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# Hirasugar Institute of Technology, Nidasoshi

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IQAC
Minutes of
Meetings
AY:2022-23

# Internal Quality Assurance Cell (IQAC) Minutes/Proceedings of Meetings

(AY: 2018-19 to Till date)

# **IQAC Minutes of Meetings/Proceedings**

AY	IQAC Meeting Link in the institute Website
2022-23	https://hsit.ac.in/NAAC/IQACMeetings/IQACMeetings202223.pdf
2021-22	https://hsit.ac.in/NAAC/IQACMeetings/IQACMeetings202122.pdf
2020-21	https://hsit.ac.in/NAAC/IQACMeetings/IQACMeetings202021.pdf
2019-20	https://hsit.ac.in/NAAC/IQACMeetings/IQACMeetings201920.pdf
2018-19	https://hsit.ac.in/NAAC/IQACMeetings/IQACMeetings201819.pdf

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**IQAC** 

AY:2022-23

Ref: NDS/HSIT/IQAC/Reports/2023-24/497

Date: 2 5 JAN 2024

# Internal Quality Assurance Cell (IQAC)

# Minutes/Proceedings of Meetings and Action Taken Reports

(AY: 2018-19 to Till date)

CNI	IOAC	Data	Minutes/Droppedings	Action Taken
S.N.	IQAC	Date	Minutes/Proceedings	Action Taken
	Meeting			
1	No.	20th T	Decided to facilitate the more no. of	The Technical and Antitude
1.	23	20 <sup>th</sup> Jan.		_
	×	2024	activities during the current academic	trainings are conducted by the
			years to enhance the employability	training and placement cell and
			skills among the students and to	associations of the departments.
			increase the placement percentage	The personality development and
		-		career guidance programmes are
	x 15	,		conducted by the TP Cell and by
				the departments.
2.	23	20 <sup>th</sup> Jan.	In view to develop faculty members as	The SAFs were reviewed and
		2024	per the expectations in the NEP-2020	verified.
			based revised university curriculum, it	The few faculty members are
			is decided to conduct review and	advised and suggested to improve
		- *	verification meeting on the Staff	in the non-performing parameters
			Appraisal Forms (SAFs) of AY: 2022-	by the committee.
	*	4 1	23 submitted by the faculty members	*
3.	23	20 <sup>th</sup> Jan.	It is decided to motivate and facilitate	The proposals were prepared by
	,	2024	all faculty members at the department	the faculty members on the
			level for preparations of best,	emerging research and innovation
9			competitive and relevant proposals for	titles and are submitted to the
			research grants to establish research	VGST, GoK.
	э.		and innovation ecosystem at the	The some proposals were
		· · · · · · · · · · · · · · · · · · ·	institute on relevant and emerging	shortlisted for online presentation.
4		*	areas.	After presentation one proposal
d / x				has been selected for Rs. 20 Lakhs
4.	23	20 <sup>th</sup> Jan.	To create health and societal	The NSS, Redcross, UHV and
		2024	consciousness among the students and	Women Empowerment activities
	2 /	la a	staff and sensitize them on relevant	were conducted.
	2.4		issues, it is decided to organize more	The sports and Yoga activities are
			no. of sports, yoga, social and	conducted.
			sensitizing activities in the current	AICTE Activities were conducted
			academic year.	and reports were prepared by the
	. ,			students and reports are evaluated
	,	10	* .	through students presentations.
		,		The students were completed their
7				mini and final year projects and
, ,			Institute of	prepared project reports. The
			4 6	reports are evaluated internal and
			181	

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**IQAC Action Taken** Reports

AY:2022-23

_					
					external members through
					students demonstrations and
		20.00			presentations.
					Freshers Day has been conducted.
					III Sem Welcome functions are
	x x				conducted.
					Annual gathering and fun-week
			×		have organised
+	5.	23	20 <sup>th</sup> Jan.	In view to promote innovation and	
	3.	23	20 Jan.	1	The entrepreneurship and IPR
	5		2024	entrepreneurship actions in the institute	activities are organised.
		14		campus, it is decided to conduct	
				entrepreneurship and IPR promotion &	
				awareness activities during the current	
				academic years.	
	6.	22	12 <sup>th</sup> Jan.	In view to improve the participation of	_
	1.4		2024	the students and understand and realize	Comprehensive Assessment
	T N			the theoretical concepts and it is	(CCA), the activities are
		*		decided to make assessment and	conducted at the department level
				documentation policies at the	as per the 2022 and 2021 VTU
			3	department level based on the nature of	Scheme of Study. The policies are
			* .	the activities.	made at the department level as
					per the VTU guidelines. All the
					course coordinators are practicing
					the policies for holistic
				i i i i i i i i i i i i i i i i i i i	development of the students.
H	7.	22	12 <sup>th</sup> Jan.	It is decided to initiate learner centric	All the class rooms are connected
	/• //	22	2024	and class room dynamics based	with internet and LCD projects.
			2024		
				pedagogies in the classes and	The course coordinators using the
1				laboratories to enhance the learning	e-resources and videos in the
			2 10	experience of the students through the	classroom on regular basis.
		_ ^ _		pedagogical initiatives and e-resources.	The pedagogical initiatives and
			9	Also decided to disseminate the e-	innovative teaching aids are using
			,	resources mentioned in the university's	by course coordinators regularly to
			A 3	revised curriculum (2021 & 2022	address the slow and fast learners.
				Scheme of Study & Evaluation) and	Activities are conducted to
				from other sources in the classes and	improve participative learning.
	* * * * * *		s	laboratories to the students to	
		3 N	- 7	understand, realize and analyze	
		9		emerging and relevant areas and	
				difficult concepts	
	8.	22	12 <sup>th</sup> Jan.	It is decided to complete the projects,	Every year students and guide/s
			2024	which will attracts sponsorships and	are together project proposals as
			- A	awards, published in international	per the departmental policies and
			* .	journals and conference, patentable	proceedings.
		*		etc. in the stipulated period of time.	The synopsis presentation and
	4 4			Also decided to make department level	progress review meetings are
	1				
		g <sup>2</sup>		policies and guidelines.	organised to guide and suggest the

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**Action Taken** Reports

AY:2022-23

				students for best projects. Students submitted the synopsis to the KSCST, VTU etc. for sponsorship. Some projects received sponsorship from KSCST and VTU. Some project works of the students are published in the international journals.
9.	22	12 <sup>th</sup> Jan. 2024	In view to promote the participative and cooperative learning among the students, policies and guidelines to conduct, assess and document the internships and technical seminars/activities and it is decided to facilitate and complete the sufficient no. of such events at the department level.	The students undergone the internships as per the VTU CoE and guidelines and are guided by the faculty members. After completion of the internships students submitted the report. The internships are evaluated internal and external members as per the university guidelines and proper rubrics through the students' presentations.  Under the guidance of the faculty students prepared a report on relevant and emerging technical topic and it is evaluated through students' presentation with proper rubrics as per university
10.	22	12 <sup>th</sup> Jan. 2024	The guidelines to promote R&D activities such as paper publications, organising conferences, fetching research funds, innovative student projects, establishment of research ecosystem, excellencies in relevant and emerging domains at department level and it is decided to make policy guidelines at the department level.	guidelines.  The R&D policies have been made at the department level to promote R&D activities.  The R& D and industry attached laboratories were established in the departments.  The research articles were published in the international journals and conferences.  Some student projects received sponsorships and awards from various agencies.
11.	21	15 <sup>th</sup> Dec. 2023	With reference to the revised VTU 2022 Scheme of Study (Curriculum) in the III semester for the AY:2023-24, the preparations required for successful implementation of the curriculum on coding, ability enhancement and emerging courses and it is decided to	The faculty members are trained to handle emerging and ability enhancement courses.  The policies are made at department and institute level for successful implementation of revised VTU curriculum.

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IQAC **Action Taken** Reports

AY:2022-23

		a 1 ,		made a department level policies in line with the university guidelines time to time.	
	12.	21	15 <sup>th</sup> Dec. 2023	With reference to the VTU Circular No.:VTU/BGM/BOS/New UG-PG Prog/2023-24/4865, Dated:13 <sup>th</sup> Dec.	been made.
				202 regarding quality of questions in SEE concerning COs and RBTLs and in view to achieve higher API and SI	scrutinised (RBTL levels and Marks allotment, pattern etc.) IA
			,	and to improve the performance of the students in VTU-SEE, it is decided to practice the similar RBTLs in the CIEs and Rubrics.	per the proceedings made at department level.
-	12	21	15 <sup>th</sup> Dec.		The "Academic Acadia-2" DAG
	13.	21		In the view of successful completion of	
			2023	Teaching-Learning-Evaluation process	and PAC Meetings are conducted.
				as per the university guidelines, it is	
		2 · ·		decided to conduct "Academic Audit"	
			* ×	by internal and external expertise for	
		7 7		further improvements.	
		8		Also decided to conduct Department	
		F (8)	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Advisory Committee (DAC) and	
		2		Program Assessment Committee	
		15		(PAC) meetings at the department	
		2 H	4 4	level by external senior faculty members, professional body member,	
				industry persons etc., and decided to	
				make department level, competitive &	
	* · · · · · · · · · · · · · · · · · · ·	2 ,	, ·	relevant student centric polices for	
	3	4	1	further improvements.	
$\vdash$	14.	21	15 <sup>th</sup> Dec.	To make pollution free campus and to	"Environment and Green Audits"
	A	21	2023	create energy and environment	are conducted.
		2 7 E	2023	consciousness among the staff and	are conducted.
			er u	students, it is decided to conduct	
		`	8	"Environment and Green Audits".	
	15.	21	15 <sup>th</sup> Dec.	In order to achieve higher attainment	ERP and OBE softwares are
			2023	levels of COs-POs-PSOs through	installed and practising on regular
			ž 1 *	direct and indirect methods and to	basis
	n			provide best facilities for counseling-	
		, 0	a s	mentoring-welfare-office automation-	
				grievance resolution, it is decided to	
		1 2	^	practice ERP and OBE Softwares on	
			tl-	regular basis.	
	16.	21	15 <sup>th</sup> Dec.	In view of announcement of	The indirect methods such as
			2023	university's semester end exam (SEE)	Course End Surveys (CES),
	4,	2 2	x = 20	results, it is decided to assess the	Employer and Alumni Surveys are
	· .			attainment of POs and PSOs through	conducted.
L				direct and indirect emethods in the	Attainments of POs and PSOs are
				(2)	

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**Action Taken** Reports

**IQAC** 

AY:2022-23

17.	20	6 <sup>th</sup> Oct.	prescribed formats such as Faculty Course Assessment Report (FCAR), Course End Survey, Activity etc.  With reference to the NEP based VTU	assessed in the FCAR by the respective course coordinators and are checked by module coordinator and verified by the HOD.
17.	20	2023	2022 Scheme of Study & Evaluation guidelines it is decided to reform the Teaching-Learning-Evaluation (TLE) process and its documentation.	The faculty diary and IA booklet assessment front pages have been revised as per the revised VTU scheme of study
18.	20	6 <sup>th</sup> Oct. 2023	The roles & responsibilities of important functionaries are finalized and decided to revise the various committee.	formed along with the responsibilities.
19.	20	6 <sup>th</sup> Oct. 2023	The qualitative parameters of Project Work Phase-I & Internship-02 are discussed and decided to plan and guide the students to receive at least one credential (sponsorship, patent filing/awards & publication in reputed international journal)  And decided to facilitate, prepare and guide the students to inculcate report writing and presentation skills.	The synopsis presentations, progress review meetings are conducted and evaluated through proper rubrics by the committee members.  Project exhibitions and demonstrations are conducted and evaluated by the external members.  The reports of the students' internships are evaluated through the proper rubrics internally and externally as per the VTU guidelines.
20.	19	6 <sup>th</sup> Sept. 2023	With reference to the due date (8 <sup>th</sup> Feb. 2024) of NAAC Cycle-01, Accreditation and to achieve higher grade in Cycle-02 A&A process, it is decided to publish Road Map/Schedule for important activities such as	The Road-map has been prepared for important phases of Cycle-02 SSR submission and preparations.
. , .			submission of IIQA, SSR, Reviews and Mock Assessment.	
21.	19	6 <sup>th</sup> Sept. 2023	In view to improve the Teaching Learning Process, to use innovative pedagogy and to establish best Faculty Performance Appraisal & Development System (FRADS) in the	the policy of students' feedback on Teaching & Learning has been revised. The revision of policy is the allotment of "External Observers". All HoDs are
22	19	6 <sup>th</sup> Sept.	Development System (FPADS) in the institute and with reference to the NBA Compliances and revised NAAC QIFs, It is decided to revise the policy of students' feedback on Teaching & Learning.	suggested to follow the same. The detailed guidelines will be released time-to-time.
22.	19	o sept.	In view to enhance the APP & SI and	The counseling and mentoring

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**IQAC Action Taken** Reports

