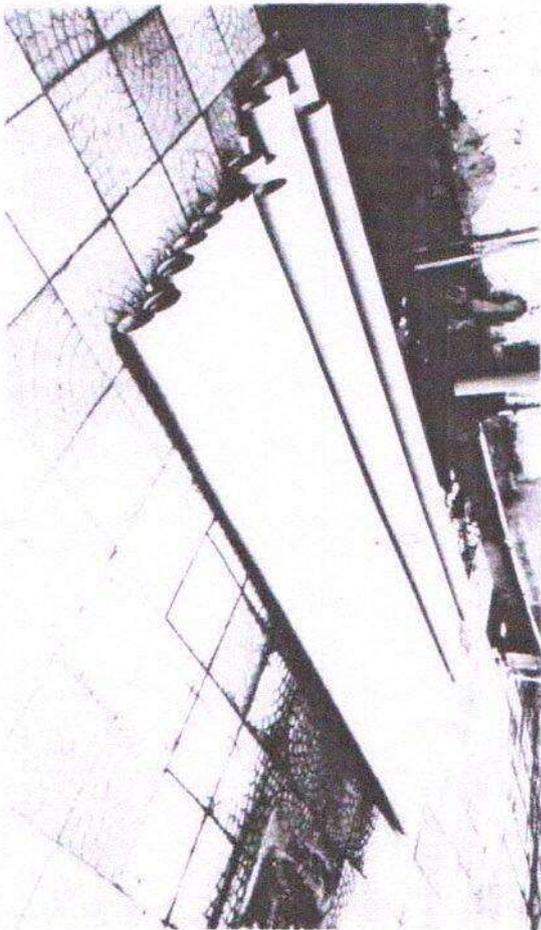
With Regard
For **Envirospec**

Sumit Roy
Mob No: 09830028439

ATTESTED
[Signature]
Principal
Sammilani Mahavidyalaya
E.M. Bypass, Baghajatin
Kolkata-700 094



ATTESTED
Pana
Principal
Sammilani Mahavidyalaya
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Gane
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Sammilani Mahavidyalaya

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Date

GREEN CAMPUS INITIATIVES POLICY (2021-22 to 2025-26)

Context:

Green campus is a concept to build an atmosphere where both environment friendly sustainable living practices and education are combined to promote green initiatives in the campus of an educational institution. This concept gives an institution the opportunity to take the lead in redefining its environmental culture and developing new paradigms by creating sustainable solutions to environmental, social and economic needs of mankind. Studies have shown that students studying in active green campuses have better concentration, retention capacity, environmental behaviors, community solidarity, etc. At Sammilani Mahavidyalaya more than a dozen components pertaining to sustainable development of the environment has been taken under the flagship name of '**SABUJ SAMILANI**'. The main objective is to generate awareness among the students and other stakeholders on how and why to protect the environment.

Scope of the Policy:

Sammilani Mahavidyalaya has shown remarkable awareness in maintaining an eco-friendly campus since its establishment in 1996. The campus is surrounded by lush green environment which is very much conducive for teaching-learning processes and related activities. It has a playground and two separate gardens. A huge area is left in its natural form, and acts as a natural habitat for biodiversity and a large variety of species of grasses, herbs, shrubs and trees.

The focus areas of this policy are:

- Clean Campus Initiatives
- Landscaping Initiatives
- Clean Air Initiatives:
- Preserve medicinal plants and other tree and plants
- Promote delicate biodiversity like butterfly
- ✓ No Smoking Zone
- ✓ No Plastic Zone



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- Infrastructure:
 - ✓ Alternate Sources of Energy (Solar Power Plant)
 - ✓ Installation of Energy Efficiency Equipment like LED bulbs and tubes
 - ✓ Water Conservation through Rainwater Harvesting System and AC machine waste lines
- Waste Management processes:
 - ✓ Solid Waste Management (segregation of biodegradable and non-biodegradable, composting organic waste)
 - ✓ Liquid Waste Management (separation of general and hazardous waste)
 - ✓ E-Waste Management
- Awareness Initiatives
- Environment-centric Activities
- Green Audit
- Environment Audit
- Energy Audit
- Plastic-Free Campus

