

The Annual Quality Assurance Report (AQAR) of the IQAC (For Universities)

Institutions Accredited by NAAC need to submit an Annual self-reviewed progress report i.e. Annual Quality Assurance Report (AQAR) to NAAC, through its IQAC. The report is to detail the tangible results achieved in key areas, specifically identified by the IQAC at the beginning of the Academic year. *The AQAR period would be the Academic Year. (For example, July 1, 2017 to June 30, 2018)*

Part – A

Data of the Institution

(data may be captured from IIQA)

1. Name of the Institution Sant Longowal Institute of Engineering and Technology,
Longowal

- | | |
|--|---|
| • Name of the Head of the institution : | Prof. (Dr.) Shailendra Kumar Jain |
| • Designation: | Director |
| • Does the institution function from own campus: | Yes |
| • Phone no./Alternate phone no. | 01672-253100 (O), 253101 (R) |
| • Mobile no. | +919478400840 |
| • Registered Email | director@sliet.ac.in |
| • Alternate Email | deanacad@sliet.ac.in |
| • Address | Sant Longowal Institute of Engineering & Technology |
| • City/Town : | Longowal/ Sangrur |
| • State/UT : | Punjab |
| • Pin Code : | 148106 |

2. Institutional status:

- University: State/Central/Deemed/Private: Deemed
(Tick appropriate)
- Type of Institution: Co-education/Men/Women Co-Education
- Location : Rural/Semi-urban/Urban: Rural
- Financial Status: Centrally funded/state funded/Private Centrally Funded
(please specify)

- Name of the IQAC Co-ordinator/Director: Prof. (Dr.) J.S. Dhillon
- Phone no. /Alternate phone no. : 01672-2531678
- Mobile: +91 9779 828833
- IQAC e-mail address: igac@slit.ac.in
- Alternate Email address: jsdhillonp@yahoo.co.in

3. Website address: www.slit.ac.in

Web-link of the AQAR: (Previous Academic Year): <http://slit.ac.in/internal-quality-assurance-cell-igac/AQAR2017-18.pdf>

For ex. <http://www.chanakyauniv.edu.in/AQAR2015-16.doc>

4. Whether Academic Calendar prepared during the year?

Yes/No....., if yes, whether it is uploaded in the Institutional website: YES

Weblink: <http://academic.slit.ac.in/files/2012/10/New-academic-calander-2108.pdf>

5. Accreditation Details

Cycle	Grade	CGPA	Year of Accreditation	Validity Period
1 st	B	2.35	2012	from:2012 to: 2017
2 nd	B+	2.58	2017	from:2017 to: 2022

6. Date of Establishment of IQAC: DD/MM/YYYY: 16/02/2013

7. Internal Quality Assurance System

7.1 Quality initiatives by IQAC during the year for promoting quality culture		
Item /Title of the quality initiative by IQAC	Date & duration	Number of participants/beneficiaries
Workshop on Outcome Based Education System	06.05.2019	112 (1 st session = 60 & 2 nd Session = 52)
Internal Academic & Administrative Audit		
Electronics & Communication Engg.	17.07.2019	15
EIE	10.07.2019	05
CSE	14.05.2019	05
FET	14.05.2019	05
Chem. Engg	21-28.05.2019	12

Math	04.06.2019	07
Chemistry	16.05.2019	05
Physics	24.05.2019	05
Mech. Engg.	06.06.2019	50
Management & Humanities	15.05.2019	10
Academic Section	30-31 May, 2019	04
Store & Purchase Section	30-31 May, 2019	04
Administration Section	30-31 May, 2019	04
Accounts Section	30-31 May, 2019	04
Estate Office	30-31 May, 2019	04
Hostel System	30-31 May, 2019	04
Transport System	30-31 May, 2019	04
Health Centre	30-31 May, 2019	04
Sports Section	30-31 May, 2019	04
Set up of Competitive Examination Cell	04.07.2019	04 Members

Note: Some Quality Assurance initiatives of the institution are:

(Indicative list)

- *Regular meeting of Internal Quality Assurance Cell (IQAC); timely submission of Annual Quality Assurance Report (AQAR) to NAAC; Feedback from all stakeholders collected, analysed and used for improvements*
- *Academic Administrative Audit (AAA) conducted and its follow up action*
- *Participation in NIRF*
- *ISO Certification*
- *NBA etc.*
- *Any other Quality Audit*

8. Provide the list of Special Status conferred by Central/ State Government- UGC/CSIR/DST/DBT/ICMR/TEQIP/World Bank/CPE of UGC etc.

Institution/ Department/Faculty	Scheme	Funding agency	Year of award with duration	Amount
SLIET Longowal	TEQIP-III	National Project Implementation Unit (NPIU), (World Bank Project) New Delhi	12.04.2018 - 30.09.2020 (Letter no. AC/TEQIP-III/MHRD dated 12.04.2018)	Rs.7.00 Crore

9. Whether composition of IQAC as per latest NAAC guidelines: Yes/No: Yes

*upload latest notification of formation of IQAC Yes

10. No. of IQAC meetings held during the year: 02

The minutes of IQAC meeting and compliance to the decisions have been uploaded on the institutional website.....

Yes/No

YES

(Please upload, minutes of meetings and action taken report)

<http://sliet.ac.in/internal-quality-assurance-cell-iqac/minutes-of-iqac-meetings/>

11. Whether IQAC received funding from any of the funding agency to support its activities during the year? Yes No

If yes, mention the amount:

Year:

12. Significant contributions made by IQAC during the current year (maximum five bullets)

- Initiation of SLIET Merit Scholarship Scheme
- Dean (Student Welfare) Coordinates to ensure that Anti-Ragging measures have been effectively enforced. Emphasized the monitoring of the Teaching & Learning processes at departmental levels.
- Initiation of SLIET Quality Publication Award (SQPA) to grant incentives to the research scholars of the Institute.
- Remedial classes for weak students and make-up classes for UG and PG students have been introduced. NPTEL courses for students as well as faculty.
- Certificate of appreciation received from National Project Implementation Unit (NPIU), New Delhi
- SLIET Team "Green Rangers" outperforms 70 teams including IITs to bag the overall winner award in Efficycle, 2018
- Admissions to Ph.D. made under National Doctoral Fellowship Scheme (NDF) of AICTE.
- Employment Skill test for UG students was conducted, in which 1740 students of the institute participated.
- Research assistantship under TEQIP-III is provided to 10 Ph.D. scholars.
- The institute organized 12 expert lectures under Industry Institute Component.
- The Institute organized 03 day Personality Development Programme for UG Students.
- A team of 48 students from the Institute went on Industrial Visit to Gahaziabad
- The Institute organized 05 workshop/seminars for faculty/staff of the Institute.
- 80 students of the Institute are already placed through Campus placement in well reputed companies and the placement through campus is in progress.
- Set up of Competitive Examination Cell
- Organizing of a Seminar on Outcome Based Education (OBE) system

- Financial support to students for innovative projects under TEQIP-III
- Financial support to young faculty to promote research
- Physical Training (PT) to 1st Year ICD Students
- Establishment of Rovers/Rangers Group under Bharat Scout & Guides, Punjab

13. Plan of action chalked out by the IQAC in the beginning of the Academic year towards Quality Enhancement and the outcome achieved by the end of the Academic year

Plan of Action	Achievements/Outcomes
<ul style="list-style-type: none"> • Action has been initiated to introduced complete MIS/ERP • Study materials for ICD students. 	<ul style="list-style-type: none"> • Saral ERP has been implemented • Under Progress

14. Whether the AQAR was placed before statutory body? Yes /No: YES

Name of the statutory body : SENATE

Date of meeting(s) : 15.01.2019 (23rd Meeting Item No. 23.9.2)

15. Whether NAAC/or any other accredited body(s) visited IQAC or interacted with it to Assess the functioning?

Yes/No: No

Date:

16. Whether institutional data submitted to AISHE: Yes/No: Yes

Year: 2018-19

Date of Submission: 29.03.2019

17. Does the Institution have Management Information System?

Yes

No

NO (under progress-In the last phase of implementation)

If yes, give a brief description and a list of modules currently operational.

(Maximum 500 words)

Yes, the Institute has Management Information System (MIS), which is a piece-meal type of MIS and it is active in the following sections/Departments.

a) Central Library b) Central Admission Cell c) Examination Cell d) Accounts Section e) Store & Purchase Section

Part-B

CRITERION I – CURRICULAR ASPECTS			
1.1 Curriculum Design and Development			
1.1.1 Programmes for which syllabus revision was carried out during the Academic year			
Name of programme	Programme Code	Programme Specialization	Dates of revision
BE	GCS	Computer Science & Engineering	27.06.2018
BE	GEC	Electronics & Communication Engineering	27.06.2018
BE	GIN	Instrumentation & Control Engineering	27.06.2018
BE	GEE	Electrical Engineering	27.06.2018
BE	GCT	Chemical Engineering	27.06.2018
BE	GFT	Food Technology	27.06.2018
BE	GME	Mechanical Engineering (Manufacturing Engg.)	27.06.2018
BE	GWT	Mechanical Engineering (Welding Technology)	27.06.2018
M.Tech.	PG-MSE	Manufacturing Systems Engineering	27.06.2018
M.Tech.	PG-WLF	Welding and Fabrication	27.06.2018
M.Tech.	PG-FET	Food Engineering & Technology	27.06.2018
M.Tech.	PG-CSE	Computer Science & Engineering	27.06.2018
M.Tech.	PG-ICE	Instrumentation and Control Engineering	27.06.2018
M.Tech.	PG-ECE	Electronics and Communication Engineering	27.06.2018
M.Tech.	PG-CE	Chemical Engineering	27.06.2018
MSc	PG-PHY	Chemical Engineering	27.06.2018
MSc	PG-CHY	Chemistry	27.06.2018
MSc	PG-MATH	Mathematics	27.06.2018
MBA	MBA	MBA	27.06.2018