AY:2022-23

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		2023	getting employment and sustaining in it, it is decided to revise the Counseling and Mentoring 2 policies as below:  a) Academic Excellency Counseling & Mentoring Cycle (A-CM Cycle)  b) Personality & Career Excellency Counseling & Mentoring (P-CM Cycle)			
23.	19	6 <sup>th</sup> Sept. 2023	In view to implement the OBE and NEP-2020, it is suggested to revise the existing from "Faculty Dairy" to "CO-PO based Faculty Dairy" i.e., TLE Cycle	The faculty diary and IA booklet assessment front pages have been revised as per the revised VTU scheme of study		
24.	19	6 <sup>th</sup> Sept. 2023	In order to monitor the improvement in courses and projects, all the course coordinators are suggested to adopt T-L-E documentation policy "One Course/Lab file and Project File"	"One Course/Lab file and Project File" policy has been adopted		
25.	19	6 <sup>th</sup> Sept. 2023	In view to promote the participation of students in resolving environmental, energy, society and humanity related issues and problems, it is suggested to prepare "Annual NSS-Calendar of Events" and PO-PSO assessment.	In process		
26.	18	18 <sup>th</sup> Aug. 2023	With reference to the NAAC-Institute-Dashboard, the previous assessment years' (2019-20 & 2020-21) AQARs are open for review and edit. Hence decided to review the above said AQARs through criterion and IQAC coordinators of respective assessment year and submit for approval to NAAC office	dashboard and both are accepted		
27.	18	18 <sup>th</sup> Aug. 2023	With reference to the revised guidelines of the NAAC, It is decided to revise the composition of the IQAC committee	The IQAC committee has been revised as per the NAAC guidelines.		
28.	18	18 <sup>th</sup> Aug. 2023	With reference to the preparations, documentation and achieving higher grade in the NAAC Cycle-02 Assessment & Accreditation (A&A) process, It is decided to organize a One Day Workshop on the title "Revised NAAC Quality Indicator Framework (QIF) & SSR Submission" by	The One Day Workshop on the title "Revised NAAC Quality Indicator Framework (QIF) & SSR Submission" has been organized successfully.		

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**IQAC Action Taken** Reports AY:2022-23

		n 8 **	expertise in the November 3 <sup>rd</sup> week 2023	
29.	18	18 <sup>th</sup> Aug. 2023	In view to accelerate the qualitative, outcome based and focused preparations to achieve higher grade in the NAAC-Cycle 02 Assessment & Accreditation process, it is decided to revise the composition of Steering Team for SSR and Peer Team Visit Preparations based on the Key Indicators/Metrics/Key Person of specific domain	The Steering Team has been revised based on the metrics/KIs.
30.	18	18 <sup>th</sup> Aug. 2023	Decided to prepare institute CoE in line with the University CoE covering IA Tests, marks submission and diplay, feedback collection on Teaching-Learning process and important activities at institute level. Decided to recruit the staff members based on the load and expertise. And as per the norms of the VTU and AICTE.	Institute CoE has been prepared and published in the institute website and displayed on the notice boards and also circulated to HODs and students through WhatsApp groups to prepare departmental/association CoE, Class Time-Table and lesion plans of course coordinators.  The faculty and instructors are recruited based on the academic and additional workloads at department and institute level.  The academic and additional workloads were distributed rationally and based on the expertise and passion in the subjects.
31.	18	18 <sup>th</sup> Aug. 2023	In view to promote R&D activities, it is decided to establish research ecosystem in relevant areas, it is decided to submit the proposals for grants to the various agencies such as VGST, AICTE, DST etc.  Also decided to motivate the students to submit the synopsis for synopsis to KSCST, VTU and Shristi etc.	The proposals are prepared on relevant and emerging areas and submitted to the various agencies. Many student synopses were selected for sponsorship from KSCST and VTU and some projects received awards in the project exhibitions conducted by various organizations.  Two VGST proposals were selected for grant.
32.	18	18 <sup>th</sup> Aug. 2023	In order to attain higher levels of all Programme Outcomes (POs) through Activity Based Learning (ABL), to bridge the University curriculum gaps	The VTU curriculum gaps are identified at department level and the bridging activities are conducted.

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IOAC **Action Taken** Reports

AY:2022-23

				2
		4	and to make student ready for industry, it is decided to implement the concept "Gap Identification & Mitigation Cycle (GIM Cycle)"	
33.	18	18 <sup>th</sup> Aug. 2023	In view to promote Research & Development (R&D) in the institute, it is decided to organize International Conference (ICRTET-2023) in the 1 <sup>st</sup> week of December 2023. The coordination work has been assigned	International Conference on Recent Trends in Engineering and Technology (ICRTET-2023) has been organized successfully. Around 82 papers are presented and published.
		\$ P 10	to Dr.K.M.Akkoli, Dean (R&D) and Dr.S.N.Topannavar, Dean (Aca).	
34.	17	6 <sup>th</sup> March 2023	It is decided to organize institute level activities to promote participative learning among the students.  Also decided to facilitated to conduct activities at department level to	Technovision-23 has been conducted QUEST-23 has been conducted Graduation Day has been organized.
			enhance participative learning and to create competitiveness among the	The students are enjoyed "Fun Week" with various cultural and
			students	social activities.  Departmental Associations are made plan and conducted activities
35.	17	6 <sup>th</sup> March 2023	Decided to prepare institute CoE in line with the University CoE covering IA Tests, marks submission and diplay, feedback collection on Teaching-Learning process and	Institute CoE has been prepared and published in the institute website and displayed on the notice boards and also circulated to HODs and students through
			important activities at institute level. Decided to recruit the staff members based on the load and expertise. And as per the norms of the VTU and AICTE.	WhatsApp groups to prepare departmental/association CoE, Class Time-Table and lesion plans of course coordinators.  The faculty and instructors are
				recruited based on the academic and additional workloads at department and institute level.  The academic and additional
				workloads were distributed rationally and based on the expertise and passion in the subjects.
	1,	éh.		
36.	17	6 <sup>th</sup> March	Decided to conduct "Academic Audit" for the AY:2021-22 by the committee	Academic Audits for the AY:2021-22 have been collected
		2023	composed of external and internal expertise members	by all the department and submitted to the office.
37.	17	6 <sup>th</sup>	Decided to collect and analyze	Facilitated to collect feedbacks
			Cliento UF	

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		March	feedback on curriculum and facilities	and are analyzed.
	21-	2023	by from all stakeholders.	Based on the recommendations of
			Also decided to take actions based on	the analysis, the actions are taken
	**	1 1 1	the recommendations of the analysis	and whole process has been
			report and decided to inform to the	informed to the VTU authorities.
3	8. 16	23 <sup>rd</sup>	university for further actions.  To promote participative and	Workshops and seminars are
3	6.	Sept.	experiential learning among the	Workshops and seminars are conducted at all the departments
		2022	students, it is decided to organize	and the takeaways of the students
		2022	workshops, seminars, industry visits	are assessed to POs and PSOs
			and internships.	
3	9. 16	23 <sup>rd</sup>	For knowledge transfer/sharing,	The new MoUs are made at the
		Sept.	employment, realization of theoretical	department level and activities are
		2022	concepts and to promote industry	conducted with already
	9 *		institute interactions, it is decided to	established MoUs.
			establish MoUs with external	The industry supported labs are
1			organizations/industry.	established for hands on
	n n			experience and to resolve complex
1	0. 16	23 <sup>rd</sup>	It is decided to make rigorous	and relevant problems  The students are counseled and
"	0.   10	Sept.	counseling of the absentees for their	mentored through their respective
	e *	2022	regularity to the classes	faculty mentor.
4	1. 16	23 <sup>rd</sup>	Decided to prepare institute CoE in	Institute CoE has been prepared
		Sept.	line with the University CoE covering	and published in the institute
		2022	IA Tests, marks submission, feedback	website and displayed on the
	V 2 1		collection on Teaching-Learning	notice board and also circulated to
			process and important activities at	HODs and students through
		1	institute level	WhatsApp groups to prepare
	A			departmental/association CoE, Class Time-Table and lesion plans
				of course coordinators.
42	2. 16	23 <sup>rd</sup>	Decided to collect and analyze	Facilitated to collect feedbacks
"		Sept.	feedback on curriculum and facilities	and are analyzed.
		2022	by from all stakeholders.	Based on the recommendations of
	2	y .	Also decided to take actions based on	the analysis, the actions are taken
			the recommendations of the analysis	and whole process has been
			report and decided to inform to the	informed to the VTU authorities.
	15	and a	university for further actions.	T. 1
43	3. 15	2 <sup>nd</sup> Sept. 2022	It is decided to organize institute level	Technovision-23 has been conducted
		2022	learning among the students.	QUEST-23 has been conducted
			Also decided to facilitated to conduct	Graduation Day has been
1			activities at department level to	organized.
			enhance participative learning and to	Departmental Associations are
añ "			create competitiveness among the	made plan and conducted
			students	activities
44	1. 15	2 <sup>nd</sup> Sept.	Decided to collect "Academic Audit"	Academic Audits for the
			10	

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		2022	for the AY:2020-21 by the committee composed of external and internal expertise members	AY:2020-21 have been collected by all the department and submitted to the office.
45.	15	2 <sup>nd</sup> Sept. 2022	It is decided to prepare AQAR of the assessment year 2021-22	AQAR prepared and submitted to the NAAC
46.	15	2 <sup>nd</sup> Sept. 2022	Decided to collect and analyze feedback on curriculum and facilities by from all stakeholders.	Facilitated to collect feedbacks and are analyzed.  Based on the recommendations of
			Also decided to take actions based on the recommendations of the analysis report and decided to inform to the university for further actions.	the analysis, the actions are taken and whole process has been informed to the VTU authorities.
47.	15	2 <sup>nd</sup> Sept. 2022	Decided to prepare institute CoE in line with the University CoE covering IA Tests, marks submission, feedback collection on Teaching-Learning process and important activities at institute level	Institute CoE has been prepared and published in the institute website and displayed on the notice board and also circulated to HODs and students through WhatsApp groups to prepare departmental/association CoE, Class Time-Table and lesion plans of course coordinators.
48.	14	25 <sup>th</sup> June. 2022	It decided to verify department level actions and documentation to submit NBA compliance report for continuation of accreditation for further 3 years	The documentation and actions to comply NBA report are verified inter department expertise for further actions.
49.	14	25 <sup>th</sup> June. 2022	It is decided to organize institute level activities to promote participative learning among the students.  Also decided to facilitated to conduct activities at department level to enhance participative learning and to create competitiveness among the students	Technovision has been conducted QUEST-22 has been conducted Graduation Day has been organized.  The students are enjoyed "Fun Week" with various cultural and social activities.  Departmental Associations are made plan and conducted activities
50.	14	25 <sup>th</sup> June. 2022	Decided to collect feedback on teaching-learning and facilities	Feedbacks are collected, analyzed and actions were taken based on the recommendations and intimated to the university at all departments.
51.	13	5 <sup>th</sup> April 2022	Decided to prepare institute CoE in line with the University CoE covering IA Tests, marks submission, feedback collection on Teaching-Learning process and important activities at institute level	Institute CoE has been prepared and published in the institute website and displayed on the notice board and also circulated to HODs and students through WhatsApp groups to prepare

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2				departmental/association CoE, Class Time-Table and lesion plans of course coordinators.
52.	13	5 <sup>th</sup> April 2022	Decided to collect feedback on teaching-learning and facilities	Feedbacks are collected, analyzed and actions were taken based on the recommendations and intimated to the university at all departments.
53.	13	5 <sup>th</sup> April 2022	For knowledge transfer/sharing, employment, realization of theoretical concepts and to promote industry institute interactions, it is decided to establish MoUs with external organizations/industry.	The new MoUs are made at the department level and activities are conducted with already established MoUs.  The industry supported labs are established for hands on experience and to resolve complex and relevant problems
54.	13	5 <sup>th</sup> April 2022	To promote R&D work and to increase research publications in the conference proceedings and in the international journals, it is decided to organize International Conference	Due to the technical problem with the VTU CoE of exams, the organization of conference has been postponed, but the faculty members are motivated to participate in the online international conferences.
55.	13	5 <sup>th</sup> April 2022	It is decided to organize institute level activities to promote participative learning among the students.  Also decided to facilitated to conduct activities at department level to enhance participative learning and to create competitiveness among the students	Graduation Day has been organized. The students are enjoyed "Fun Week" with various cultural and social activities. Departmental Associations are made plan and conducted activities
56.	13	5 <sup>th</sup> April 2022	Decided to collect feedback on teaching-learning and facilities	Feedbacks are collected, analyzed and actions were taken based on the recommendations and intimated to the university at all departments.
57.	12	24 <sup>th</sup> Sept. 2021	It is decided to prepare AQAR of the assessment year 2020-21	AQAR prepared and submitted to the NAAC
58.	12	24 <sup>th</sup> Sept. 2021	Decided to prepare institute CoE in line with the University CoE covering IA Tests, marks submission, feedback	Institute CoE has been prepared and published in the institute website and displayed on the
			collection on Teaching-Learning process and important activities at institute level	notice board and also circulated to HODs and students through WhatsApp groups to prepare departmental/association CoE, Class Time-Table and lesion plans of course coordinators.