Objectives of the Policy

- 1) To protect and conserve ecological systems and resources within the campus.
- 2) To ensure judicious use of environmental resources to meet the needs and aspirations of the present and future generations.
- 3) To integrate environmental concerns into policies, plans and programmes for social development and outreach activities.
- 4) To work with all stakeholders and the local community to raise awareness and to seek adoption of healthy environmental practices towards reducing any adverse effect on the environment.
- 5) To continuously improve our contribution to climate protection and adaptation to climate change and to the conservation of global resources.



- 6) To continuously improve the efficient use of all resources including energy and water, and to reduce consumption and the amount of waste produced, recovering and recycling waste where possible.
- 7) To preserve medicinal plants and other trees and plants
- 8) To preserve delicate biodiversity like butterfly through a butterfly garden
- 9) To make the campus plastic free.
- 10) To conduct green, environment and energy audits from time to time.
- 11) To minimize the use of paper in administration by adopting a policy for robust e-governance.

Policy:

Clean Campus Initiatives

The college has pledged to actively coordinate cleanliness activities in the college and beyond the campus in accordance with the vision of Swachh Bharat Abhiyan. It commits to continue with this programme. The broad vision is as follows:

1. Mass awareness will be generated on cleanliness and hygiene amongst the students and the staff members by holding regular cleanliness drives. The idea is to motivate them to contribute in a proactive manner.
2. Activities will be conducted under the NSS unit.
3. Staff Members will be encouraged to participate in the cleanliness drive in the college campus.
4. Events such as poster and slogan competitions, essay writing, spoken word poetry, speeches, skits on cleanliness will be arranged.
5. Pledge by the students and the staff members will be administered towards maintaining cleanliness of the college campus and its surrounding areas on an annual basis.
6. Workshops on 3Rs: Reduce, Reuse and Recycle of waste, will be organized particularly on organic waste management through vermicomposting.
7. Commitment to manage waste and maintain clean campus especially during college events.

Landscaping Initiatives

The campus landscape, like its buildings, can be seen as the physical embodiment of a college's values. It is a vital part of the life of a campus, providing space for study, play, outdoor events, relaxation and aesthetic appreciation. Green campus landscapes also manage runoff, help

recharge groundwater, and clean and cool the air on campus. The landscape serves as a visual representation of the campus community's commitment to sustainability. As campus landscapes are so visible and accessible, landscaping initiatives are a great way to build awareness around the environment.

There are more than 250 trees, 750 shrubs and 20 herbs including about 40 types of medicinal plants on campus along with a playground with grass cover. Proper signage will be displayed against each and every plants/trees. Particularly for medicinal plants the signage will show usefulness of the plants for medicinal purposes. The landscape of trees and plants provide the students and the staff with clean and cool air in a soothing environment.

The college commits to enriching this healthy habitat and maintaining the symbiotic relation of the institution with nature by

- Organising annual tree plantation drives
- Promoting environment awareness programmes among the stakeholders

Clean Air Initiatives

The college encourages the staff and students to use eco-friendly transport like bicycles, especially to the students who commute a short distance to come to college from the adjacent areas. Also, this helps in their safety, security, fuel conservation and reduces environmental pollution. The vehicles owned by the staff or the students with pollution check stickers are permitted into the campus.

In compliance with the framework provided by the National Tobacco Control Programme (NTCP) 2007-08, the college prohibits smoking and the use of other tobacco products; and also bans selling tobacco products in the college canteen.

Infrastructural Initiatives

- Alternate Sources of Energy

The college is dedicated to minimise and sustainably manage use of electricity. It believes in reducing the consumption of electricity produced by non-renewable resources by switching to clean energy sources like solar energy for purposes like lighting the campus.

- Energy Saving and Energy Efficient Equipment

The college commits to install environment-friendly electrical appliances to save energy and also to reduce wasteful inefficiencies. The college believes in using cleaner energy such as LED lighting, etc.