1.1.2 Programmes/ courses focussed on employability/ entrepreneurship/ skill development during the Academic year				
Programme with Code	Programme specializaiton	Date of Introduction	Course with Code	Date of Introduction

BE	Computer Science & Engineering	27.06.2018	HSMC401	27.06.2018
BE	Electronics & Communication Engineering	27.06.2018	HSMC401	27.06.2018
BE	Instrumentation & Control Engineering	27.06.2018	HSMC401	27.06.2018
BE	Electrical Engineering	27.06.2018	HSMC401	27.06.2018
BE	Chemical Engineering	27.06.2018	HSMC401	27.06.2018
BE	Food Technology	27.06.2018	HSMC401	27.06.2018
BE	Mechanical Engineering (Manufacturing Engg.)	27.06.2018	HSMC401	27.06.2018
BE	Mechanical Engineering (Welding Technology)	27.06.2018	HSMC401	27.06.2018
BE	Computer Science & Engineering	27.06.2018	HSMC402	27.06.2018
BE	Electronics & Communication Engineering	27.06.2018	HSMC402	27.06.2018
BE	Instrumentation & Control Engineering	27.06.2018	HSMC402	27.06.2018
BE	Electrical Engineering	27.06.2018	HSMC402	27.06.2018
BE	Chemical Engineering	27.06.2018	HSMC402	27.06.2018
BE	Food Technology	27.06.2018	HSMC402	27.06.2018
BE	Mechanical Engineering (Manufacturing Engg.)	27.06.2018	HSMC402	27.06.2018
BE	Mechanical Engineering (Welding Technology)	27.06.2018	HSMC402	27.06.2018
BE	Computer Science & Engineering	27.06.2018	ESME402	27.06.2018
BE	Electronics & Communication Engineering	27.06.2018	ESME402	27.06.2018
BE	Instrumentation & Control Engineering	27.06.2018	ESME402	27.06.2018
BE	Electrical Engineering	27.06.2018	ESME402	27.06.2018
BE	Chemical Engineering	27.06.2018	ESME402	27.06.2018

BE	Food Technology	27.06.2018	ESME402	27.06.2018
BE	Mechanical Engineering (Manufacturing Engg.)	27.06.2018	ESME402	27.06.2018
BE	Mechanical Engineering (Welding Technology)	27.06.2018	ESME402	27.06.2018
1.2 Academic Flexibility :				
1.2.1 New programmes/courses introduced during the Academic year				
Programme/Course		Date of introduction		
NIL		NIL		
1.2.2 Programmes in which Choice Based Credit System (CBCS)/Elective Course System implemented at the University level during the Academic year.				
Name of programmes adopting CBCS	Programme Specialization		Date of implementation of CBCS/Elective Course System	
BE	Computer Science & Engineering		27.06.2018	
BE	Electronics & Communication Engineering		27.06.2018	
BE	Instrumentation & Control Engineering		27.06.2018	
BE	Electrical Engineering		27.06.2018	
BE	Chemical Engineering		27.06.2018	
BE	Food Technology		27.06.2018	
BE	Mechanical Engineering (Manufacturing Engg.)		27.06.2018	
BE	Mechanical Engineering (Welding Technology)		27.06.2018	
M.Tech.	Manufacturing Systems Engineering		27.06.2018	
M.Tech.	Welding and Fabrication		27.06.2018	
M.Tech.	Food Engineering & Technology		27.06.2018	
M.Tech.	Computer Science & Engineering		27.06.2018	
M.Tech.	Instrumentation and Control Engineering		27.06.2018	
M.Tech.	Electronics and Communication Engineering		27.06.2018	
M.Tech.	Chemical Engineering		27.06.2018	
MSc	Physics		27.06.2018	
MSc	Chemistry		27.06.2018	
MSc	Mathematics		27.06.2018	
MBA	MBA		27.06.2018	
1.3 Curriculum Enrichment:				
1. To adopt the AICTE Model Curriculum 2018 applicable in SLIET, a number of meetings were held with the HODs / their representatives.				
2. Included fractional credit courses to give space to curricular activities.				
3. Provision for opting 20% courses from MOOCs.				
1.3.1 Value-added courses imparting transferable and life skills offered during the year				
Value added courses		Date of introduction	Number of students enrolled	
English Communication and Soft Skills		27.06.2018	161	
Environmental Studies		27.06.2018	161	
Research Methodology and IPR		27.06.2018	41	

English for Research Paper Writing and professional communication	27.06.2018	41
Constitution of India	27.06.2018	41
1.3.2 Field Projects / Internships under taken during the year		
Project/Programme Title	Programme Specialization	No. of students enrolled for Field Projects / Internships
MSc	Internship of MSc (Chemistry) students at Pharmaffiliates Analytics & Synthetics (P) Ltd., Panchkula, Haryana	4
BE	Computer Science and Engineering	8
BE	Computer Science and Engineering	6
BE	Computer Science and Engineering	8

1.4 Feedback System				
1.4.1 Whether structured feedback received from all the stakeholders.				
1) Students	2) Teachers	3) Employers	4) Alumni	5) Parents
Yes	No	Yes	Yes	No
1.4.2 How the feedback obtained is being analyzed and utilized for overall development of the institution? (maximum 500 words)				
Data Analytics Committee is constituted vide Office Order No. SLIET/DIR/2520 dt. 29.01.2019 to analyze the Data. As per record available in department of Training and Placement there were no procedure/ format/ mechanism available to take the feedback from Employers in the past. But after self-assessment of this gap Head (T&P) has designed one Feedback Form & regularly taking the feedback from our recruiters since November 2016.				
CRITERION II -TEACHING-LEARNING AND EVALUATION				
2.1 Student Enrolment and Profile				
2.1. 1 Demand Ratio during the year				
Name of the Programme	Programme Specialization	Number of seats available	Number of Application received	Students Enrolled
BE (Lateral Entry)	Computer Science & Engineering (GCS)	86	631 (Through SLIET Entrance Test (SET-III))	86
BE (Lateral Entry)	Electronics & Communication Engineering (GEC)	44		44
BE (Lateral Entry)	Instrumentation & Control Engineering (GIN)	60		45
BE (Lateral Entry)	Electrical Engineering (GEE)	39		39

BE (Lateral Entry)	Chemical Engineering (GCT)	52	164 (Through SLIET Entrance Test (SET-III))	47
BE (Lateral Entry)	Food Technology (GFT)	63		52
BE (Lateral Entry)	Mechanical Engineering (Manufacturing Engg.) (GME)	62	285 (Through SLIET Entrance Test (SET-III))	62
BE (Lateral Entry)	Mechanical Engineering (Welding Technology) (GWT)	70		61
BE	Computer Science & Engineering (GCS)	53	Through JoSAA/CSAB	47
BE	Electronics & Communication Engineering (GEC)	26		18
BE	Instrumentation & Control Engineering (GIN)	26		08
BE	Electrical Engineering (GEE)	27		24
BE	Chemical Engineering (GCT)	26		18
BE	Food Technology (GFT)	26		03
BE	Mechanical Engineering (Manufacturing Engg.) (GME)	33		32
BE	Mechanical Engineering (Welding Technology) (GWT)	32		23
M.Tech.	M.Tech. in Manufacturing Systems Engineering (PG-MSE)	36	104 (Through CCMT and SLIET Entrance Test)	28
M.Tech.	M.Tech. in Welding and Fabrication (PG-WLF)	25		12
M.Tech.	M.Tech. in Food Engineering & Technology (PG-FET)	36		19
M.Tech.	M.Tech. in Computer Science & Engineering (PG-CSE)	25		19
M.Tech.	M.Tech. in Instrumentation and Control Engineering (PG-ICE)	25		20
M.Tech.	M.Tech. in Electronics and Communication Engineering (PG-ECE)	25		03
M.Tech.	M.Tech. in Chemical Engineering (PG-CE)	25		0
MSc	M.Sc. in Physics (PG-PHY)	25	52	21
MSc	M.Sc. in Chemistry (PG-CHY)	25	(Through CCMN and SLIET)	20
MSc	M.Sc. in Mathematics (PG-MATH)	25		15