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			Grade by NAAC & Frogrammes Accredited by N	5711 052 04 202
59.	12	24 <sup>th</sup> Sept. 2021	It is decided to motivate faculty for publications and patenting	Motivational talks were organized. Entrepreneurship and IPR activities are conducted
60.	12	24 <sup>th</sup> Sept. 2021	It is decided to verify the Self Appraisal Forms (SAFs) submitted by the faculty members by the committee consist of management representative, Principal and HOD	SAFs were collected and verified in the meeting and the suggestions are given for further improvements.
61.	12	24 <sup>th</sup> Sept. 2021	In view of holistic development of the students, it is decided to organize value added and certificate programmes at the department level	The value added and certificate programmes were conducted from all the departments
62.	12	24 <sup>th</sup> Sept. 2021	It is decided to conduct "Induction Programme" for 1 <sup>st</sup> year students as per the VTU and AICTE guidelines	The "Induction progamme" has been conducted as per the university CoE and guidelines
63.	12	24 <sup>th</sup> Sept. 2021	Decided to prepare institute CoE in line with the University CoE covering IA Tests, marks submission, feedback collection on Teaching-Learning process and important activities at institute level	Institute CoE has been prepared and published in the institute website and displayed on the notice board and also circulated to HODs and students through WhatsApp groups to prepare departmental/association CoE, Class Time-Table and lesion plans of course coordinators.
64.	12	24 <sup>th</sup> Sept. 2021	Decided to collect feedback on teaching-learning and facilities	Feedbacks are collected, analyzed and actions were taken based on the recommendations and intimated to the university at all departments.
65.	12	24 <sup>th</sup> Sept. 2021	For knowledge transfer/sharing, employment, realization of theoretical concepts and to promote industry institute interactions, it is decided to establish MoUs with external organizations/industry.	The new MoUs are made at the department level and activities are conducted with already established MoUs.
66.	11	19 <sup>th</sup> Aug. 2020	Decided to collect feedback on teaching-learning and facilities	Feedbacks are collected, analyzed and actions were taken based on the recommendations and intimated to the university at all departments.
67.	11	19 <sup>th</sup> Aug. 2020	It is decided to verify the Self Appraisal Forms (SAFs) submitted by the faculty members by the committee consist of management representative, Principal and HOD	SAFs were collected and verified in the meeting and the suggestions are given for further improvements.
68.	11	19 <sup>th</sup> Aug. 2020	In view of holistic development of the students, it is decided to organize value	The value added and certificate programmes were conducted from

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**IQAC Action Taken** Reports AY:2022-23

		cci cuitcu at 7	A Grade by NAAC & Programmes Accredited by N	ADA. COE & ECE
			added and certificate programmes at the department level	all the departments
69.	11	19 <sup>th</sup> Aug. 2020	Decided to conduct "Academic Audit" for the AY:2019-20 by the committee composed of external and internal expertise members	Academic Audits for the AY:2019-20 have been collected by all the department and submitted to the office.
70.	11	19 <sup>th</sup> Aug. 2020	Decided to collect and analyze feedback on curriculum and facilities by from all stakeholders.  Also decided to take actions based on the recommendations of the analysis report and decided to inform to the university for further actions.	Facilitated to collect feedbacks and are analyzed.  Based on the recommendations of the analysis, the actions are taken and whole process has been informed to the VTU authorities.
71.	11	19 <sup>th</sup> Aug. 2020	For knowledge transfer/sharing, employment, realization of theoretical concepts and to promote industry institute interactions, it is decided to establish MoUs with external organizations/industry.	The new MoUs are made at the department level and activities are conducted with already established MoUs.
72.	11	19 <sup>th</sup> Aug. 2020	It is decided to organize institute level activities to promote participative learning among the students. Also decided to facilitated to conduct activities at department level to enhance participative learning and to create competitiveness among the students	Graduation Day has been organized. The students are enjoyed "Fun Week" with various cultural and social activities. Departmental Associations are made plan and conducted activities
73.	11	19 <sup>th</sup> Aug. 2020	Decided to prepare institute CoE in line with the University CoE covering IA Tests, marks submission, feedback collection on Teaching-Learning process and important activities at institute level	Institute CoE has been prepared and published in the institute website and displayed on the notice board and also circulated to HODs and students through WhatsApp groups to prepare departmental/association CoE, Class Time-Table and lesion plans of course coordinators.
74.	11	19 <sup>th</sup> Aug. 2020	For knowledge transfer/sharing, employment, realization of theoretical concepts and to promote industry institute interactions, it is decided to establish MoUs with external organizations/industry.	The new MoUs are made at the department level and activities are conducted with already established MoUs.  The industry supported labs are established for hands on experience and to resolve complex and relevant problems
75.	10	8 <sup>th</sup> Aug. 2020	Decided to prepare institute CoE in line with the University CoE covering IA Tests, marks submission, feedback	Institute CoE has been prepared and published in the institute website and displayed on the

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			collection on Teaching-Learning process and important activities at institute level	notice board and also circulated to HODs and students through WhatsApp groups to prepare departmental/association CoE, Class Time-Table and lesion plans of course coordinators.
76.	10	8 <sup>th</sup> Aug. 2020	It is decided to prepare institute CoE in line with the VTU CoE consist of feedback, IA Tests and IA Marks submission schedule.	Institute CoE has been prepared in line with the VTU CoE and also CPs are prepared by the respective course coordinators and both are
20 T			Also decided to prepare course plans (CPs) for each course by course coordinator.	circulated to the students and published on the institute website.
77.	10	8 <sup>th</sup> Aug. 2020	It is decided to organize 4 <sup>th</sup> international conference-2020	Could not conduct due to COVID-19
78.	10	8 <sup>th</sup> Aug. 2020	Decided to organize industry visits, seminars and internships	Could not conduct due to COVID-19
79.	10	8 <sup>th</sup> Aug. 2020	Decided to conduct Graduation Day- 2020	Could not conduct due to COVID-19
80.	10	8 <sup>th</sup> Aug. 2020	Decided to conduct AICTE Sponsored 4-days workshop on "Basics of MAT Lab and Simulink"	Online workshop Conducted during 19 <sup>th</sup> -22 <sup>nd</sup> Spt. 2019
81.	10	8 <sup>th</sup> Aug. 2020	Decided to conduct workshops on "PCB Design and Testing", "Python Programming", Design and Simulation of Micro strips Antenna", "CATIA and GD&T"	Conducted
82.	10	8 <sup>th</sup> Aug. 2020	Decided to conduct awareness programme on "Energy Conservation"	Conducted
83.	09	6 <sup>th</sup> Feb. 2020	It is decided to prepare institute CoE in line with the VTU CoE consist of feedback, IA Tests and IA Marks submission schedule.  Also decided to prepare course plans (CPs) for each course by course coordinator.	Institute CoE has been prepared in line with the VTU CoE and also CPs are prepared by the respective course coordinators and both are circulated to the students and published on the institute website.
84.	09	6 <sup>th</sup> Feb. 2020	It is decided to organize institute level activities to promote participative learning among the students.  Also decided to facilitated to conduct activities at department level to enhance participative learning and to create competitiveness among the students	Technovision-2020 has been conducted QUEST-20 has been conducted Graduation Day has been organized.  Sambhrama-2020 has been organized.  The students are enjoyed "Fun Week" with various cultural and social activities.  Departmental Associations are

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=				made plan and conducted
				activities
85.	09	6 <sup>th</sup> Feb. 2020	For knowledge transfer/sharing, employment, realization of theoretical concepts and to promote industry	The new MoUs are made at the department level and activities are conducted with already established MoUs.
			institute interactions, it is decided to establish MoUs with external organizations/industry.	The industry supported labs are established for hands on experience and to resolve complex and relevant problems
86.	09	6 <sup>th</sup> Feb. 2020	Decided to conduct "Academic Audit" for the AY:2018-19 by the committee composed of external and internal expertise members	Academic Audits for the AY:2018-19 have been collected by all the department and submitted to the office.
87.	09	6 <sup>th</sup> Feb. 2020	Decided to collect and analyze feedback on curriculum and facilities by from all stakeholders.	Facilitated to collect feedbacks and are analyzed.  Based on the recommendations of
			Also decided to take actions based on the recommendations of the analysis report and decided to inform to the university for further actions.	the analysis, the actions are taken and whole process has been informed to the VTU authorities.
88.	08	6 <sup>th</sup> Jan 2020	Decided to conduct IA Tests centrally	Conducted centrally
89.	08	6 <sup>th</sup> Jan 2020	Decide to submit research fund proposals to VGST, GoK	Proposals were submitted from all the department out of them 2 were selected for Rs. 40lakhs
90.	08	6 <sup>th</sup> Jan 2020	Decided to organize seminars, internships and industrial visits	Organized seminars, internships and industrial visits
91.	08	6 <sup>th</sup> Jan 2020	It is decided to conduct "Induction Programme" for 1 <sup>st</sup> year students as per the VTU and AICTE guidelines	The "Induction progamme" has been conducted as per the university CoE and guidelines
92.	08	6 <sup>th</sup> Jan 2020	It is decided to conduct VGST sponsored FDP on "Machine Learning and Data Analytics"	The FDP has been conducted on 8 <sup>th</sup> -11 <sup>th</sup> Jan 2020
93.	08	6 <sup>th</sup> Jan 2020	Decided to organize professional body activities at institute level	The professional body activities were organized by the departments
94.	07	3 <sup>rd</sup> Aug. 2019	It is decided to prepare institute CoE in line with the VTU CoE consist of feedback, IA Tests and IA Marks submission schedule.  Also decided to prepare course plans	Institute CoE has been prepared in line with the VTU CoE and also CPs are prepared by the respective course coordinators and both are circulated to the students and
			(CPs) for each course by course coordinator.  Decided to prepare class time tables by departmental Time-Table coordinators	published on the institute website. The Time tables were prepared and displayed on the notice board well in advance and circulated to the students and staff for further

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				actions
95.	07	3 <sup>rd</sup> Aug. 2019	Decided to collect "Academic Audit" for the AY:2018-19 by the committee composed of external and internal expertise members	Academic Audits for the AY:2018-19 have been collected by all the department and submitted to the office.
96.	07	3 <sup>rd</sup> Aug. 2019	It is decided to distribute the academic and additional workloads to the faculty and instructors	Workloads were distributed as per the VTU and AICTE norms
97.	07	3 <sup>rd</sup> Aug. 2019	It is decided to verify the Self Appraisal Forms (SAFs) submitted by the faculty members by the committee consist of management representative, Principal and HOD	SAFs were collected and verified in the meeting and the suggestions are given for further improvements.
98.	07	3 <sup>rd</sup> Aug. 2019	Decided to collect feedback on teaching-learning and facilities	Feedbacks are collected, analyzed and actions were taken based on the recommendations and intimated to the university at all departments.
99.	07	3 <sup>rd</sup> Aug. 2019	It is decided to prepare AQAR of the assessment year 2018-19	AQAR prepared and submitted to the NAAC
100.	07	3 <sup>rd</sup> Aug. 2019	Decided to prepare institute CoE in line with the University CoE covering IA Tests, marks submission, feedback collection on Teaching-Learning process and important activities at institute level	Institute CoE has been prepared and published in the institute website and displayed on the notice board and also circulated to HODs and students through WhatsApp groups to prepare departmental/association CoE, Class Time-Table and lesion plans of course coordinators.
101.	07	3 <sup>rd</sup> Aug. 2019	It is decided to motivate faculty for publications and patenting	Motivational talks were organized. Entrepreneurship and IPR activities are conducted
102.	07	3 <sup>rd</sup> Aug. 2019	Decided to organize seminars, internships and industrial visits	Organized seminars, internships and industrial visits
103.	06	20 <sup>th</sup> July 2019	Decided to prepare institute CoE in line with the University CoE covering IA Tests, marks submission and diplay, feedback collection on Teaching-Learning process and important activities at institute level. Decided to recruit the staff members based on the load and expertise. And as per the norms of the VTU and AICTE.	Institute CoE has been prepared and published in the institute website and displayed on the notice boards and also circulated to HODs and students through WhatsApp groups to prepare departmental/association CoE, Class Time-Table and lesion plans of course coordinators.  The faculty and instructors are recruited based on the academic and additional workloads at department and institute level.
				Decided to recruit the staff members based on the load and expertise. And as per the norms of the VTU and