- Water Conservation through Rainwater Harvesting System

The college has committed itself to store rain water by rainwater harvesting system. This practice helps the college to reduce the use of ground water.

Waste Management Processes

The college strives to have a minimal impact on the environment and is dedicated to reduce and manage the waste generated by the college campus. The following specific procedures will be undertaken to ensure its contribution in protecting the environment.

Solid Waste Management

With its aim to provide holistic education and a positive impact on the environment, the college will adopt practices that will mitigate and manage solid waste through the following methods:

- Systematically engage with the 3Rs of environment friendliness (Reduce, Reuse and Recycle).
- Collect paper waste produced on campus and collaborate with scrap dealers for recycling.
- Reduce solid waste by developing a technology-centric teaching and administrative model.
- Reduce use of paper by supporting digitisation of attendance and internal assessment records.
- Reduce requirement of printed books by updating the e-books and e-journals collection of the college library.
- Encourage all students and teachers to use emails for assignment submissions.
- Take initiatives to spread awareness amongst students about
 - ✓ Food wastage and ways of minimising it
 - ✓ Minimising the use of packaged food
 - ✓ The habit of reusing and recycling non-biodegradable products
 - ✓ Organising workshops for the students on solid waste management
- Organic waste would be used for production of vermicompost through training to the students, staff and other interested stakeholders

Liquid Waste Management

- Maintain leak proof water fixtures.
- Minimise the use of water by constructing more Indian style toilets

instead of western style toilets.

- Continuous monitoring to take immediate steps to stop any water leakage through taps, pipes, tanks, toilet flush etc.
- Reuse of waste water from wash basins.
- Separate waste lines from laboratories for general liquid waste and hazardous liquid waste

E-Waste Management

The college ensures that its usage of technology and generation of e-waste does not impact the environment. For this purpose, the college plans to strive towards:

- More provisions for disposal of the institutional e-waste.
- Collaboration with e-waste recycling companies to get electronic waste recycled.
- Awareness amongst students about reduction of e-waste and environment friendly disposal practices for e-waste.

Awareness Initiatives

Outreach and education are of utmost importance so that all members of the campus community may value the objectives of the policy and aid in its implementation. This is why the college supports and encourages awareness campaigns, seminars, workshops, conferences and other interactive sessions to facilitate effective implementation of the Green Campus Initiatives Policy. Proper signages for the existing medicinal plants and general trees/plants will be displayed to make the students, staff and local people on their usefulness and preservation.

Training on production of vermicompost using organic waste

Training for production of vermicompost using organic waste will be given for sustainable development of the environment.

Environment-centric Activities

The college encourages the NSS unit and all the departments to organise events, competitions and training sessions that will bring about positive environmental changes at the grassroot level.

Conduct Green Audit

The college aims to regularly conduct a Green Audit of its campus to assess the strengths and weaknesses to further the goals of long-term sustainability. A green audit is a useful tool to determine how and where most energy or water or resources are being used. The college can then consider how to implement changes and make savings. It can determine the type and volume of waste. Recycling projects or waste minimisation plans can be adopted. It will create health consciousness and promote environmental values and ethics. It provides a better understanding of the impact of eco- friendly practices on campus.



Pana
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Conduct Environment Audit

A clean and healthy environment aids effective learning and provides a conducive learning environment. The college aims to regularly conduct an Environment Audit of its campus towards environmental protection and environmental awareness at local and global front as well.

Conduct Energy Audit

An Energy Audit to be conducted as and when required to further reduce its carbon footprint. The importance of reducing energy consumption cannot be overstated. The energy audit, with its specialised tools will identify wastage of energy. Such an inspection often reveals several different flaws which cause a loss of significant amounts of energy which the college will not be able to detect. These flaws often have easy and affordable solutions and provide significant savings.

Plastic-Free Campus

The college has been observing most of its duties in terms of solid waste management since its inception. In view of the Government of India's resolution to ban all single use plastics due to the hazardous impact of plastic use and related pollution, the college administration strictly bans the use of single use plastics in its premise to make it a 'Plastic Free Campus'.



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