				Entrance Test)	
MBA	MBA	50	31	13	
2.2 Catering to Student Diversity					
2.2.1. Student - Full time teacher ratio (current year data)					
Year	Number of students enrolled in the institution (UG)	Number of students enrolled in the institution (PG)	Number of full time teachers available in the institution teaching only UG courses	Number of full time teachers available in the institution teaching only PG courses	Number of teachers teaching both UG and PG courses
2018-19	1776	304	--	--	155
2.3 Teaching - Learning Process					
2.3.1 Percentage of teachers using ICT for effective teaching with Learning Management Systems (LMS), E-learning resources etc. (current year data)					
Number of teachers on roll	Number of teachers using ICT (<i>LMS, e-Resources</i>)	ICT tools and resources available	Number of ICT enabled classrooms	Number of smart classrooms	E-resources and techniques used
155 (130 regular + 25 on contract)	85	3	15	9	18
2.3.2 Students mentoring system available in the institution? Give details. (maximum 500 words)					
<p>Students mentoring system is available in the institution in the form of Course Counsellor, Tutor Guardian Scheme and Student Mentor Scheme. All the classes of the Diploma, Degree and PG students are assigned their course Counsellors. Students of Diploma and degree of all years in a mixed manner are assigned a faculty member of his/her department and if required from non-engineering departments as Tutor Guardian. Students from BE-IIInd year and BE-IIIrd year are given STUDENT MENTOR assignments on volunteer basis to mentor the students of Diploma 1st year and Degree 1st year respectively. Each student mentor has been allotted 10-15 mentees. On the recommendations of respective Head of the Departments, Departmental coordinators from Engineering departments have been appointed for TGSMS activity. Every Wednesday a period in the central time table from 12:30 to 01:30pm is fixed for course councillor and Tutor Guardian activities on alternate Wednesdays. The main purpose of this student mentor scheme is to address their problems (academics, social, emotion, economic etc.) and encourage the students to participate in the various academic and non-academic events throughout the academic year. Students can discuss any kind of problems occurs during their study in SLIET campus with their respective mentors. Student mentors are encouraged to cooperate and help their mentees by 24x7 hours. This scheme, which is perhaps the only one of its kind, guarantees additional assurance to the new corners and takes some burdens off the parents and lessens their anxiety. The students are free to contact the counselling service with a wide range of worries, including person al, home and family relationships, depression, anxiety and loneliness. This scheme has given pivotal results in the following areas:</p>					

<ul style="list-style-type: none"> To enhance teacher-student contact hours. To enhance students' academic performance and attendance. To minimise student drop-out rates. To identify and understand the status of slow learners and encourage advanced learners. To render equitable service to students. 		
Number of students enrolled in the institution	Number of fulltime teachers	Mentor: Mentee Ratio
3707	155	1:10

2.4 Teacher Profile and Quality				
2.4.1 Number of full time teachers appointed during the year				
No. of sanctioned positions	No. of filled positions	Vacant positions	Positions filled during the current year	No. of faculty with Ph.D.
1+180	1+130	50	NIL	96
2.4.2 Honours and recognitions received by teachers (received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the year)				
Year of award	Name of full time teachers receiving awards from state level, national level, international level	Designation	Name of the award, fellowship, received from Government or recognized bodies	
2018	P S Panesar	Professor	Fellow Award	
2018	Dr. Ajat Shatru Arora	Professor	Was Selected for LEAP mandated by MHRD and Organised by IIT, Roorkee During 16 Nov, 2018 to 7 Dec, 2018 at GNEC Noida and Ros Business School, Michigan University, Ann Arbor, Michigan, USA.	
2018	Dr. Shailendra Kumar Jain	Director	Was Selected for LEAP mandated by MHRD and Organised by IIT, Roorkee During 16 Nov, 2018 to 7 Dec, 2018 at GNEC Noida and Ros Business School, Michigan University, Ann Arbor, Michigan, USA.	
2018	Prof. Shankar Singh	Professor	Selected to teach AT73.17 (Advanced Material Science for Design & Manufacturing) at	

			Asian Institute of Technology (AIT), Bangkok, Thailand under MHRD Scheme STIF Secondment to Asian Institute of Technology, Bangkok
2019	Dr. Harish Kumar Chopra	Professor	Selected for three-week leadership development program Leadership for Academicians Program (LEAP) under the aegis of the Ministry of Human Resource Development, Government of India at IIT, BHU from Feb 25 to March 9, 2019 and at The Pennsylvania State University, Pennsylvania, United States from March 11th to 15th, 2019
2019	Dr. D.C. Saxena	Professor	Selected for three-week leadership development program Leadership for Academicians Program (LEAP) under the aegis of the Ministry of Human Resource Development, Government of India at IIT, BHU from Feb 25 to March 9, 2019 and at The Pennsylvania State University, Pennsylvania, United States from March 11th to 15th, 2019
2019	Dr. Manpreet Singh Manna	Associate Professor	PFLA Excellence Award -2019 from People First Leadership Academy and International Accreditation organisation at La Marvella Sarovar the premier, Bangalore on 19th Jan., 2019. “Editor Choice Education Excellency Award-2019” for making Indian Education Affordable and Reachable from Chairman NBA during Dialogue

			India Academia Awards at Taj Dubai (UAE) on 2nd May, 2019.
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5 Evaluation Process and Reforms :

1. Modifications in Academic Calendar to facilitate the students to attend maximum classes.
2. Minor examinations only on Mondays to save time and to give sufficient time to the students for the preparation of examinations.
3. Retest examinations on Saturdays / vacation during the semester to facilitate the slow runners.
4. Different continuous evaluation schemes for Under-Graduate (UG) & Integrated Certificate Diploma (ICD) Students
5. Timely declaration of Results after approval in the SENATE (Academic Council)

2.5.1 Number of days from the date of semester-end/ year- end examination till the declaration of results during the year

Programme Name	Program me Code	Semester/ year	Last date of the last semester-end/ year- end examination	Date of declaration of results of semester-end/ year- end examination
Certificate in Building Maintenance	CBM	2nd / 1st	22.05.2019	17.06.2019
Certificate in Data Entry & Word Processing	CDE	2nd / 1st	22.05.2019	17.06.2019
Certificate in Paper Technology	CPT	2nd / 1st	22.05.2019	17.06.2019
Certificate in Servicing & Maintenance of Electronic Instruments	CSME	2nd / 1st	22.05.2019	17.06.2019
Certificate in Television Mechanic	CTV	2nd / 1st	22.05.2019	17.06.2019
Certificate in Electrician	CEN	2nd / 1st	22.05.2019	17.06.2019
Certificate in Food Processing & Preservation	CFP	2nd / 1st	22.05.2019	17.06.2019
Certificate in Servicing & Maintenance of Medical Instruments	CSMM	2nd / 1st	22.05.2019	17.06.2019
Certificate in Air Conditioning Mechanic	CAC	2nd / 1st	22.05.2019	17.06.2019
Certificate in Auto & Farm Equipment Mechanic	CAF	2nd / 1st	22.05.2019	17.06.2019
Certificate in Foundry and Forging	CFF	2nd / 1st	22.05.2019	17.06.2019
Certificate in Tool & Die Technology	CTD	2nd / 1st	22.05.2019	17.06.2019
Certificate in Welding	CWG	2nd / 1 st	22.05.2019	17.06.2019
Certificate in Building Maintenance	CBM	4 th / 2 nd	22.05.2019	17.06.2019
Certificate in Data Entry & Word Processing	CDE	4 th / 2 nd	22.05.2019	17.06.2019

Certificate in Paper Technology	CPT	4 th / 2 nd	22.05.2019	17.06.2019
Certificate in Servicing & Maintenance of Electronic Instruments	CSME	4 th / 2 nd	22.05.2019	17.06.2019
Certificate in Television Mechanic	CTV	4 th / 2 nd	22.05.2019	17.06.2019
Certificate in Electrician	CEN	4 th / 2 nd	22.05.2019	17.06.2019
Certificate in Food Processing & Preservation	CFP	4 th / 2 nd	22.05.2019	17.06.2019
Certificate in Servicing & Maintenance of Medical Instruments	CSMM	4 th / 2 nd	22.05.2019	17.06.2019
Certificate in Air Conditioning Mechanic	CAC	4 th / 2 nd	22.05.2019	17.06.2019
Certificate in Auto & Farm Equipment Mechanic	CAF	4 th / 2 nd	22.05.2019	17.06.2019
Certificate in Foundry and Forging	CFF	4 th / 2 nd	22.05.2019	17.06.2019
Certificate in Tool & Die Technology	CTD	4 th / 2 nd	22.05.2019	17.06.2019
Certificate in Welding	CWG	4 th / 2 nd	22.05.2019	17.06.2019
Diploma in Computer Science & Engineering	DCS	6 th / 3 rd	22.05.2019	17.06.2019
Diploma in Chemical Technology	DCT	6 th / 3 rd	22.05.2019	17.06.2019
Diploma in Electronics & Communication Engineering	DEC	6 th / 3 rd	22.05.2019	17.06.2019
Diploma in Electrical Engineering	DEE	6 th / 3 rd	22.05.2019	17.06.2019
Diploma in Food Technology	DFT	6 th / 3 rd	22.05.2019	17.06.2019
Diploma in Instrumentation & Control	DIN	6 th / 3 rd	22.05.2019	17.06.2019
Diploma in Mechanical Engineering	DME	6 th / 3 rd	22.05.2019	17.06.2019
Computer Science & Engineering	GCS	2 nd / 1 st Yr	17.05.2019	17.06.2019
Electronics and Communication Engg.	GEC	2 nd / 1 st Yr	17.05.2019	17.06.2019
Electrical Engg.	GEE	2 nd / 1 st Yr	17.05.2019	17.06.2019
Instrumentation and Control Engg.	GIN	2 nd / 1 st Yr	17.05.2019	17.06.2019
Chemical Engg.	GCT	2 nd / 1 st Yr	17.05.2019	17.06.2019
Food Technology	GFT	2 nd / 1 st Yr	17.05.2019	21.06.2019
Mechanical Engg. (Welding Technology)	GWT	2 nd / 1 st Yr	17.05.2019	17.06.2019
Mechanical Engg. (Manufacturing Engg.	GME	2 nd / 1 st Yr	17.05.2019	21.06.2019
Computer Science & Engineering	GCS	4 th / 2 nd Yr	22.05.2019	17.06.2019
Electronics and Communication Engg.	GEC	4 th / 2 nd Yr	21.05.2019	17.06.2019
Electrical Engg.	GEE	4 th / 2 nd Yr	22.05.2019	21.06.2019
Instrumentation and Control Engg.	GIN	4 th / 2 nd Yr	22.05.2019	17.06.2019
Chemical Engg.	GCT	4 th / 2 nd Yr	21.05.2019	17.06.2019
Food Technology	GFT	4 th / 2 nd Yr	21.05.2019	17.06.2019
Mechanical Engg. (Welding Technology)	GWT	4 th / 2 nd Yr	22.05.2019	17.06.2019
Mechanical Engg. (Manufacturing Engg.	GME	4 th / 2 nd Yr	22.05.2019	17.06.2019
Computer Science & Engineering	GCS	6 th / 3 rd Yr	22.05.2019	17.06.2019
Electronics and Communication Engg.	GEC	6 th / 3 rd Yr	22.05.2019	17.06.2019
Electrical Engg.	GEE	6 th / 3 rd Yr	22.05.2019	17.06.2019
Instrumentation and Control Engg.	GIN	6 th / 3 rd Yr	22.05.2019	17.06.2019
Chemical Engg.	GCT	6 th / 3 rd Yr	22.05.2019	17.06.2019
Food Technology	GFT	6 th / 3 rd Yr	22.05.2019	17.06.2019
Mechanical Engg. (Welding Technology)	GWT	6 th / 3 rd Yr	22.05.2019	17.06.2019
Mechanical Engg. (Manufacturing Engg.	GME	6 th / 3 rd Yr	22.05.2019	17.06.2019
Computer Science & Engineering	GCS	8 th / 4 th Yr	22.05.2019	17.06.2019
Electronics and Communication Engg.	GEC	8 th / 4 th Yr	22.05.2019	17.06.2019
Electrical Engg.	GEE	8 th / 4 th Yr	22.05.2019	17.06.2019