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				The academic and additional workloads were distributed rationally and based on the expertise and passion in the subjects.
104.	06	20 <sup>th</sup> July 2019	Decided to conduct and document the counseling and mentoring of the students on two parameters: 1) Academic Performance 2) Psychology and Personality	Academic and Personality/psychology counseling and mentoring have been conducted based on the CIE performance and additional skills inculcated by the students.  The central counseling were also conducted for critical cases.
105.	06	20 <sup>th</sup> July 2019	It is decided to organize institute level activities to promote participative learning among the students.  Also decided to facilitated to conduct activities at department level to enhance participative learning and to create competitiveness among the students	Technovision- A project exhibition of all nearby polytechnic students has been conducted QUEST-A national level technical activities and competitions were conducted Graduation Day has been organized.  The students are enjoyed "Fun
				Week" with various cultural and social activities.  Departmental Associations are made plan and conducted activities
106.	06	20 <sup>th</sup> July 2019	It is decided to verify the Self Appraisal Forms (SAFs) submitted by the faculty members by the committee consist of management representative, Principal and HOD	SAFs were collected and verified in the meeting and the suggestions are given for further improvements.
107.	06	20 <sup>th</sup> July 2019	In view to promote R&D activities, it is decided to establish research ecosystem in relevant areas, it is decided to submit the proposals for grants to the various agencies such as VGST, AICTE, DST etc.  Also decided to motivate the students	The proposals are prepared on relevant and emerging areas and submitted to the various agencies.  Many student synopses were selected for sponsorship from KSCST and VTU and some projects received awards in the
108.	06	20 <sup>th</sup> July	to submit the synopsis for synopsis to KSCST, VTU and Shristi etc.  It is decided to conduct "Induction"	project exhibitions conducted by various organizations. Two VGST proposals were selected for grant.  The "Induction progamme" has
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IQAC **Action Taken** Reports AY:2022-23

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		2019	Programme" for 1 <sup>st</sup> year students as per the VTU and AICTE guidelines	been conducted as per the university CoE and guidelines
109.	06	20 <sup>th</sup> July 2019	Decided to conduct "Academic Audit" for the AY:2018-19 by the committee composed of external and internal expertise members	Academic Audits for the AY:2019-20 have been collected by all the department and submitted to the office.
110.		20 <sup>th</sup> July 2019	Decided to collect and analyze feedback on curriculum and facilities by from all stakeholders.  Also decided to take actions based on the recommendations of the analysis report and decided to inform to the university for further actions.	Facilitated to collect feedbacks and are analyzed.  Based on the recommendations of the analysis, the actions are taken and whole process has been informed to the VTU authorities.
111.	06	20 <sup>th</sup> July 2019	It is decided to verify the Self Appraisal Forms (SAFs) submitted by the faculty members by the committee consist of management representative, Principal and HOD	SAFs were collected and verified in the meeting and the suggestions are given for further improvements.
112.	06	20 <sup>th</sup> July 2019	In view of holistic development of the students, it is decided to organize value added and certificate programmes at the department level	The value added and certificate programmes were conducted from all the departments
113.	05	28 <sup>th</sup> Jan. 2019	It is decided to motivate faculty for publications and patenting	Motivational talks were organized. Entrepreneurship and IPR activities are conducted
114.	05	28 <sup>th</sup> Jan. 2019	Decided to organize seminars, internships and industrial visits	Organized seminars, internships and industrial visits
115.	05	28 <sup>th</sup> Jan. 2019	Decided to prepare institute CoE in line with the University CoE covering IA Tests, marks submission and diplay, feedback collection on Teaching-Learning process and important activities at institute level. Decided to recruit the staff members based on the load and expertise. And as per the norms of the VTU and AICTE.	Institute CoE has been prepared and published in the institute website and displayed on the notice boards and also circulated to HODs and students through WhatsApp groups to prepare departmental/association CoE, Class Time-Table and lesion plans of course coordinators.  The faculty and instructors are recruited based on the academic and additional workloads at department and institute level.  The academic and additional workloads were distributed rationally and based on the expertise and passion in the subjects.
116.	05	28 <sup>th</sup> Jan.	Decided to conduct and document the	Academic and

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**Action Taken** Reports

**IQAC** 

AY:2022-23

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		2019	counseling and mentoring of the students on two parameters: 1) Academic Performance 2) Psychology and Personality	Personality/psychology counseling and mentoring have been conducted based on the CIE performance and additional skills inculcated by the students.  The central counseling were also conducted for critical cases.
117.	05	28 <sup>th</sup> Jan. 2019	It is decided to organize institute level activities to promote participative learning among the students.	Technovision- A project exhibition of all nearby polytechnic students has been
er er			Also decided to facilitated to conduct activities at department level to	conducted QUEST-A national level technical
			enhance participative learning and to create competitiveness among the students	activities and competitions were conducted Graduation Day has been
		* x		organized. The students are enjoyed "Fun
		y a		Week" with various cultural and social activities.  Departmental Associations are
* .				made plan and conducted activities
118.	05	28 <sup>th</sup> Jan. 2019	It is decided to verify the Self Appraisal Forms (SAFs) submitted by the faculty members by the committee consist of management representative, Principal and HOD	SAFs were collected and verified in the meeting and the suggestions are given for further improvements.
119.	04	30 <sup>th</sup> Nov. 2018	In view to promote R&D activities, it is decided to establish research	The proposals are prepared on relevant and emerging areas and
			ecosystem in relevant areas, it is decided to submit the proposals for grants to the various agencies such as VGST, AICTE, DST etc.	submitted to the various agencies.  Many student synopses were selected for sponsorship from KSCST and VTU and some
	4		Also decided to motivate the students to submit the synopsis for synopsis to	projects received awards in the project exhibitions conducted by
			KSCST, VTU and Shristi etc.	various organizations. Two VGST proposals were selected for grant.
120.	04	30 <sup>th</sup> Nov. 2018	It is decided to conduct "Induction Programme" for 1 <sup>st</sup> year students as per the VTU and AICTE guidelines	The "Induction progamme" has been conducted as per the university CoE and guidelines
121.	04	30 <sup>th</sup> Nov. 2018	It is decided to distribute the academic and additional workloads to the faculty and instructors	Workloads were distributed as per the VTU and AICTE norms
122.	04	30 <sup>th</sup> Nov. 2018	It is decided to verify the Self Appraisal Forms (SAFs) submitted by	SAFs were collected and verified in the meeting and the suggestions

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Hirasugar Institute of Technology, Nidasoshi Approved by AICTE, New Delhi, Permanently Affiliated to VTU, Belagavi Recognized under2(f) &12B of UGC Act, 1956 Accredited at 'A' Grade by NAAC & Programmes Accredited by NBA: CSE & ECE

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			Totale by HANE & Frogrammes Accreated by H	
			the faculty members by the committee consist of management representative, Principal and HOD	are given for further improvements.
123.	04	30 <sup>th</sup> Nov. 2018	Decided to collect feedback on teaching-learning and facilities	Feedbacks are collected, analyzed and actions were taken based on the recommendations and intimated to the university at all departments.
124.	04	30 <sup>th</sup> Nov. 2018	It is decided to motivate faculty for publications and patenting	Motivational talks were organized. Entrepreneurship and IPR activities are conducted
125.	04	30 <sup>th</sup> Nov. 2018	Decided to organize seminars, internships and industrial visits	Organized seminars, internships and industrial visits
126.	04	30 <sup>th</sup> Nov. 2018	Decided to prepare institute CoE in line with the University CoE covering IA Tests, marks submission and diplay, feedback collection on Teaching-Learning process and important activities at institute level. Decided to recruit the staff members based on the load and expertise. And as per the norms of the VTU and AICTE.	Institute CoE has been prepared and published in the institute website and displayed on the notice boards and also circulated to HODs and students through WhatsApp groups to prepare departmental/association CoE, Class Time-Table and lesion plans of course coordinators.  The faculty and instructors are recruited based on the academic and additional workloads at department and institute level.  The academic and additional workloads were distributed rationally and based on the expertise and passion in the subjects.
127.	03	3 <sup>rd</sup> Aug. 2018	Decided to conduct and document the counseling and mentoring of the students on two parameters: 1) Academic Performance 2) Psychology and Personality	Academic and Personality/psychology counseling and mentoring have been conducted based on the CIE performance and additional skills inculcated by the students.  The central counseling were also conducted for critical cases.
128.	03	3 <sup>rd</sup> Aug. 2018	It is decided to organize institute level activities to promote participative learning among the students.  Also decided to facilitated to conduct activities at department level to enhance participative learning and to create competitiveness among the	Technovision- A project exhibition of all nearby polytechnic students has been conducted QUEST-A national level technical activities and competitions were conducted

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		1.	students	Graduation Day has been
			students	
				organized.
				The students are enjoyed "Fun Week" with various cultural and
		2 .		
	*			social activities.
1	**	5 g 7		Departmental Associations are
	-	,		made plan and conducted
120	- 02	ord 4	7.1.1.1.1.1.0.1.0.1.0.1.0	activities
129.	03	3 <sup>rd</sup> Aug.	It is decided to verify the Self	SAFs were collected and verified
*,		2018	Appraisal Forms (SAFs) submitted by	in the meeting and the suggestions
	* * * * * *		the faculty members by the committee	are given for further
			consist of management representative,	improvements.
			Principal and HOD	
130.	03	3 <sup>rd</sup> Aug.	In view to promote R&D activities, it	The proposals are prepared on
. ,	,	2018	is decided to establish research	relevant and emerging areas and
			ecosystem in relevant areas, it is	submitted to the various agencies.
			decided to submit the proposals for	Many student synopses were
			grants to the various agencies such as	selected for sponsorship from
			VGST, AICTE, DST etc.	KSCST and VTU and some
	* * * * *		Also decided to motivate the students	projects received awards in the
			to submit the synopsis for synopsis to	project exhibitions conducted by
		5. V *2	KSCST, VTU and Shristi etc.	various organizations.
				Two VGST proposals were
				selected for grant.
d s				solveted for grant.
131.	03	3 <sup>rd</sup> Aug.	It is decided to conduct "Induction	The "Induction progamme" has
	n n	2018	Programme" for 1 <sup>st</sup> year students as	been conducted as per the
			per the VTU and AICTE guidelines	university CoE and guidelines
132.	03	3 <sup>rd</sup> Aug.	In view to promote R&D activities, it	The proposals are prepared on
132.		2018	is decided to establish research	relevant and emerging areas and
		2010	ecosystem in relevant areas, it is	submitted to the various agencies.
			decided to submit the proposals for	
			grants to the various agencies such as	J 1
_ ×			VGST, AICTE, DST etc.	selected for sponsorship from KSCST and VTU and some
		*	Also decided to motivate the students	
				projects received awards in the
			to submit the synopsis for synopsis to	project exhibitions conducted by
			KSCST, VTU and Shristi etc.	various organizations.
				Two VGST proposals were
	,		4.5	selected for grant.
122	02	ooth Ma	This decided to meet to Control	N f = 4' = -1 4 = 11 = -1 4 =
133.	02	28 <sup>th</sup> May	It is decided to motivate faculty for	Motivational talks were organized.
		2018	publications and patenting	Entrepreneurship and IPR
		28 <sup>th</sup> May	Devilous	activities are conducted
101		7X''' May	Decided to organize seminars,	Organized seminars, internships
134.	02			
		2018	internships and industrial visits	and industrial visits
134. 135.	02	2018 28 <sup>th</sup> May	internships and industrial visits  Decided to prepare institute CoE in	and industrial visits Institute CoE has been prepared
		2018	internships and industrial visits	and industrial visits