Instrumentation and Control Engg.	GIN	8 th /4 th Yr	22.05.2019	17.06.2019
Chemical Engg.	GCT	8 th /4 th Yr	22.05.2019	17.06.2019
Food Technology	GFT	8 th /4 th Yr	22.05.2019	17.06.2019
Mechanical Engg. (Welding Technology)	GWT	8 th /4 th Yr	22.05.2019	17.06.2019
Mechanical Engg. (Manufacturing Engg.)	GME	8 th /4 th Yr	22.05.2019	17.06.2019
M.Tech. in Computer Science & Engineering	PGCSE	2 nd / 1 st Yr	22.05.2019	17-06-2019
M.Tech. in Electronics & Communication Engineering	PGECE	2 nd / 1 st Yr	22.05.2019	17-06-2019
M.Tech. in Food Engineering & Technology	PGFET	2 nd / 1 st Yr	22.05.2019	17-06-2019
M.Tech. in Instrumentation & Control Engineering	PGICE	2 nd / 1 st Yr	22.05.2019	17-06-2019
M.Tech. in Manufacturing Systems Engineering	PGMSE	2 nd / 1 st Yr	22.05.2019	17-06-2019
M.Tech. in Mechanical Engineering (Specialization in Welding and Fabrication)	PGWLF	2 nd / 1 st Yr	22.05.2019	17-06-2019
Master of Science in Chemistry	PGCHY	2 nd / 1 st Yr	22.05.2019	17-06-2019
Master of Science in Physics	PGPHY	2 nd / 1 st Yr	22.05.2019	17-06-2019
Master of Science in Mathematics	PGMATH	2 nd / 1 st Yr	22.05.2019	17-06-2019
Master of Business Administration	MBA	2 nd / 1 st Yr	22.05.2019	17-06-2019
M.Tech. in Computer Science & Engineering	PGCSE	4 th /2 nd Yr	28.06.2019 (The last date of thesis Submission in Academic Section with Extension)	The Result Notification notified after submission of external Viva voce and approved by Competent Authority
M.Tech. in Electronics & Communication Engineering	PGECE	4 th /2 nd Yr	28.06.2019 (The last date of thesis Submission in Academic Section with Extension)	The Result Notification notified after submission of external Viva voce and approved by Competent Authority
M.Tech. in Food Engineering & Technology	PGFET	4 th /2 nd Yr	28.06.2019 (The last date of thesis Submission in Academic Section with Extension)	The Result Notification notified after submission of external Viva voce and approved by Competent Authority
M.Tech. in Instrumentation & Control Engineering	PGICE	4 th /2 nd Yr	28.06.2019 (The last date of thesis	The Result Notification notified after

			Submission in Academic Section with Extension)	submission of external Viva voce and approved by Competent Authority
M.Tech. in Manufacturing Systems Engineering	PGMSE	4 th /2 nd Yr	28.06.2019 (The last date of thesis Submission in Academic Section with Extension)	The Result Notification notified after submission of external Viva voce and approved by Competent Authority
M.Tech. in Mechanical Engineering (Specialization in Welding and Fabrication)	PGWLF	4 th /2 nd Yr	28.06.2019 (The last date of thesis Submission in Academic Section with Extension)	The Result Notification notified after submission of external Viva voce and approved by Competent Authority
Master of Science in Chemistry	PGCHY	4 th /2 nd Yr	22.05.2019	26.07.2019
Master of Science in Physics	PGPHY	4 th /2 nd Yr	22.05.2019	17.06.2019
Master of Science in Mathematics	PGMATH	4 th /2 nd Yr	22.05.2019	17.06.2019
Master of Business Administration	MBA	4 th /2 nd Yr	22.05.2019	23.08.2019
2.5.2 Average percentage of Student complaints/grievances about evaluation against total number appeared in the examinations during the year				
*Do not include re-evaluation/ re-totalling = The answer sheets are shown to the students before the submission of grades.				
Number of complaints or grievances about evaluation	Total number of students appeared in the examination		Percentage	
11	3517		031%	
(15-18 Batch, ICD, UG, PG)	(15-18 Batch, ICD, UG, PG)		(15-18 Batch, ICD, UG, PG)	
2.6 Student Performance and Learning Outcomes				
2.6.1 Program outcomes, program specific outcomes and course outcomes for all programs offered by the institution are stated and displayed in website of the institution (to provide the weblink)				
http://sliet.ac.in/#				
2.6.2 Pass percentage of students				
Programme Code	Programme name	Number of students appeared in the final year examination	Number of students passed in final Semester /year examination	Pass Percentage
DCT	Diploma in Chemical Technology	49	39	79.59
DFT	Diploma in Food	47	33	70.21

	Technology			
DCS	Diploma in Computer Science & Engineering	92	83	90.22
DEC	Diploma in Electronics & Communication Engineering	50	39	78.00
DIN	Diploma in Instrumentation and Process Control	40	26	65.00
DEE	Diploma in Electrical Engineering	40	33	82.50
DME	Diploma in Mechanical Engineering	119	86	72.27
GCT	Chemical Engineering	52	45	86.53
GFT	Food Technology	30	22	73.33
GCS	Computer Science & Engineering	113	101	89.38
GEC	Electronics & Communication Engineering	56	49	87.50
GIN	Instrumentation & Control Engineering	40	33	82.50
GEE	Electrical Engineering	59	57	96.61
GME	Mechanical Engineering (Manufacturing Engg.)	72	70	97.22
GWT	Mechanical Engineering (Welding Technology)	74	63	85.13
PG-MSE	M.Tech. in Manufacturing Systems Engineering	22	14	63.64
PG-WLF	M.Tech. in Welding and Fabrication	7	7	100
PG-FET	M.Tech. in Food Engineering & Technology	3	2	66.67
PG-CSE	M.Tech. in Computer Science & Engineering	11	8	72.73
PG-ICE	M.Tech. in Instrumentation and Control Engineering	9	4	44.44
PG-ECE	M.Tech. in Electronics and Communication Engineering	14	12	85.71
MBA	MBA	3	3	100
PG-PHY	M.Sc. in Physics	19	17	89.47
PG-CHY	M.Sc. in Chemistry	15	15	100
PG-MATH	M.Sc. in Mathematics	17	16	94.12

2.7 Student Satisfaction Survey

2.7.1 Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design the

questionnaire) (results and details be provided as weblink)				
The feedback of students is collected centralized and is analyzed by the Data Analytics Committee, constituted vide Office Order No. SLIET/DIR/2520 dt. 29.01.2019.				
CRITERION III – RESEARCH, INNOVATIONS AND EXTENSION				
3.1 Promotion of Research and Facilities				
3.1.1 Teachers awarded National/International fellowship for advanced studies/ research during the year				
	Name of the teacher awarded the fellowship	Name of the Award	Date of Award	Awarding Agency
National	NIL	NIL	NIL	NIL
International	NIL	NIL	NIL	NIL
3.1.2 Number of JRFs, SRFs, Post Doctoral Fellows, Research Associates and other fellows in the Institution enrolled during the year = 42				
Name of Research fellowship		Duration of fellowship	Funding agency	
JRF (01)		6 months	Punjab State Council for Science & Technology, Chandigarh with support of Biotechnology Industry Research Assistance Council, Gol	
JRF (01)		03 years	QIP/AICTE	
NDF (07)		03 years	NDF/AICTE	
JRF (11)		05 years	GIA	
JRF (10)		05 years	TEQIP-III	
JRF (03)		05 years	CSIR	
JRF (09)		05 years	GIA	

3.2 Resource Mobilization for Research				
3.2.1 Research funds sanctioned and received from various agencies, industry and other organisations				
Nature of the Project	Duration	Name of the funding Agency	Total grant sanctioned	Amount received during the year
Major projects	5 yr = 61,00,000/- 2 yr=14,00,000/- 3 yr=25,00,000/- 3 yr=16,80,000/- 3 yr=16,00,000/- 6 months= 4,00,000/- 06 projects	DST (FIST) AICTE AICTE AICTE AICTE FICCI	1,36,80,000/-	1,17,62,500/-
Minor Projects	Nil	Nil	Nil	Nil
Interdisciplinary	Nil	Nil	Nil	Nil

Projects				
Industry sponsored Projects	Nil	Nil	Nil	Nil
Projects sponsored by the University	NA	NA	NA	NA
Students Research Projects (other than compulsory by the University)	13 projects one year each	TEQIP-III	5, 03, 503	5, 03, 503
International Projects	3 yr=18,07,080/- 2 yr=21,48,672/- 2 projects	DST DST	39,55,752/-	16,74,336/-
Any other(Specify) Faculty Projects	6 projects one year each	TEQIP-III	6, 50, 200/-	6, 50, 200/-
Total	27 projects		1,87,89,455/-	1,45,90,539/-
3.3 Innovation Ecosystem				
3.3.1 Workshops/Seminars Conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices during the year				
Title of Workshop/Seminar	Name of the Dept.		Date(s)	
Workshop on "FSSAI FOSTAC Training and Certification"	Food Engineering & Technology		15 April 2019	
TEQIP-III Sponsored STTP on Waste Management Practices for Environmental Sustainability (WMPES-2018)	Chemical Engineering		10-14 Sept. 2018	
Global Trends in Education	Computer Science & Engineering		5-6 th Feb, 2019	
Internet of Things	Computer Science & Engineering		18-22 nd , 2018	
Leadership Talk by Shri. Anand Mahindra, Chairman, Mahindra Coordinator: Dr. Surita Maini	Electrical and Instruction Engineering		08-01-2019	
Leadership Talk with Dr. Anand Deshpande, CMD	Electrical and Instruction Engineering		24-01-2019	
Workshop on IPR for Students and Faculty Members, by Ms. Shwetaree Majumder	Electrical and Instruction Engineering		10-01-2019	
Workshop on IPR for Students and Faculty Members by Dr. Vijay	Electrical and Instruction Engineering		04-02-2019	

Kumar Sukhwa					
3.3.2 Awards for Innovation won by Institution/Teachers/Research scholars/Students during the year					
Title of the innovation	Name of the Awardee	Awarding Agency	Date of Award	Category	
Mobile APP for Rental Battery	Louis Pegu (PIRATICAS)	MHRD, AICTE, i4c, Persistent System	3/3/2019	Software	
The 9 th season of “Efficycle 2018” (Dynamic Resilience Season),	SLIET TEAM	Society of Automotive Engineers Northern India section (SAE-NIS	2018	To design and build human-powered vehicle namely “EFFICYCLE”.	
Efficycle 2018	Iqbal Singh	Lovely Professional University (LPU), Jalandhar	2018	1 Lac Cash prize	
‘Pride of Punjab’	Junkyard Warriors” (19 team members)	Baja SAE India 2019	2019	Durability Award	
International Go-Kart Championshi p- 2019	Juggernauts’ of Sant Longowal Institute of Engg. & Technology (SLIET),	IGC 2019.	2019	Best Build Quality Winner’	
Overall Winner of EGVC 2019	Green Rangers 2019” (Eight team members) participated	in EGVC 2019 held at LD College of Engineering, Ahmadabad	3 rd to 6 th April 2019	Endurance Winner; Manoeuvrability Award and Best Design Runner-up Award, along with cash prize.	
3.3.3 No. of Incubation centre created, start-ups incubated on campus during the year					
Incubation Center	Name	Sponsered By	Name of the Start-up	Nature of Start-up	Date of Commen cement
Cyber security Cell, CSE Department, SLIET Longowal	Under the MOU with Threat Landscape Cyber solution Pvt.	Threat Landscape Cyber solution Pvt. Ltd.	NIL	NIL	NA

	Ltd.				
Institution's Innovation Council	IIC- SLIET	TEQIP-III and SLIET	NIL	NIL	NA

3.4 Research Publications and Awards

3.4.1 Ph. Ds awarded during the year

Name of the Department	No. of Ph. Ds Awarded
Chemistry	02
Math	01
Physics	01
Food Engineering & Technology	02
Chemical Engineering	03
Electronics & Communication Engineering	03
Computer Science & Engineering	02
Mechanical Engineering	05
Management & Humanities	06

3.4.2 Research Publications in the Journals notified on UGC website during the year

	Department	No. of Publication	Average Impact Factor, if any
National	Chemistry	0	0
International	Chemistry	19	3.38
National	Math	1	Nil
International	Math	30	----
National	Physics	05	0
International	Physics	12	1.53
National	Food Engineering & Technology	0	0
International	Food Engineering & Technology	48	>1.00
National	Chemical Engineering	1	0
International	Chemical Engineering	4	0.857
National	Electronics & Communication Engineering	0	0
International	Electronics & Communication Engineering	31	0
National	Computer Science & Engineering	00	0
International	Computer Science & Engineering	19	3.0486
National	Electrical & Instrumentation Engineering	0	0
International	Electrical & Instrumentation Engineering	04	0.841
National	Mechanical Engineering	--	--
International	Mechanical Engineering	31	2.26
National	Management & Humanities	0	0
International	Management & Humanities	15	0

3.4.3 Books and Chapters in edited Volumes / Books published, and papers in National/International

Conference Proceedings per Teacher during the year						
Department		No. of publication				
Chemistry		01				
Physics		09				
Food Engineering & Technology		10				
Chemical Engineering		02				
Computer Science & Engineering		08				
Electrical & Instrumentation Engineering		03				
Mechanical Engineering		30				
Management & Humanities		11				
3.4.4 Patents published/awarded during the year						
Patent Details	Patent status Published/Filed	Patent Number	Date of Award			
NIL	----	----	----			
3.4.5 Bibliometrics of the publications during the last Academic year based on average citation index in Scopus/ Web of Science or PubMed/ Indian Citation Index						
Title of the paper	Name of the author	Title of the journal	Year of publication	Citation Index	Institutional affiliation as mentioned in the publication	Number of citations excluding self citations
p53-Mdm2 Interaction Inhibitors as Novel Nongenotoxic Anticancer Agents	Dr. Harish Kumar Chopra	Current Cancer Drug Targets	2018	Scopus / Web of science	Sant Longowal Institute of Engineering & Technology	3
Exploring Low-Cost Natural Precursors as Chiral Building Blocks in Synthesis: Chiral Carbohydrate-Ionic Liquids	Dr. Harish Kumar Chopra	Mini-Reviews In Organic Chemistry	2018	Scopus / Web of science	Sant Longowal Institute of Engineering & Technology	3
Synthesis, characterization and applications of some novel DMAP-based chiral ionic liquids	Dr. Harish Kumar Chopra	Journal Of Molecular Liquids	2018	Scopus / Web of science	Sant Longowal Institute of Engineering & Technology	2
Synthesis, characterization, and	Dr. Harish Kumar	Synthetic Communicatio	2018	Scopus / Web	Sant Longowal	2

organocatalytic application of chiral ionic liquids derived from (S,R)-noscapine	Chopra	ns		of scienc e	Institute of Engineering & Technology	
Enantioselective Reduction Reactions Using Chiral Ionic Liquids: An Overview	Dr. Harish Kumar Chopra	Current Organic Synthesis	2018	Scopus / Web of scienc e	Sant Longowal Institute of Engineering & Technology	1
Chiral Recognition Methods in Analytical Chemistry: Role of the Chiral Ionic Liquids	Dr. Harish Kumar Chopra	Critical Reviews In Analytical Chemistry	2019	Scopus / Web of scienc e	Sant Longowal Institute of Engineering & Technology	0
Optimization and production of turmeric extract-based nanoemulsion (TEBN) and its application in preservation of fatty fish fillet	Dr. Harish Kumar Chopra	Journal Of Food Processing And Preservation	2018	Scopus / Web of scienc e	Sant Longowal Institute of Engineering & Technology	0
Development of highly selective novel fluorescence quenching probe based on Bi ₂ S ₃ -TiO ₂ nanoparticles for sensing the Fe(III)	Dhiraj	Sensors And Actuators B-Chemical	2018	Scopus / Web of scienc e	Sant Longowal Institute of Engineering & Technology	3
A biopolymer-based composite hydrogel for rhodamine 6G dye removal: its synthesis, adsorption isotherms and kinetics	Dhiraj	Iranian Polymer Journal	2018	Scopus / Web of scienc e	Sant Longowal Institute of Engineering & Technology	2
Experimental and theoretical investigations of Mn-N-co-doped TiO ₂ photocatalyst for	Dhiraj	Journal Of Materials Research And Technology-Jmr&T	2019	Scopus / Web of scienc e	Sant Longowal Institute of Engineering &	0

visible light induced degradation of organic pollutants					Technology	
Investigations on Amphoteric Chitosan/TiO ₂ Bionanocomposites for Application in Visible Light Induced Photocatalytic Degradation	Dhiraj	Advances In Polymer Technology	2019	Scopus / Web of science	Sant Longowal Institute of Engineering & Technology	0
Photocatalytic degradation of monocrotophos using TiO ₂ photocatalyst: identification of intermediates by chromatographic techniques and reaction pathway	Dhiraj	Desalination And Water Treatment	2019	Scopus / Web of science	Sant Longowal Institute of Engineering & Technology	0
Semi-interpenetrating networks of biopolymer chitosan/acrylic acid and thiourea hydrogels: synthesis, characterization and their potential for removal of cadmium	Dhiraj	Iranian Polymer Journal	2019	Scopus / Web of science	Sant Longowal Institute of Engineering & Technology	0
Comparative studies of the electronic, binding and photophysical properties of a new nona-dentate hemi-cage tripodal HQ pendant trizaza-macrocycle with unfilled, half-filled and completely filled lanthanide ions	Rohini; Baral, Minati; Kanungo, B. K.	New Journal Of Chemistry	2018	Scopus / Web of science	Sant Longowal Institute of Engineering & Technology	1