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IA Tests, marks submission and diplay, feedback collection on Teaching-Learning process and important activities at institute level. Decided to recruit the staff members based on the load and expertise. And as per the norms of the VTU and AICTE.  136. 02 28th May 2018  137. 02 28th May 2018  138. 02 28th May 2018  139. 01 12th It is decided to verify the Self Appraisal Forms (SAFs) submitted by the faculty members be the consist of management representative, Principal and HOD 139. 01 12th It is decided to verify the Self in the meeting and the suggestion are propared on the sugers on further the consist of management representative, Principal and HOD 139. 01 12th It is decided to process and important activities at propagate the norms of the VTU and AICTE.  WhatsApp groups to repeate departmental/association CoEt, Class Time-Table and lesion plans of course coordinators. The faculty and instructors are recruited based on the academic and additional workloads at department and institute level. The academic and additional workloads were distributed rationally and based on the expertise and passion in the subjects.  Academic Personality/psychology counseling and mentoring have been conducted based on the ClE performance and additional skills inculcated by the students. The central counseling were also conducted for critical cases.  The central counseling were also conducted for critical cases.  The conducted based on the ClE performance and additional skills inculcated by the students. The central counseling were also conducted for critical cases.  The conducted based on the ClE performance and additional skills inculcated by the students. The central counseling were also conducted for critical cases.  The central counseling were also conducted for critical cases.  The conducted based on the ClE performance and additional skills inculcated by the conducted activities and competitions were conducted or created by the conducted for critical cases.  The conducted by the conduct and counseling and the conducted for cr		,			
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and Personality  and Personality  and Personality  performance and additional skills inculcated by the students. The central counseling were also conducted for critical cases.  Technovision- A project exhibition of all nearby polytechnic students has been conducted activities at department level to enhance participative learning and to create competitiveness among the students  Also decided to facilitated to conduct activities at department level to enhance participative learning and to create competitiveness among the students  Technovision- A project exhibition of all nearby polytechnic students has been conducted  QUEST-A national level technical activities and competitions were conducted  Graduation Day has been organized.  The students are enjoyed "Fun Week" with various cultural and social activities.  Departmental Associations are made plan and conducted activities  SAFs were collected and verified in the meeting and the suggestions are given for further improvements.	136.	02		counseling and mentoring of the students on two parameters: 1)	Personality/psychology counseling and mentoring have been
137. 02 28th May 2018 It is decided to organize institute level activities to promote participative learning among the students. Also decided to facilitated to conduct activities at department level to enhance participative learning and to create competitiveness among the students  138. 02 28th May 2018 It is decided to verify the Self Appraisal Forms (SAFs) submitted by the faculty members by the committee consist of management representative, Principal and HOD  138. occunducted for critical cases.  Technovision- A project exhibition of all nearby polytechnic students has been conducted QUEST-A national level technical activities and competitions were conducted Graduation Day has been organized.  The students are enjoyed "Fun Week" with various cultural and social activities.  Departmental Associations are made plan and conducted activities  SAFs were collected and verified in the meeting and the suggestions are given for further improvements.				, , ,	performance and additional skills inculcated by the students.
activities to promote participative learning among the students. Also decided to facilitated to conduct activities at department level to enhance participative learning and to create competitiveness among the students    Description   Conducted   QUEST-A national level technical activities and competitions were conducted   Graduation   Day   has   been organized.   The students are enjoyed "Fun   Week" with various cultural and social activities.   Departmental   Associations   are made   plan   and   conducted   activities   SAFs   were collected   and verified   in the meeting and the suggestions   are   given   for   further   improvements.	. *				
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Appraisal Forms (SAFs) submitted by the faculty members by the committee consist of management representative, Principal and HOD in the meeting and the suggestions are given for further improvements.					social activities.  Departmental Associations are made plan and conducted
139. 01 12 <sup>th</sup> In view to promote R&D activities, it The proposals are prepared on	138.	02	2018	Appraisal Forms (SAFs) submitted by the faculty members by the committee consist of management representative, Principal and HOD	in the meeting and the suggestions are given for further
March is decided to establish research relevant and emerging areas and	139.	01			

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		2018	ecosystem in relevant areas, it is decided to submit the proposals for grants to the various agencies such as VGST, AICTE, DST etc. Also decided to motivate the students to submit the synopsis for synopsis to KSCST, VTU and Shristi etc.	submitted to the various agencies.  Many student synopses were selected for sponsorship from KSCST and VTU and some projects received awards in the project exhibitions conducted by various organizations.  Two VGST proposals were selected for grant.
140.	01	12 <sup>th</sup> March 2018	It is decided to conduct "Induction Programme" for 1 <sup>st</sup> year students as per the VTU and AICTE guidelines	The "Induction progamme" has been conducted as per the university CoE and guidelines
141.	01	12 <sup>th</sup> March 2018	It is decided to organize institute level activities to promote participative learning among the students. Also decided to facilitated to conduct activities at department level to	Technovision- A project exhibition of all nearby polytechnic students has been conducted QUEST-A national level technical
			enhance participative learning and to create competitiveness among the students	activities and competitions were conducted Graduation Day has been organized. The students are enjoyed "Fun Week" with various cultural and
				social activities.  Departmental Associations are made plan and conducted activities
142.	01	12 <sup>th</sup> March 2018	It is decided to verify the Self Appraisal Forms (SAFs) submitted by the faculty members by the committee consist of management representative, Principal and HOD	SAFs were collected and verified in the meeting and the suggestions are given for further improvements.
143.	01	12 <sup>th</sup> March 2018	In view to promote R&D activities, it is decided to establish research ecosystem in relevant areas, it is decided to submit the proposals for grants to the various agencies such as	The proposals are prepared on relevant and emerging areas and submitted to the various agencies.  Many student synopses were selected for sponsorship from
			VGST, AICTE, DST etc. Also decided to motivate the students to submit the synopsis for synopsis to KSCST, VTU and Shristi etc.	KSCST and VTU and some projects received awards in the project exhibitions conducted by various organizations.  Two VGST proposals were
144.	01	12 <sup>th</sup> March 2018	It is decided to conduct "Induction Programme" for 1 <sup>st</sup> year students as per the VTU and AICTE guidelines	selected for grant.  The "Induction progamme" has been conducted as per the university CoE and guidelines

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145.	01	12 <sup>th</sup>	It is decided to conduct "Induction	The "Induction progamme" has
		March	Programme" for 1 <sup>st</sup> year students as	been conducted as per the
		2018	per the VTU and AICTE guidelines	university CoE and guidelines
146.	01	12 <sup>th</sup>	Decided to collect and analyze	Facilitated to collect feedbacks
		March	feedback on curriculum and facilities	and are analyzed.
		2018	by from all stakeholders.	Based on the recommendations of
			Also decided to take actions based on	the analysis, the actions are taken
			the recommendations of the analysis	and whole process has been
			report and decided to inform to the	informed to the VTU authorities.
			university for further actions.	
147.	01	12 <sup>th</sup>	It is decided to verify the Self	SAFs were collected and verified
		March	Appraisal Forms (SAFs) submitted by	in the meeting and the suggestions
, ,		2018	the faculty members by the committee	are given for further
			consist of management representative,	improvements.
			Principal and HOD	
148.	01	12 <sup>th</sup>	In view of holistic development of the	The value added and certificate
× *		March	students, it is decided to organize value	programmes were conducted from
		2018	added and certificate programmes at	all the departments
			the department level	A 1

Dr.S.N.Topannavar **IQAC** Coordinator



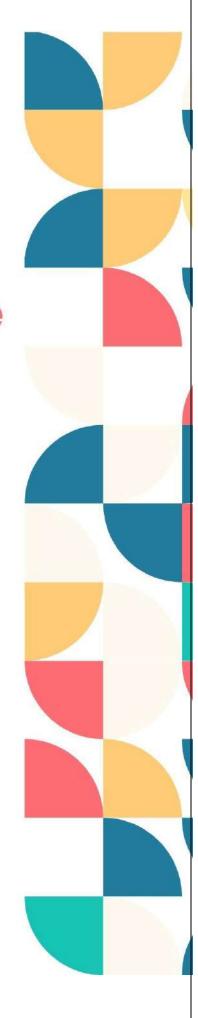
Dr.S.C.Kamate Principal Hirasugar Institute of Technology NIDASOSHI-591236



# Hirasugar Institute of Technology Nidasoshi

AUDIT
REPORT
2022-23





# **Editorial**

In the Era of global warming and climate change every citizen has to reduce their own carbon foot prints to tackle with the adverse impacts of climate change. A green audit of any academic institution revels ways in which we can reduce energy consumption, water use and reduction in emission of carbon dioxide in the environment. It is a process to look into and ask ourselves whether we are also contributing to the degradation of the environment and if so, in what manner and how we can minimize this contribution and bring down to zero and preserve our environment for future generation.

Hirasugar Institute of Technology, Nidasoshi administration has already taken a step towards the green approach and conducted green audit of campus in the year 2022-2023. As an outcome of this institute has taken green steps to reduce its carbon foot prints by several means in campus viz. sustainable fittings, tree plantation and green computing in the administration and examination. The responsibility of carrying out the scientific green audit was given to Environmental and Civil Engineering Solutions. The organization has followed the rules and regulation of Ministry of Environment and Forest, Govt. of India and Central Pollution Control Board, New Delhi.

A questionnaire was prepared based on the guidelines and format of CPCB, New Delhi to conduct green audit. The information related to consumption of resources like water, electricity and handling of solid and hazardous waste was collected in the formats from main building support services and departments. The data collected was grouped and was tabulated in Excel sheets and analysed. The graphs of the analysed data were prepared for getting quick idea of the status. Interpretation of the overall outcomes was made which incorporates primary and secondary data, references and interrelations within. Final report preparation was carried out using this interpretation to prepare environment management plan of institute for next two years.

During the preparation of the Audit Report Audit Report Hon. Principal and Vice principal, Dean IQAC encouraged us with their full support. IQAC and other officers of the institute also gave support to carry out this work. We also thank all Heads of the departments and the Co-ordinators gave full co-operation.

> Nikhil N. Kamble (C.E.O and Head)

**Environmental and Civil Engineering Solutions** 

# Acknowledgement

We express our gratitude for calling upon us for this audit, mainly the Principal and all other staff members, who were ever helpful and supported us with all the inputs needed for this audit. We thank all the teaching, non-teaching and students for helping us in conducting this audit.

# Green Audit Team

Mr. Nikhil N. Kamble

PhD (Sustainability), M. Tech. (Env. Eng.)

Mr. Aditya P. Mankar

M. Tech. (Env. Eng.)

Miss. Maithilee N. Kamble

M.B.A, B. Tech. (Mech. Eng.)

Mrs. Seema N. Kamble

Director, ECS, B. E. (Electrical)

# **Institutional Audit Committee**

Dr. S. C. Kamate

(Principal)

Prof. S. S. Patil

(Convener)

Dr. S. N. Toppannavar

(IQAC Coordinator)

Prof. H. R. Zinage

(Co-Convener)

# 1. Introduction:

The modernization and industrialization are the two important outputs of twentieth century which have made human life more luxurious and comfortable. Simultaneously, they are responsible for voracious use of natural resources, exploitation of forests and wildlife, producing massive solid waste, polluting the scarce and sacred water resources and finally making our mother Earth ugly and inhospitable. Today, people are getting more familiar to the global issues like global warming, greenhouse effect, ozone depletion and climate change etc. Now, it is considered as a final call by mother Earth to walk on the path of sustainable development. The time has come to wake up, unite and combat together for sustainable environment.

Considering the present environmental problems of pollution and excess use of natural resources, Hon. Prime Minister, Shri. Narendra Modiji has declared the Mission of Swachch Bharat Abhiyan. Also, University Grants Commission has mentioned "Green Campus, Clean Campus" mission mandatory for all higher educational institutes. As environmental sustainability is becoming an increasingly important issue for the nation, the role of higher educational institutions in relation to environmental sustainability is more prevalent.

Green Audit is the most efficient ecological tool to solve such environmental problems. It is a process of regular identification, quantification, documenting, reporting and monitoring of environmentally important components in a specified area. Through this process the regular environmental activities are monitored within and outside of the concerned sites which have direct and indirect impact on surroundings. Green audit can be one of the initiative for such institutes to account their energy, water resource use as well as wastewater, solid waste, E-waste, hazardous waste generation. Green Audit process can play an important role in promotion of environmental awareness and sensitization about resource use. It can create consciousness towards ecological values and ethics. Through green audit one can get direction about how to improve the condition of environment.

# 1.1 Need of audit:

Green auditing is the process of identifying and determining whether institutions practices are eco-friendly and sustainable. Traditionally, we are good and efficient users of natural resources. But over the period of time excess use of resources like energy, water, chemicals are become habitual for everyone especially, in common areas. Now, it is necessary to check

whether our processes are consuming more than required resources? Whether we are handling waste carefully? Green audit regulates all such practices and gives an efficient way of natural resource utilization. In the era of climate change and resource depletion it is necessary to verify the processes and convert it in to green and clean one. Green audit provides an approach for it. It also increases overall consciousness among the people working in institution towards an environment.

# 1.2 Goals of audit:

Institute has conducted a audit with specific goals as:

- 1. Identification and documentation of green practices followed by college.
- 2. Identify strength and weakness in green practices.
- 3. Conduct a survey to know the ground reality about green practices.
- 4. Analyse and suggest solution for problems identified from survey.
- 5. Assess facility of different types of waste management.
- 6. Increase environmental awareness throughout campus.
- 7. Identify and assess environmental risk.
- 8. Motivates staff for optimized sustainable use of available resources.
- 9. The long term goal of the environmental audit program is to collect baseline data of environmental parameters and resolve environmental issue before they become problem.

# 1.3 Objectives of Audit:

- 1. To examine the current practices which can impact on environment such as of resource utilization, waste management etc.
- 2. To identify and analyse significant environmental issues.
- 3. Setup goal, vision and mission for Green practices in campus.
- 4. Establish and implement Environmental Management in various departments.
- 5. Continuous assessment for betterment in performance in green practices and its evaluation.
- 6. To prepare an Environmental Statement Report on green practices followed by different departments, support services and administration building.