Structural effect on the central cavity of a pendent 12N3 macrocycle on bonding and photophysical properties of Eu ³⁺ and Tb ³⁺ complexes: Experimental and theoretical study	Rohini; Baral, Minati; Kanungo, B. K.	Journal Of Molecular Structure	2019	Scopus / Web of science	Sant Longowal Institute of Engineering & Technology	0
Experimental and theoretical studies on structure, bonding and luminescence properties of Eu(III) and Tb(III) complexes of a new macrocyclic based 8HQ ligand	Rohini; Baral, Minati; Kanungo, B. K.	Journal Of Coordination Chemistry	2019	Scopus / Web of science	Sant Longowal Institute of Engineering & Technology	0
Synthesis, thermodynamic, photophysical and DFT studies of some trivalent metal chelates of a hexadentate tripodal hydroxyquinolate-based ligand	Akbar, Rifat; Baral, Minati; Kanungo, B. K.	Journal Of Coordination Chemistry	2018	Scopus / Web of science	Sant Longowal Institute of Engineering & Technology	0
Experimental and theoretical investigations on acid catalysed stereoselective synthesis of new indazolyl-thiazole derivatives	Gautam, Poonam; Gautam, Deepika; Chaudhary, R. P.	Journal Of Molecular Structure	2018	Scopus / Web of science	Sant Longowal Institute of Engineering & Technology	1
Ultrasound-Assisted Facile Synthesis and Antimicrobial Studies of Alkanediyl-bis-thiazolidin-4-ones and Alkanediyl-bis-thiazinan-4-ones	Kaur, Amritpal; Kaur, Avneet Pal; Gautam, Poonam; Gautam, Deepika; Chaudhary,	Journal Of Heterocyclic Chemistry	2019	Scopus / Web of science	Sant Longowal Institute of Engineering & Technology	0

	Ram Pal					
Overview of phytochemistry and pharmacology of <i>Adhatoda vasica</i> .	Damanjit Singh	IJAMTES	2018	Scopus / Web of science	Sant Longowal Institute of Engineering & Technology	0
Numerical inversion of Laplace transform based on Bernstein operational matrix	V. Mishra	Mathematical methods in the applied sciences	2018	Scopus / Web of science	Sant Longowal Institute of Engineering & Technology	1
Numerical Inverse Laplace Transform for Solving a Class of Fractional Differential Equations	V. Mishra	Symmetry-basel	2019	Scopus / Web of science	Sant Longowal Institute of Engineering & Technology	1
Efficient higher order derivative-free multipoint methods with and without memory for systems of nonlinear equations	J.R. Sharma	International journal of computer mathematics	2018	Scopus / Web of science	Sant Longowal Institute of Engineering & Technology	3
Ball Convergence of an Efficient Eighth Order Iterative Method Under Weak Conditions	J.R. Sharma	Mathematics	2018	Scopus / Web of science	Sant Longowal Institute of Engineering & Technology	2
A fast and efficient composite Newton-Chebyshev method for systems of nonlinear equations	J.R. Sharma	Journal of complexity	2018	Scopus / Web of science	Sant Longowal Institute of Engineering & Technology	0
Design and Analysis of a New Class of Derivative-Free Optimal Order	J.R. Sharma	International journal of computational methods	2018	Scopus / Web of science	Sant Longowal Institute of Engineering	1

Methods for Nonlinear Equations				e	& Technology	
An Efficient Class of Traub-Steffensen-Like Seventh Order Multiple-Root Solvers with Applications	J.R. Sharma	Symmetry-basel	2019	Scopus / Web of science	Sant Longowal Institute of Engineering & Technology	1
On a Class of Efficient Higher Order Newton-like Methods	J.R. Sharma	Mathematical modelling and analysis	2019	Scopus / Web of science	Sant Longowal Institute of Engineering & Technology	1
Generalized Kung-Traub method and its multi-step iteration in Banach spaces	J.R. Sharma	Journal of complexity	2019	Scopus / Web of science	Sant Longowal Institute of Engineering & Technology	0
An Efficient Class of Weighted-Newton Multiple Root Solvers with Seventh Order Convergence	J.R. Sharma	Symmetry-basel	2019	Scopus / Web of science	Sant Longowal Institute of Engineering & Technology	0
On a Reduced Cost Higher Order Traub-Steffensen-Like Method for Nonlinear Systems	J.R. Sharma	Symmetry-basel	2019	Scopus / Web of science	Sant Longowal Institute of Engineering & Technology	0
One-Point Optimal Family of Multiple Root Solvers of Second-Order	J.R. Sharma	Mathematics	2019	Scopus / Web of science	Sant Longowal Institute of Engineering & Technology	0
An Efficient Derivative Free One-Point Method with Memory	J.R. Sharma	Mathematics	2019	Scopus / Web of	Sant Longowal Institute of	0

for Solving Nonlinear Equations				science	Engineering & Technology	
On a Bi-Parametric Family of Fourth Order Composite Newton-Jarratt Methods for Nonlinear Systems	J.R. Sharma	Mathematics	2019	Scopus / Web of science	Sant Longowal Institute of Engineering & Technology	0
Development of Optimal Eighth Order Derivative-Free Methods for Multiple Roots of Nonlinear Equations	J.R. Sharma	Symmetry-basel	2019	Scopus / Web of science	Sant Longowal Institute of Engineering & Technology	0
Convergence Analysis of Weighted-Newton Methods of Optimal Eighth Order in Banach Spaces	J.R. Sharma	Mathematics	2019	Scopus / Web of science	Sant Longowal Institute of Engineering & Technology	0
Convergence Ball and Complex Geometry of an Iteration Function of Higher Order	J.R. Sharma	Mathematics	2019	Scopus / Web of science	Sant Longowal Institute of Engineering & Technology	0
Bianchi-III cosmological model with BVDP in modified $f(R,T)$ theory	R.K.Mishra	Mathematics	2018	Scopus / Web of science	Sant Longowal Institute of Engineering & Technology	1
Synthesis, characterization and swelling rapheme of silver nanoparticles containing superabsorbent based on grafted copolymer of polyacrylic	Dhaliwal, A. S.	VACUUM	2018	Scopus / Web of science	Sant Longowal Institute of Engineering & Technology	06

acid/Guar gum						
Photon Interaction Parameters Investigations for Some ZnO-Al ₂ O ₃ -Fe ₂ O ₃ -P ₂ O ₅ Glasses at 59.4 keV Incident Photon Energy	Dhaliwal, A. S.	GLASS PHYSICS AND CHEMISTRY	2019	Scopus / Web of science	Sant Longowal Institute of Engineering & Technology	00
Enhanced efficiency of thin film GaAs solar cells with plasmonic metal nanoparticles	Verma S S	ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS	2018	Scopus / Web of science	Sant Longowal Institute of Engineering & Technology	03
Plasmon enhanced light trapping in thin film GaAs solar cells by Al nanoparticle array	Verma S S	PHYSICS LETTERS A	2019	Scopus / Web of science	Sant Longowal Institute of Engineering & Technology	01
Optical Properties Simulation of Magneto-Plasmonic Alloys Nanostructures	Sinha M M, Verma S S	PLASMONICS	2019	Scopus / Web of science	Sant Longowal Institute of Engineering & Technology	02
Limits on contact interactions and leptoquarks at HERA	Kaur P as a member of ZEUS Collaboration	Physical review D	2019	Scopus / Web of science	Sant Longowal Institute of Engineering & Technology	01
Charm production in charged current deep inelastic scattering at HERA	Kaur P as a member of ZEUS Collaboration	JOURNAL OF HIGH ENERGY PHYSICS	2019	Scopus / Web of science	Sant Longowal Institute of Engineering & Technology	01

A state-of –art literature survey of Grey Relational Analysis (GRA) applications in competitive business environment	Arvind Jayant,	International journal of industrial and systems engineering,V ol.30, No. 4, pp 425-448.	2018	Web of Scienc e	Sant Longowal Institute of Engineering & Technology	01
Fabrication of Micro-Channels on Pure-Ti by USM and Its Surface Roughness Analysis	Pardeep Gupta,	Ciencia e Technical, Vitivinicola, Vol. 33(7), 2018, pp. 92-97.	2018	Web of Scienc e	Sant Longowal Institute of Engineering & Technology	0
Manufacturing Excellence through Total Productive Maintenance Implementation in an Indian Industry: A Case Study	Pardeep Gupta,	International Journal of Mechanical and Production Engineering, Research and Development, Vol. 9(3), June 2019, 1593-1604.	2018	Web of Scienc e	Sant Longowal Institute of Engineering & Technology	0
Metallurgical, impact and fatigue performance of electron beam welded duplex stainless-steel joints	A.S. Shahi,	Journal of Materials Processing Technology (Publisher: Elsevier) 272 137-148.	2019	Web of Scienc e	Sant Longowal Institute of Engineering & Technology	0
Impact Toughness, Fatigue Crack Growth and Corrosion Behaviour of Thermally Aged UNS S32205 Duplex Stainless Steel,	A.S. Shahi,	Transactions of Indian Institute of Metals (Publisher: Springer),	2019	Web of Scienc e	Sant Longowal Institute of Engineering & Technology	0