# 1.4 NAAC criteria VII Environmental Consciousness:

Institutes are playing a key role in development of human resources worldwide. Higher education institutes campus run various activities with aim to percolate the knowledge along with practical dimension among the society. Likewise different technological problems higher education institutes also try to give solution for issues related to environment. Different types of evolutionary methods are used to assess the problem concerning environment. It includes Environmental Impact Assessment (EIA), Social Impact Assessment (SIA), Carbon Footprint Mapping, Green audit etc

National Assessment and Accreditation Council (NAAC) which is a self-governing organization that declares the institutions as Grade according to the scores assigned at the time of accreditation of the institution. The intention of green audit is to upgrade the environmental condition inside and around the institution. It is performed by considering environmental parameters like water and wastewater accounting, energy conservation, waste management, air, noise monitoring etc. for making the institution more eco-friendly.

Students are the major strength of any academic institution. Practicing green actions in any educational institution will inculcate the good habit of caring natural resources in students. Many environmental activities like plantation and nurturing saplings and trees, Cleanliness drives, Bird watching camps, No vehicle day, Rain water harvesting, etc. will make the students good citizen of the country. Through Green Audit, higher educational institutions can ensure that they contribute towards the reduction of Global warming through Carbon Footprint reduction measures.

# 1.5 Benefits of Green Audit to an Educational Institute:

There are many advantages of green audit to an Educational Institute:

- 1. It would help to protect the environment in and around the campus.
- 2. Recognize the cost saving methods through waste minimization and energy conservation.
- 3. Find out the prevailing and forthcoming complications
- 4. Empower the organization to frame a better environmental performance.
- 5. It portrays good image of institution through its clean and green campus.

# 2. Overview of Institute:

Hirasugar Institute of Technology, Nidasoshi was established in the year of 1996. Institute has huge area of 48.20 acres and has been serving the mankind in the field of Engineering and technology.



The landscaped grounds of college are widely admired for their beauty. The most valuable investment any educational institution can make is "Nurturing Future Leaders". With the continuous rise in expectation of essential leadership standards, the institute has torch bearers have taken a responsibility for this investment to nurture the NextGen leaders with a vision to bridge the existing skill gap. With a firm step forward to attain an academic excellence, several Centres of Excellence, computer labs, and industry-academia associations has been setup at the College in association with the top leaders. The College believes that its primary stakeholders are the students. All aspects of education focus on the core values of contributing to national development while fostering global competencies among students. The College admits students from all social milieus and empowers them through intensive mentoring and counselling to face the challenges of life and become responsible and sensitized citizens of the country.

The institution came into existence in the year 1996 with the sole purpose of providing quality technical education in various disciplines of engineering. Since then the growth of the Institute has been guided by the proactive response to the fast changing world of technology.

The institute is approved by All India Council for Technical Education, New Delhi (AICTE, New Delhi) and is affiliated to Visvesvaraya Technological University, Belgaum (VTU, Belgaum).

Hirasugar Institute of Technology (HIT), Nidasoshi offers 4 years full time Bachelor of Engineering (B.E.) degree courses in various disciplines as mentioned below:

# **UG Courses**

- Computer Science & Engineering
- Electronics & communication Engineering
- Electrical & Electronics Engineering
- Mechanical Engineering
- Civil Engineering

## **Research Centre**

- Mechanical Engineering
- Computer Science & Engineering
- Electronics & Communication Engineering
- Electrical & Electronics Engineering
- **Engineering Chemistry**

The Institute's main objective is to provide effective technical education and make the students to become better citizens and accomplished technocrats of our nation. It also helps students to achieve success in their life by helping the students to get recruited into various national and multinational organizations.

## **Our Vision**

"To be a preferred institution in Engineering Education by achieving excellence in teaching and research and to remain as a source of pride for its commitment to holistic development of individual and society"

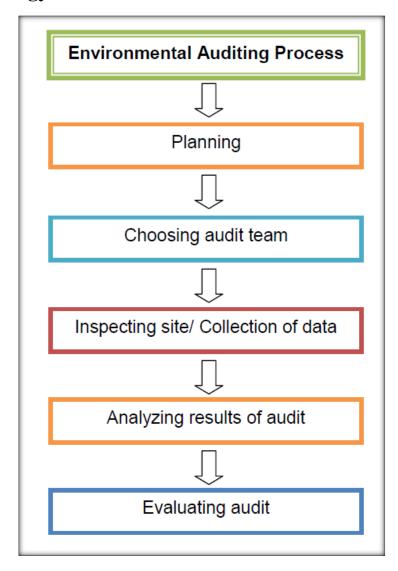
## **Our Mission**

"To continuously strive for the overall development of students, educating them in a state of the art infrastructure, by retaining the best practices, people and inspire them to imbibe real time problem solving skills, leadership qualities, human values and societal commitments, so that they emerge as competent professionals"

## **Core values:**

- Holistic Development: The Students are educated in a spiritual atmosphere under the blessings of His Holiness Mahaswamiji of Shri Math by adopting self-service, participative & cooperative learning and leadership practices along with academics.
- Student Centric Learning: To create student centric learning atmosphere by adopting experimental learning, mini projects, students seminars, internship program, industrial visits, technical competitions, project seminars, carrier guidance activities and extracurricular activities.
- **Centre of Excellence:** To develop a centre of excellence in providing education in the field of Engineering and Technology to produce technically competent and socially responsible Engineering professionals.
- **Promoting prosperity:** The sole objective is to provide Engineering Education to the rural youth of this region for prosperous carrier and development of society.
- Environmental Consciousness: Students are educated to make optimum use of environmental resources like Soil/Land, Water and conserve the energy so that they can keep the campus clean, green & pollution free.

# 3. Methodology:



# 3.1 Audits to be carried out:

- Green and carbon footprint audit
- Energy audit
- Environmental audit
  - o Water audit
  - Wastewater audit
  - Solid waste audit
  - Ambient noise audit
  - Ambient air audit



Environmental and Civil Engineering Solutions, Sangli 11

#### 4. Green and Carbon footprint audit:

Green Audit is the most efficient ecological tool to solve such environmental problems. It is a process of regular identification, quantification, documenting, reporting and monitoring of environmentally important components in a specified area. Through this process the regular environmental activities are monitored within and outside of the concerned sites which have direct and indirect impact on surroundings. Green audit can be one of the initiative for such institutes to account their energy, water resource use as well as wastewater, solid waste, Ewaste, hazardous waste generation. Green Audit process can play an important role in promotion of environmental awareness and sensitization about resource use. It can create consciousness towards ecological values and ethics. Through green audit one can get direction about how to improve the condition of environment.

Carbon is the basis of life on mother Earth. It is incorporated into the plants through photosynthesis, consumed by animal species through the food, presents in the form of carbon dioxide (CO<sub>2</sub>) the atmosphere, locked into the rocks as limestone and compressed into the different fossil fuels such as coal and oil. As CO<sub>2</sub> level in the atmosphere continue to increase, most climate designs or project that the oceans of the world and trees will keep soaking up more than half CO<sub>2</sub>. The plants on land and in the sea, taken up carbon by over many years increased the percentage discharged during decay, and this increased carbon became locked away as fossil fuels beneath the surface of the planet. The starting of the 21st century brought growing concern about global warming, climate change, food security, poverty and population growth. In the 21st century more carbon has been released into the atmosphere than that has been absorbed. CO<sub>2</sub> is a principle component causing global warming. Atmospheric carbon dioxide levels have increased to 40 % from preindustrial levels to more than 390 parts per million CO<sub>2</sub>. On this background it is a need of time to cover the research areas interrelated with climate change.

#### 4.1 Green Cover:

Hirasugar Institute of Technology, Nidasoshi has got a huge green cover and has almost 20 species of vegetation inside the campus. The institute has 2.5 acres of campus and most of this is covered by green area. They have huge plantations along with variation in species Greenery is maintained well by the institute. .



Figure 4-1 Hirasugar Institute of Technology, Nidasoshi Campus

Institute has taken huge efforts to develop its green cover. The institute has about 5.56 acres of green cover. In the vicinity of the institute there are about approximately 601 fully grown trees and more than a 88 growing plants. The below table shows some of the common tree species found.

Species	Count	Species	Count
Pongame oil tree	60	Tamrind Tree	30
Mango tree	60	Blue berry(Jamun)	25
Coconut	15	Alma tree	4
Neem tree	80	Custered Apple	10
Banayan tree	25	Cherry	45
Bamboo tree	5	Ashok tree	30
Fig tree	15	Sandalwood Tree	15
Rubber tree	4	Rudrakshi Tree	4
Curry leaves tree	3	Champk Tree	15
Guava tree	36	Jack fruit Tree	5
Pongame oil tree	60	Tamrind Tree	30
Almond Tree	30	Cycas Tree	10
Glorious Tree	10	Teak tree	60

Mostly there are trees of Mango, cherry and neem etc. Due to this the institute has high carbon sequesterial values. Considering the vicinity some dry plants were observed to approximately about 3. Plants absorb sunlight, 50% is absorbed and 30% reflected so this helps to create a cooler and more pleasant climate through a 3°C temperature reduction in the vicinity. This has also leaded to increase in biodiversity as more than 18 species of birds were observed. Some off the common birds were viz. Sparrow, wild parrots, little stint, black kite etc.

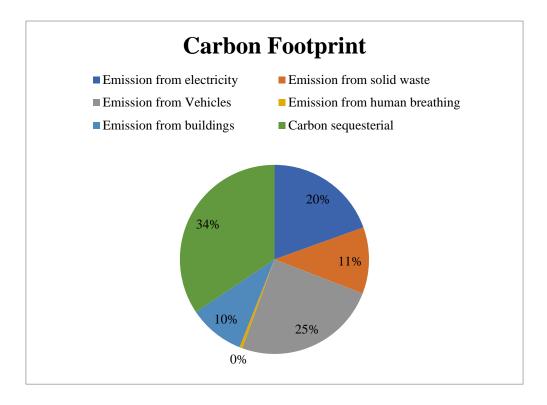
#### 4.2 Carbon Footprint Audit:

Institute has estimated its carbon footprint by factor methodology. Various factors were used to estimate the carbon emissions from Consumption of electricity, generation of solid waste, use of vehicles in campus, carbon emissions due to human breathing and emissions from buildings. At last they have also calculated Carbon sequesterial value i.e. carbon that is absorbed by the plants.

Sr. No.	Section	Emission
1	Emission from electricity	72151.543 kg CO <sub>2</sub> eq.
2	Emission from solid waste	8253.815 kg CO <sub>2</sub> eq.
3	Emission from Vehicles	3720.900 Kg CO <sub>2</sub> eq.
4	Emission from human breathing	41.200 tons of CO <sub>2</sub> eq.
5	Emission from buildings	8055.400 kg CO <sub>2</sub> eq.
6	Carbon sequesterial	3795.000 kg CO <sub>2</sub> eq.

Hence as per the calculation the carbon emission for electricity is 72151.543 kg CO<sub>2</sub> eq. secondly considering emissions from human breathing; the institute has total 727 students and staff. Considering all the staff viz. junior teachers, senior teachers, Non grant, grant CHB they are total of 136. The staff's works for about averagely 6 hours a day in the institute and the students are present for 5 hours averagely daily. Vehicles emit significant amount of gases in environment and the institute has various parking sections in the campus. It was found that averagely 69 vehicles entered the institute daily and travel about 200 m of distance from the gate. Cars also enter the institute and as per observation 10 cars are observed daily. Hence, Overall the institute emits 3720.90 Kg CO<sub>2</sub> eq. Solid waste is very important as it emits significant amount of carbon through it. Institute has a good solid waste management system. Hence the institute develops about 4700 kg of waste daily in both the form of wet and dry. Overall for a year the generation is about 8253.815 kg CO2 eq. Buildings play an

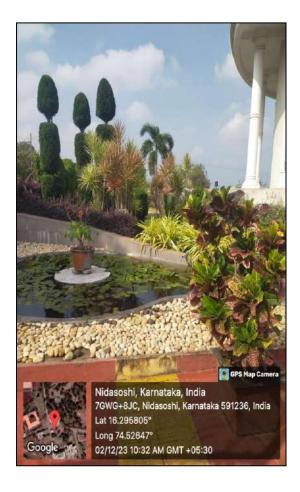
important role in carbon contribution. During the construction operation and use phase they emit significant amount of carbon. Hence considering total built-up area the carbon emissions could be evaluated. After the estimation the total built-up area observed was approximately about 325220.79 sq. ft. and the carbon emission were 8055.40 kg CO<sub>2</sub> eq. Carbon sequesterial in important as it is the carbon absorbed by the trees. The campus has 150 fully grown trees in the campus; hence the sequesterial value is about 3795 kg CO<sub>2</sub> eq.



#### 4.3 Conclusion:

- Highest carbon emission was observed from human breathing i.e. 41.20 tons of CO<sub>2</sub> eq. There is no any significant mean to reduce this number as it is not controllable.
- The next is solid waste. The emission from solid waste comprises of 8253.815 kg CO<sub>2</sub> eq. This can be significantly reduced by following simple means. Waste segregation is properly observed by the institute and they should follow the cut out plastic plans. There should be complete ban in using the plastic inside the campus. There should be minimization of food waste as it contributes highest in carbon emissions.
- Considering emission from electricity they can be significantly reduced by decrease in electricity use. This can be done by installing LED lights and using energy efficient equipment's such as machines with high star ratings which save more. Institute can

- recognize renewable energy sources and have a setup in the institute. This can lead in significant saving of electricity and reduction in carbon emissions.
- Vehicles have the least emissions in the institute and it is due to the easy approached parking so that vehicles do not roam in the vicinity. All the vehicles travel hardly 200 m in the campus and this has led to lower emissions. Still institute can follows "NO Vehicle Day" on every 2<sup>nd</sup> Saturday of each month.
- Institute reduces about 3795 kg of CO<sub>2</sub> per by the means of plants. This could be increased by increasing in plantations. Institute can plant more trees in open areas avaliable.
- The plants having highest Carbon sequestration values are suggested. Cinnamomum verum, Eugenia caryophyllid, Bumelia celestina, Acacia Berland Eri, Acacia Francescana, Chinaberry tree, Moringa oleífer, Carya illusoriness, Pinus Arizonian and Buddleia cordata are some of the suggested species for plantation.











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#### 5. Environmental Audit:

An environmental audit is a type of evaluation intended to identify environmental compliance and management system implementation gaps, along with related corrective actions. ISO 14001 is a voluntary international standard for environmental management systems ("EMS"). ISO 14001:2004 provides the requirements for an EMS and ISO 14004 gives general EMS guidelines. An EMS meeting the requirements of ISO 14001:2004 is a management tool enabling an organization of any size or type to:

- Identify and control the environmental impact of its activities, products or services;
- Improve its environmental performance continually, and
- Implement a systematic approach to setting environmental objectives and targets, to achieving these and to demonstrating that they have been achieved.

The audit examines the potential hazards or risks posed by the institutes. Areas examined may include environmental policies and procedures, energy use practices, recycling, waste, conservation, and pollution. Then, the institute can use the results to determine what changes need to be made for compliance. In a broad sense, environmental auditing aims to help protect the environment and minimize the risks of business activities to the environment and human safety and health.

#### 5.1 Water Audit and wastewater audit:

Water auditing is a method of quantifying water flows and quality in systems, with a view to reducing water usage and often saving money on otherwise unnecessary water use. Water audit is an effective management tool for minimizing losses, optimizing various uses and thus enabling considerable conservation of water. Water audits trace water use from its point of entry into the facility/system to its discharge into the sewer/river/canal etc. Wastewater audit deals with effective management of wastewater in the system. It deals with proper generation, management, treatment, transfer and disposal of wastewater.

Hirasugar Institute of Technology, Nidasoshi has carried out its water and wastewater audit and has suggested many more ways for water conservation, reuse and recycle. The detail water and waste water report is mentioned below.

#### **5.2 Water Audit report:**

Water audit for the "Hirasugar Institute of Technology, Nidasoshi" was carried out. The purpose of the water audit is to provide a thorough understanding of the water uses by identifying and measuring all water using fixtures, appliances, and practices in order to recommend potential water saving efficiencies.

#### **PRIMARY DATA**

Sr. No.	Title	Information
1	Name of Institute	Hirasugar Institute of Technology,
2	Address	Nidasoshi
3	Name of company under which water audit is carried out	Environmental and Civil Engineering Solutions, Sangli
4	Number of floors	G + 3
5	Category of building	Educational Institute
6	Nearest ESR location	Campus
7	Water supply hours	4 hrs. daily
8	Water meter present	No

#### **POPULATION DETAILS**

Title	Information
Fixed population (Working staff and	Gents: 546
Students )	Ladies: 317
Variable population (Visiting persons)	Gents: 25
	Ladies: 19

#### **SOURCE INFORMATION**

Title	Information
Sources of water	River water pumping and bore-well
Connection details	1" PVC pipe inlet and 1" outlet distribution pipe

#### **STORAGE DETAILS**

Title	Information	
Overhead tank type	PVC and RCC tank	
Location	On terrace	
Number of tanks	Block A  PVC 2000 X 2  PVC 1000 X 3  RCC 2 Lakh liters  Block B  PVC 1000 X 2  RCC 3 Lakh Liters  Block C  RCC 20000 Liters  Block D  RCC 2 Lakh Liters  Hostel  Girls RCC 1 Lakh Liters  PVC 1000 X 3  Boys RCC 1 Lakh Liters  PVC 1000 X 3  Soffice PVC 1000 X 2  Sports complex PVC 1000 X 2  Canteen PVC 1000 X 1	
Motor connection details	10 Hp X 1 B Block 2 Hp X 5 D,C Block and hostel	
Pumping period	5 hours daily	
Underground sump	Yes	

#### WATER USAGE

Toilet	Number of users	Water consumption
Gents toilet	247 users	247 X 12 lit = 6552
Washbasin	552 users	552 X 0.75 lit = 648
Ladies toilet	305 users	305 X 18 lit = 5706
Toilet cleaning	1200 liters	1200 liters
Floor cleaning	1000 liters	1000 liters
Gardening	2500 liters	2500 liters
Laboratories	5000 liters	5000 liters
Total		22,605 lit

#### 5.3 Waste water audit:

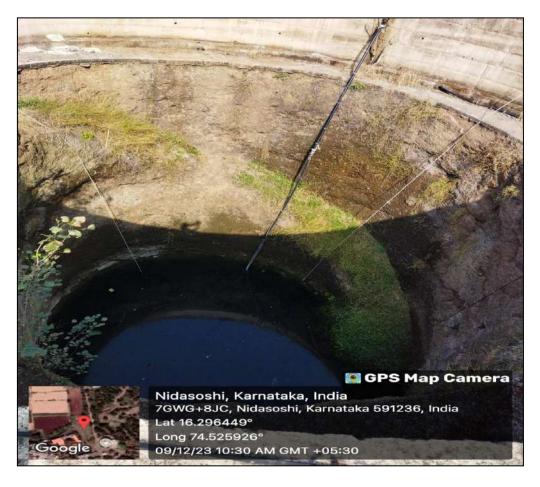
Hirasugar Institute of Technology campus generates huge amount of wastewater. The source for wastewater in the campus is hostels, institute, mess and the washrooms and urinals inside the campus. To estimate the amount of wastewater generated all the water that is used in the washrooms, quarters and hostels is considered as wastewater.

Sr. No.	Section	Wastewater generated in litres
1	Water usage generated in campus	22,605
	Waste water generated	16,953

#### 5.4 Waste water treatment plant at institute:

Hirasugar Institute of Technology lets all it waste water into sewers. Currently there is no any waste treatment facility. Sampling of waste water was done for 3 months for the parameters of COD, BOD, TKN and pH. Following table shows the characterization of wastewater.

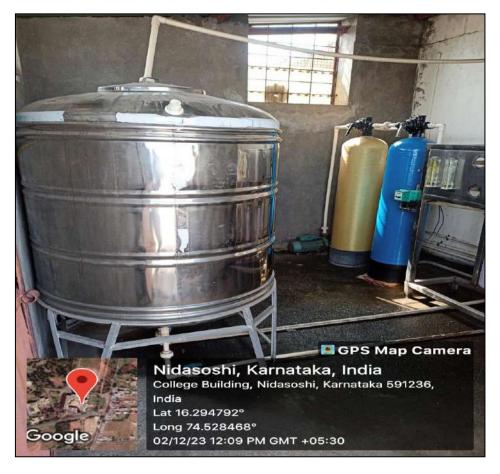
Sr. No.	Parameter	Reading
1	рН	7.14
2	COD	211
3	BOD	108
4	TKN	22











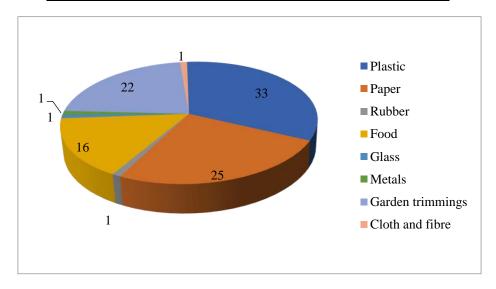


#### 5.5 Solid waste Audit:

A waste audit is a physical analysis of waste composition to provide a detailed understanding of problems, identify potential opportunities, and give you a detailed analysis of your waste composition. A waste audit will help you clearly identify your waste generation to establish baseline or benchmark data, Characterize and quantify waste stream, Verify waste pathways, identify waste diversion opportunities and identify source reduction opportunities.

Solid waste is the unwanted or useless solid material generated from the human activities in residential, industrial or commercial area. Solid waste management reduce or eliminates the adverse impact on the environment and human health. Solid waste audit for Hirasugar Institute of Technology was carried out. The entire premise was analysed for solid waste generation and waste characterization. Overall waste was observed and characterization was done. The below table shows the components of solid waste at institute campus. Quartering method was used and 1 Kg of waste was selected.

Sr. No.	Type of waste	Composition %
1	Plastic	33
2	Paper	25
3	Rubber	1
4	Food	16
5	Glass	1
6	Metals	1
7	Garden trimmings	22
8	Cloth and fibre	1



After analysing all the bins it was observed that plastic had highest contribution viz. 33% followed by the paper waste i.e. 25%. Mostly common observed plastic items were plastic wrappers of chips, soft drinks bottles and chocolate wrappers. The paper waste included paper wrappers, notebook pages, pamphlets and some pieces of cardboard. The third highest waste included garden trimmings. It included small grass, minute branches etc. The least contribution was of cloth, fibre, glass and metals.



#### 5.6 Observations and Conclusion:

- There are separate bins for wet waste and dry waste. Hence, source segregation takes place.
- Institute has taken steps towards paper recycling. The paper waste collected from the bins is send to vendors.
- Plastic ban in campus is implemented but due to lack of seriousness in the students plastic is used in campus. Institute should conduct plastic awareness seminars for both the staff and students.

#### Assessment of soil was done to determine the quality of soil:

Sr. No.	Test	Results
1	рН	6.1
2	NPK	2:3:1
3	Acidity	144 mg/lit
4	Hardness	162 mg/lit

#### 5.7 Ambient Air Audit:

Ambient air quality refers to the condition or quality of air surrounding us and in the outdoors. National Ambient Air Quality Standards are the standards for ambient air quality set by the Central Pollution Control Board (CPCB) that is applicable nationwide. The CPCB has been conferred this power by the Air (Prevention and Control of Pollution) Act, 1981. Hence, auditing this ambient air quality is stated as ambient air audit.

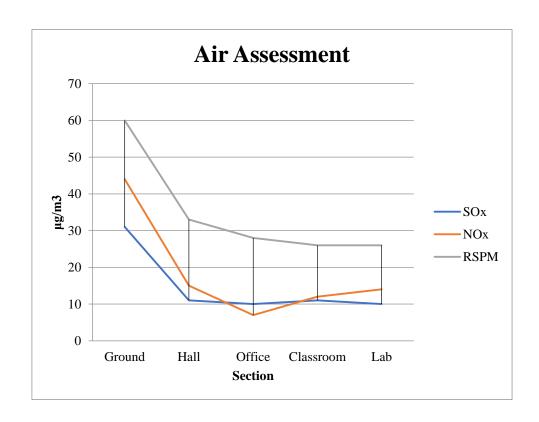
Hirasugar Institute of Technology has carried out its ambient air audit at various locations in the premises. Air quality detector machine PS-21185 was used for air audit. Parameters viz. SOx, NOx, RSPM and Air quality were assessed.



Sr. No.	Point number	Location
1	Point No 1	Ground
2	Point No 2	Hall
3	Point No 3	Office
4	Point No 4	Classroom
5	Point No 5	Lab

#### Results of air quality monitoring:

Point No	Location	SOx	NOx	RSPM	Quality
	CPCB Limits	80 μg/m3	80 μg/m3	80 μg/m3	-
1	Ground	31	44	60	Good
2	Hall	11	15	33	Fresh
3	Office	10	7	28	Good
4	Classroom	11	12	26	Fresh
5	Lab	10	14	26	Fresh



#### 5.8 Ambient Noise audit:

Ambient sound in relation to audio refers to the background noise present at a given scene or a location. This can include noises such as rain, traffic, crickets, birds, etc. Ambient sound levels are often measured in order to map sound conditions over a specific time to understand their variation with locale and various points. Ambient noise level is measured with a sound level meter. It is usually measured in Decibel (dB). 5 points were selected based on best suitable requirement for noise monitoring. RS-2250 instrument was used. Monitoring was carried out 3 times in a day for 3 months. Readings were collected in morning section, afternoon section and evening section. In addition to this monitoring was also carried out in library section, study room section, classrooms, tutorial rooms and laboratories.