Modeling and desirability approach-based multi-response optimization of WEDM parameters in machining of aluminum metal matrix composite	Rajesh Kumar,	Journal of the Brazilian Society of Mechanical Sciences and Engineering, Vol. 40(9), September 2018	2018	Web of Science	Sant Longowal Institute of Engineering & Technology	05
Adaptive artificial intelligence for automatic identification of defect in the angular contact bearing	Rajesh Kumar,	Neural Computing and Applications, Springe, Vol. 29(8), 2018, 277–287.	2018	Web of Science	Sant Longowal Institute of Engineering & Technology	01
Role of signal processing, modelling and decision making in the diagnosis of rolling element bearing defect: A review	Rajesh Kumar,	Journal of Non-destructive Evaluation, Springer	Vol. 38(1), January 2019 ISSN: 0195-9298	Web of Science	Sant Longowal Institute of Engineering & Technology	02
Modeling of the effect of process parameters on tensile strength of friction stir welded rare earth ZE-41 magnesium alloy joints	Kulwant Singh	International Journal of Applied Engineering Research, Volume 13, Number 5 (2018), pp 2882-2891, IF: 0.149 (SJR)	2018	Web of Science	Sant Longowal Institute of Engineering & Technology	0
Predicting impact behaviour of friction stir welded ZE-41 Magnesium alloy	Kulwant Singh	Indian Journal of Science and Technology, Vol 11(16), DOI;10.17485/	2018	Web of Science	Sant Longowal Institute of Engineering &	0

joints		ijst/2018/v 11i16/121652 pp 1-12			Technology	
Effect of weld cooling rates on mechanical and metallurgical properties of submerged arc welded pressure vessel steel	Harish Kumar Arya,	Journal of Pressure Vessel Technology, Volume 140 (No.4), pp 041406-1 to 041406-7, Transactions of the ASME	2018	Web of Science	Sant Longowal Institute of Engineering & Technology	0
Modelling and Evaluation of the Hunting Behaviour of a High-Speed Railway Vehicle on Curved Track.	Kumar, Vivek,	Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit 233, no. 2 (220–36. Doi:10.1177/0954409718789531	2019	Web of Science	Sant Longowal Institute of Engineering & Technology	0
Erosion wear evaluation of hvof sprayed wc-12co coating on some pipeline materials using taguchi approach,	Anuj Bansal,	Kovove Mater., Vol 57, 113–120.	2019	Web of Science	Sant Longowal Institute of Engineering & Technology	0
Effect of Copper and Magnesium Stoichiometric Additions and Thermal Aging on the Mechanical Properties of Cast Aluminium	Rakesh Kumar,	Indian Journal of Science and Technology, 11(48), 2018,1–7.	2018	Web of Science	Sant Longowal Institute of Engineering & Technology	01

Alloys.						
Study on Morphology and Mechanical Properties of Stoichiometrically Developed Al-Cu-Mg Cast Alloy	Rakesh Kumar,	International Journal of Mechanical Engineering and Technology, 10(04), 2019, 661–670.	2019	Web of Science	Sant Longowal Institute of Engineering & Technology	01
Experimental investigation on surface characteristics in Electrical Discharge Surface Grinding (EDSG) of 6061Al/Al ₂ O ₃ p 10% composite	Singh, Shankar,	Advances in Materials and Processing Technologies (Taylor and Francis), Volume 5, Issue 1, pp. 1-24, 2019.	2019	Web of Science	Sant Longowal Institute of Engineering & Technology	0
A new method to generate artificial microstructure of dual phase steel using Teacher-Learner Based Optimization	R. K. Saxena,	Sadhna, Springer, 2019, Vol 44:85, pp-1-18. (https://doi.org/10.1007/s12046-019-1054-8) Online ISSN 0973-7677, Print ISSN 0256-2499.	2019	Web of Science	Sant Longowal Institute of Engineering & Technology	0
Lactic acid extraction using environmentally benign Green emulsion ionic liquid membrane	Kumar, Anil; Thakur, Avinash; Panesar, Parmjit Singh	Journal Of Cleaner Production	APR 20 2018	Web of Science	Sant Longowal Institute of Engineering & Technology	15
Nutritional constituents of pseudo cereals and their potential use in food systems: A review	Mir, Nisar Ahmad; Riari, Charanjit Singh; Singh, Sukhcharn	Trends In Food Science & Technology	MAY 2018	Web of Science	Sant Longowal Institute of Engineering	9

					& Technology	
Rheological and structural properties of protein isolates extracted from dephenolized sunflower meal: Effect of high intensity ultrasound	Malik, Mudasir Ahmad; Saini, Charanjiv Singh	Food Hydrocolloids	AUG 2018	Web of Science	Sant Longowal Institute of Engineering & Technology	7
Biocatalytic strategies in the production of galacto-oligosaccharides and its global status	Panesar, Parmjit S.; Kaur, Rupinder; Singh, Ram S.; Kennedy, John F.	International Journal Of Biological Macromolecules	MAY 2018	Web of Science	Sant Longowal Institute of Engineering & Technology	7
Extraction of hexavalent chromium by environmentally benign green emulsion liquid membrane using tridodecylamine as an extractant	Kumar, Anil; Thakur, Avinash; Panesar, Parmjit Singh	Journal Of Industrial And Engineering Chemistry	FEB 25 2019	Web of Science	Sant Longowal Institute of Engineering & Technology	6
Changes in the GABA and polyphenols contents of foxtail millet on germination and their relationship with in vitro antioxidant activity	Sharma, Seema; Saxena, Dharmesh C.; Riar, Charanjit S.	Food Chemistry	APR 15 2018	Web of Science	Sant Longowal Institute of Engineering & Technology	5
Composite Film Developed From the Blends of Sesame Protein Isolate and Gum Rosin and Their Properties Thereof	Sharma, Loveleen; Singh, Charanjiv	Polymer Composites	MAY 2018	Web of Science	Sant Longowal Institute of Engineering & Technology	5
Edible films developed from carboxylic acid cross-linked sesame protein isolate: barrier, mechanical, thermal, crystalline and morphological properties	Sharma, Loveleen; Sharma, Harish Kumar; Saini, Charanjiv Singh	Journal Of Food Science And Technology- Mysore	FEB 2018	Web of Science	Sant Longowal Institute of Engineering & Technology	5
Gluten free approach in fat and sugar	Singh, Ajay; Kumar,	Journal Of Food	MAR	Web of	Sant Longowal	5

amended biscuits: A healthy concern for obese and diabetic individuals	Pradyuman	Processing And Preservation	2018	Science	Institute of Engineering & Technology	
Stability analysis of environmentally benign green emulsion liquid membrane	Kumar, Anil; Thakur, Avinash; Panesar, Parmjit Singh	Journal Of Dispersion Science And Technology	2018	Web of Science	Sant Longowal Institute of Engineering & Technology	5
A comparative study on experimental and response surface optimization of lactic acid synergistic extraction using green emulsion liquid membrane	Kumar, Anil; Thakur, Avinash; Panesar, Parmjit Singh	Separation And Purification Technology	MAR 18 2019	Web of Science	Sant Longowal Institute of Engineering & Technology	4
Effect of pH and holding time on the characteristics of protein isolates from Chenopodium seeds and study of their amino acid profile and scoring	Mir, Nisar A.; Riar, Charanjit S.; Singh, Sukhcharn	Food Chemistry	JAN 30 2019	Web of Science	Sant Longowal Institute of Engineering & Technology	3
Physical, Mechanical, Morphological, and Barrier Properties of Elephant Food Yam Starch, Whey Protein Concentrate and psyllium Husk Based Composite Biodegradable Films	Sukhija, Sakshi; Singh, Sukhcharn; Riar, Charanjit S.	Polymer Composites	APR 2018	Web of Science	Sant Longowal Institute of Engineering & Technology	3
Proximate composition, nutritional profile and health benefits of legumes – A review	Kamboj, Rajni; Nanda, Vikas	Legume Research	JUN 2018	Web of Science	Sant Longowal Institute of Engineering & Technology	3
Rheological, thermal, micro structural and functional properties of freeze dried onion powders as affected by sprouting	Majid, Ishrat; Dar, B. N.; Nanda, Vikas	Food Bioscience	APR 2018	Web of Science	Sant Longowal Institute of Engineering & Technology	3