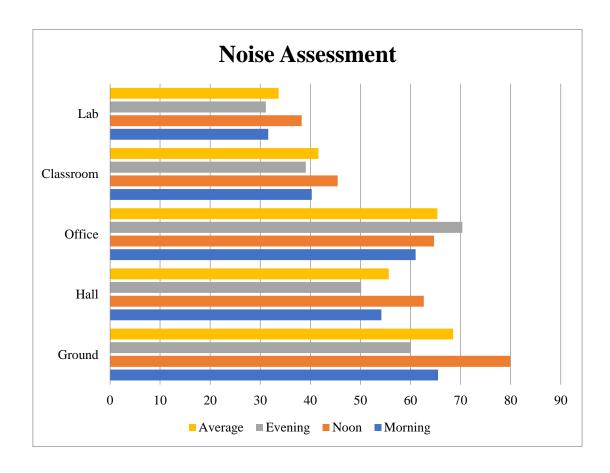


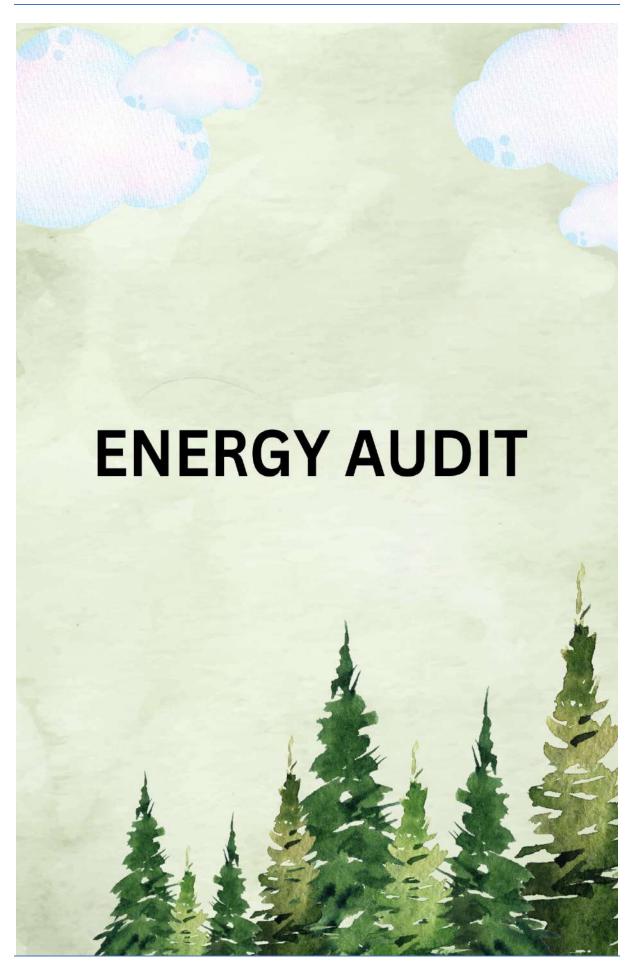
Sr. No.	Point number	Location
1	Point No 1	Ground
2	Point No 2	Hall
3	Point No 3	Office
4	Point No 4	Classroom
5	Point No 5	Lab

#### **Results of noise assessment:**

All the values are in decibels. Assessment values present average of 3 months data and the last column present the final average of morning noon and evening.

Point No	Location	Morning	Noon	Evening	Average
1	Ground	65.48	79.91	60.10	68.50
2	Hall	54.18	62.64	50.15	55.66
3	Office	61.02	64.68	70.35	65.35
4	Classroom	40.27	45.47	39.10	41.61
5	Lab	31.59	38.28	31.10	33.66





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#### 6. Energy Audit:

An energy audit is an inspection survey and an analysis of energy flows for energy conservation in a building. It may include a process or system to reduce the amount of energy input into the system without negatively affecting the output. In commercial and industrial real estate, an energy audit is the first step in identifying opportunities to reduce energy expense and carbon footprint.

A nation is tiring to advance in quantity and quality to the spread of education among the common India and development of their intelligence. In India the entire field of education and other fields of intelligent activities had been monopolized by a handful of men before independence. But today we are marching towards the desirable status of a developed nation with fast strides. But the development should be a sustained one. For achieving such an interminable development energy management is essential. As far as concerning electricity crisis, we are facing lack of electricity during office work. So, institutional management is taking design regarding production of electricity and saving electricity for Eco social aspect. Energy requirement of India is growing and incomplete domestic fossil fuel treasury. The country has motivated strategy to enlarge its renewable energy resources and policy to establish the nuclear power plants. India increases the involvement of nuclear power to largely electrical energy development facility from 4.2% to 9%. India's industrial demand accounted for 35% of electrical power requirement, domestic household use accounted for 28%, agriculture 21%, commercial 9%, and public lighting and other miscellaneous applications accounted for the rest. Energy conservation means reduction in energy consumption without making any sacrifice of quantity or quality. A successful energy management program begins with energy conservation; it will lead to adequate rating of equipment's, using high efficiency equipment and change of habits which causes enormous wastages of energy. By observing all these study lack of electricity and huge electricity demands. It is necessary to plan to be self-sufficient in electricity requirement.

#### **6.1 Connection details:**

Institute receives electricity from State Electricity Distribution. Following are the details about connection.

**Type of connection:** HT -1

• **Tariff:** 170 HT- 2 (C) (II)

Contract demand: 100 KVA

Feeder voltage: 11 KV

#### **Tariff Structure:**

As per Distribution Company, HT and LT consumers have an option to take Time of Day (TOD) tariff instead of the normal tariff. Under TOD tariff electricity consumption and maximum demand in respect of HT consumers for different periods of the day i.e. normal period, peak load period and off-peak load period could be recorded by installing TOD meter. The maximum demand and consumption recorded in different periods could be billed on the following rates of the tariff applicable.

TOD Tariffs	Rate % (Rs./Unit)	
0000 Hrs- 0600 Hrs & 2200 Hrs- 2400 Hrs	-1.500	
0600 Hrs- 0900 Hrs & 1200 Hrs- 1800 Hrs	0.000	
0900 Hrs- 1200 Hrs	0.800	
1800 Hrs- 2200 Hrs	1.100	

#### **Power Factor:**

Power Factor (PF) is an indicator of efficient utilization of power. In an AC (Alternating Current) electrical power system, PF is defined as the ratio of real power flowing to the load, to the apparent power in the circuit and is a dimensionless number.



#### 6.2 Bill analysis:

Bill analysis for Hirasugar Institute of Technology had been done for academic year 2022-2023.

Sr. No.	Month	Consumption (Kw)	Bill Amount
1	April 22	20395	201579.00
2	May 22	19809	199578.00
3	June 22	20267	203671.00
4	July 22	17867	181307.00
5	August 22	19002	197495.00
6	September 22	17206	180958.00
7	October 22	16203	177393.00
8	November 22	15253	168313.00
9	December 22	16575	180949.00
10	January 23	19839	211154.00
11	February 23	19275	205792.00
12	March 23	17231	186357.00

#### 6.3 ILER analysis:

Lighting is provided in industries, commercial buildings, indoor and outdoor for providing comfortable working environment. The primary objective is to provide the required lighting effect for the lowest installed load i.e. highest lighting at lowest power consumption. The purpose of performance test is to calculate the installed efficacy in terms of lux/watt/m<sup>2</sup> (existing or design) for general lighting installation. The calculated value can be compared with the norms for specific types of interior installations for assessing improvement options.

Range	Condition	
0.5 or less	Urgent activity required (UAR)	
0.51 - 0.70	Review Suggested (RS)	
0.70- above	Good	

ILER analysis for various sections in the institute was carried out. Firstly using LUX meter illumination was measured and then numerical analysis was carried out. ILER gives idea about lighting conditions and measured regarding improving them.

Sr. No.	Section	LUX reading	ILER	Condition
1	Library	177	0.81	Good
2	Study room	131	0.79	Good
3	Classroom S1	136	0.77	Good
4	Classrooms S2	111	0.88	Good
5	Laboratories	145	0.84	Good
6	Office	145	0.78	Good

#### Reasons for Good ILER:

Proper placement of windows and doors so that natural light is available well.

Good ventilation system.

#### **Inverter Details:**

Total number of Inverter: 23

UPS KVA: 111.6

Battery name: Exide

Battery Voltage: 12 V – 192 V

Count of battery: 203



#### **Fitting Details:**

LED: 622

Fans: 969

PC: 414

Printers: 41

#### 6.4 Sustainable practices:

#### **Energy Conservation program:**



#### Fire Extinguisher



#### **NSS** activities





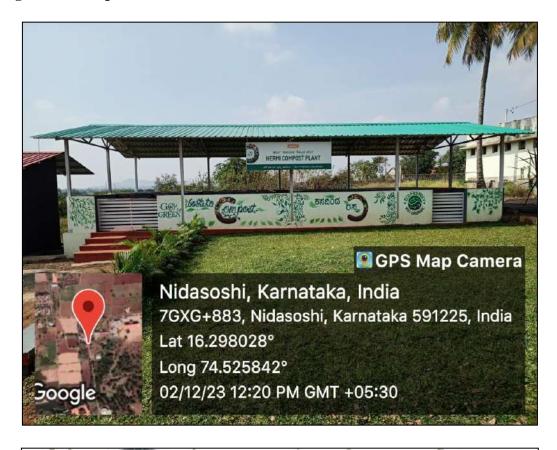
#### **Solar panel:**

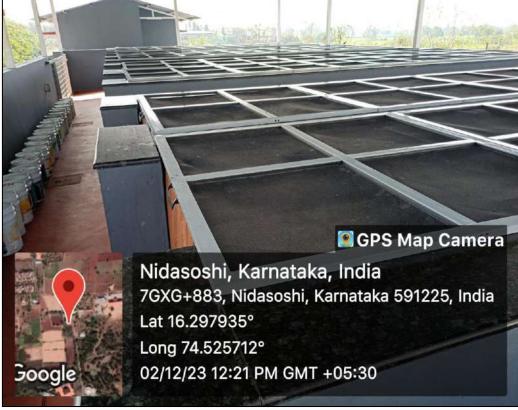


#### EV bike charging station



#### **Sewage treatment plant**





# CERTIFICATE

**ENERGY AUDIT** 

PROUDLY PRESENTED TO

## Hirasugar Institute of Technology, Nidasoshi

Our team of Environmental Engineers have analyzed Clean and Green Energy practices followed by the Institution.

THIS CERTIFICATE WAS AWARDED BY

**Environmental and Civil Engineering Solutions** 



Sokamble

SEEMA N. KAMBLE
DIRECTOR

Quick

NIKHIL N. KAMBLE
AUDITOR

**AUDIT YEAR 2022-2023** 

## CERTIFICATE

### GREEN AUDIT

PROUDLY PRESENTED TO

## Hirasugar Institute of Technology, Nidasoshi

Our team of Environmental Engineers have analyzed Clean and Green Sustainable practices followed by the Institution.

THIS CERTIFICATE WAS AWARDED BY

**Environmental and Civil Engineering Solutions** 



Sokamble

SEEMA N. KAMBLE DIRECTOR

NIKHIL N. KAMBLE **AUDITOR** 

**AUDIT YEAR 2022-2023** 

## CERTIFICATE **ENVIRONMENT AUDIT**

PROUDLY PRESENTED TO

### Hirasugar Institute of Technology, Nidasoshi

Our team of Environmental Engineers have analyzed Environmental practices followed by the Institution.

THIS CERTIFICATE WAS AWARDED BY

**Environmental and Civil Engineering Solutions** 



SEEMA N. KAMBLE DIRECTOR

NIKHIL N. KAMBLE **AUDITOR** 

**AUDIT YEAR 2022-2023** 

#### S J P N Trust's



#### Hirasugar Institute of Technology, Nidasoshi.

Inculcating Values, Promoting Prosperity
Approved by AICTE, Recognized by Govt. of Karnataka and Permanently Affiliated to Visvesvaraya Technological University - Belagavi.

Recognized under 2(f) &12B of UGC Act, 1956.Accredited at 'A' Grade by NAAC & Programmes Accredited by NBA: CSE & ECE.

HSIT
NAAC-Cycle2SSR
Criterion.6.5.2

2023-24

#### 6.5.2: Quality assurance initiatives of the institution

6.5.2. NIRF Report, AAA Report and details on follow up actions.

**NIRF Audit Reports** 

https://hsit.ac.in/NAAC/Cycle2/C6/6.5.2/NIRFReports.pdf

**Academic Audit Reports of all Departments** 

https://hsit.ac.in/NAAC/Cycle2/C6/6.5.2/CSEAcademicAuditReportsFollowupActions.pdf
https://hsit.ac.in/NAAC/Cycle2/C6/6.5.2/ECEAcademicAuditReportsFollowupActions.pdf
https://hsit.ac.in/NAAC/Cycle2/C6/6.5.2/EEEAcademicAuditReportsFollowupActions.pdf
https://hsit.ac.in/NAAC/Cycle2/C6/6.5.2/MEAcademicAuditReportsFollowupActions.pdf

#### **Administrative Audit Reports**

https://hsit.ac.in/NAAC/Cycle2/C6/6.5.2/ReportsGreenEnergyEnvironmentAudits.pdf

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