					Technology	
Development of crosslinked sesame protein and pineapple extract-based bilayer coatings for shelf-life extension of fresh-cut pineapple	Sharma, Loveleen; Saini, Charanjiv Singh; Sharma, Harish Kumar	Journal Of Food Processing And Preservation	FEB 2018	Web of Science	Sant Longowal Institute of Engineering & Technology	3
Comparative study of raw and germinated Chenopodium (Chenopodium album) flour on the basis of thermal, rheological, minerals, fatty acid profile and phytochemicals	Jan, Romee; Saxena, D. C.; Singh, Sukhcharn	Food Chemistry	DEC 15 2018	Web of Science	Sant Longowal Institute of Engineering & Technology	2
Optimization of antioxidant activity, textural and sensory characteristics of gluten-free cookies made from whole raphe quinoa flour	Jan, Khan Nadiya; Panesar, P. S.; Singh, Sukhcharn	Lwt-Food Science And Technology	JUL 2018	Web of Science	Sant Longowal Institute of Engineering & Technology	2
A review on emulsion liquid membrane (ELM) for the treatment of various industrial effluent streams	Kumar, Anil; Thakur, Avinash; Panesar, Parmjit Singh	Reviews In Environmental Science And Bio-Technology	MAR 2019	Web of Science	Sant Longowal Institute of Engineering & Technology	2
Physicochemical, molecular and thermal properties of high-intensity ultrasound (HIUS) treated protein isolates from album (Chenopodium album) seed	Mir, Nisar A.; Riar, Charanjit S.; Singh, Sukhcharn	Food Hydrocolloids	NOV 2019	Web of Science	Sant Longowal Institute of Engineering & Technology	1
Effect of chemical composition, granule structure and crystalline form of pigmented rice starches on their functional characteristics	Bhat, Farhan Mohiuddin; Riar, Charanjit Singh	Food Chemistry	NOV 1 2019	Web of Science	Sant Longowal Institute of Engineering & Technology	1
Effect of composition, granular morphology	Bhat, Farhan Mohiuddin;	Food	MAY 15	Web	Sant	1

and crystalline structure on the pasting, textural, thermal and sensory characteristics of traditional rice cultivars	Riar, Charanjit Singh	Chemistry	2019	of Science	Longowal Institute of Engineering & Technology	
Characteristics of β -glucan extracted from raw and germinated foxtail (<i>Setaria raphe</i>) and kodo (<i>Paspalum scrobiculatum</i>) millets	Sharma, Seema; Saxena, Dharmesh C.; Riar, Charanjit S.	International Journal Of Biological Macromolecules	15-Oct-18	Web of Science	Sant Longowal Institute of Engineering & Technology	1
Effect of Egg Albumen, Vegetable Oil, Corn Bran, and Cooking Methods on Quality Characteristics of Chicken Nuggets Using Response Surface Methodology	Ashok Kumar Pathera, Charanjit Singh Riar, Sanjay Yadav, and Pradeep Kumar Singh	Korean Journal Of Food Science And Animal Resources	Oct-2018	Web of Science	Sant Longowal Institute of Engineering & Technology	1
Effect of addition of different levels of β -glucan from minor millet on the functional, textural and sensory characteristics of cake premix and cake	S Sharma, DC Saxena, CS Riar	Journal Of Food Measurement And Characterization	Jun-18	Web of Science	Sant Longowal Institute of Engineering & Technology	1
Exploring the influence of heat moisture treatment on physicochemical, pasting, structural and morphological properties of mango kernel starches from Indian cultivars	Bharti, Indu; Singh, Sukhcharn; Saxena, D. C.	Lwt-Food Science And Technology	AUG 2019	Web of Science	Sant Longowal Institute of Engineering & Technology	1
Influence of alkali treatment on physicochemical, pasting, morphological and structural properties of mango kernel starches derived from Indian cultivars	Bharti, Indu; Singh, Sukhcharn; Saxena, D. C.	International Journal Of Biological Macromolecules	MAR 15 2019	Web of Science	Sant Longowal Institute of Engineering & Technology	1
Textural, in vitro antioxidant activity and sensory	Jan, Khan Nadiya; Panesar, P.	Journal Of Food Processing	MAR 2018	Web of Science	Sant Longowal Institute of	1

characteristics of cookies made from blends of wheat-quinoa grown in India	S.; Singh, Sukhcharn	And Preservation		e	Engineering & Technology	
Assessment of raphe-chemical properties, fatty acid, amino acid and mineral profile of bee pollen from India with a multivariate perspective	Thakur, M and Nanda V	Journal Of Food And Nutrition Research	2018	Web of Science	Sant Longowal Institute of Engineering & Technology	1
Dynamic Changes in Health-Promoting Properties and Eating Quality During Off-Vine Ripening of Tomatoes	Siddiqui, Mohammed Wasim; Lara, Isabel; Ilahy, Riadh; Tlili, Imen; Ali, Asgar; Homa, Fozia; Prasad, Kamlesh; Deshi, Vinayak; Lenucci, Marcello Salvatore; Hdider, Chafik	Comprehensive Reviews In Food Science And Food Safety	NOV 2018	Web of Science	Sant Longowal Institute of Engineering & Technology	1
Thermal, structural and rheological characterization of protein isolate from sesame meal	Saini, Charanjiv Singh; Sharma, Harish Kumar; Sharma, Loveleen	Journal Of Food Measurement And Characterization	MAR 2018	Web of Science	Sant Longowal Institute of Engineering & Technology	1
Recent developments on sustainable solvents for emulsion liquid membrane processes	Kumar, Anil; Thakur, Avinash; Panesar, Parmjit Singh	Journal Of Cleaner Production	DEC 10 2019	Web of Science	Sant Longowal Institute of Engineering & Technology	1
L(+)-Lactic Acid Production by Immobilized Lactobacillus casei Using Low Cost Agro-Industrial Waste as Carbon and Nitrogen Sources	Thakur, Avinash; Panesar, Parmjit Singh; Saini, Manohar Singh	Waste And Biomass Valorization	MAY 2019	Web of Science	Sant Longowal Institute of Engineering & Technology	1

Parametric Optimization of Lactic Acid Production by Immobilized Lactobacillus casei Using Box-Behnken Design	Thakur, Avinash; Panesar, Parmjit Singh; Saini, Manohar Singh	Periodica Polytechnica-Chemical Engineering	2018	Web of Science	Sant Longowal Institute of Engineering & Technology	1
Effect of parboiling and puffing processes on the physicochemical, functional, optical, pasting, thermal, textural and structural properties of selected Indica rice	Kumar, Shiv; Prasad, Kamlesh	Journal Of Food Measurement And Characterization	SEP 2018	Web of Science	Sant Longowal Institute of Engineering & Technology	0
Development and parameter optimization of maize flat bread supplemented with asparagus bean flour	Shah, Tajamul Rouf; Prasad, Kamlesh; Kumar, Pradyuman	Food Science And Technology	2018	Web of Science	Sant Longowal Institute of Engineering & Technology	0
A biopolymer-based composite hydrogel for rhodamine 6G dye removal: its synthesis, adsorption isotherms and kinetics	Navneet Bhullar, Kamlesh Kumari, Dhiraj Sud	Iranian Polymer Journal, 27(7)	2018 Impact factor 1.278		Sant Longowal Institute of Engineering & Technology	03
Microbial, Physicochemical, and Sensory Analyses-Based Shelf Life Appraisal of White Fresh Cheese Packaged into PET Waste-Based Active Packaging Film	Amandeep Singh, Moumita Kharmrai, Sarthik Samanta, Kamlesh Kumari, Patit Paban Kundu	Journal of Packaging Technology and Research 2(2), pp 125–147	2018		Sant Longowal Institute of Engineering & Technology	03
Semi-interpenetrating networks of biopolymer chitosan/acrylic acid and thiourea hydrogels: synthesis, characterization and	Navneet Bhullar, Kamlesh Kumari, Dhiraj Sud	Iranian Polymer Journal,	2019 Impact factor 1.278		Sant Longowal Institute of Engineering & Technology	03

their potential for removal of cadmium						
Effect of introducing ozone prior to elemental chlorine free bleaching of wheat straw pulp on pulp, paper and effluent properties	Tripathi, S.K., Bhardwaj, N.K., and Ghatak H.R.	Cellulose Chemistry and Technology	2019		Sant Longowal Institute of Engineering & Technology	
Improvement in pulp quality and effluent properties using methanol as carbohydrate protector during ozone bleaching of wheat straw pulp	Tripathi, S.K., Bhardwaj, N.K., and Ghatak H.R.	APPITA Journal	2018		Sant Longowal Institute of Engineering & Technology	
Optimization of ozone bleaching conditions for improving wheat straw pulp quality using response surface methodology	Tripathi, S.K., Bhardwaj, N.K., and Ghatak H.R.	Ozone: Science and Engineering	2019		Sant Longowal Institute of Engineering & Technology	
Additives to decrease cellulose chain scission during ozone bleaching of wheat straw pulp	Tripathi, S.K., Bhardwaj, N.K., and Ghatak H.R.	Nordic Pulp and Paper Research Journal	2018		Sant Longowal Institute of Engineering & Technology	
l(+)-Lactic Acid Production by Immobilized <i>Lactobacillus casei</i> Using Low Cost Agro-Industrial Waste as Carbon and Nitrogen Sources	Avinash Thakur, Parmjit Singh Panesar, Manohar Singh Saini	Waste and Biomass Valorization	2019		Sant Longowal Institute of Engineering & Technology	02
Parametric optimization of green synergistic reactive extraction of lactic	Anil Kumar and Avinash thakur	Chemical engineering Communicatio	2019		Sant Longowal Institute of Engineering	01

acid using trioctylamine, Aliquat336, and butan-2-ol in sunflower oil by response surface methodology		ns			& Technology	
Continuous Production of Lactic Acid in a Two Stage Process Using Immobilized Lactobacillus casei MTCC 1423 Cells	Avinash Thakur, Parmjit Singh Panesar, Manohar Singh Saini	International Journal of Food Engineering	2018		Sant Longowal Institute of Engineering & Technology	0
Optimization of process parameters and estimation of kinetic parameters for lactic acid production by Lactobacillus casei MTCC 1423	Avinash Thakur, Parmjit Singh Panesar, Manohar Singh Saini	Biomass Conversion and Biorefinery	2019		Sant Longowal Institute of Engineering & Technology	03
Extraction of hexavalent chromium by environmentally benign green emulsion liquid membrane using tridodecylamine as an extractant	Anil Kumar, Avinash Thakur, Parmjit Singh Panesar,	Journal of Industrial and Engineering Chemistry	2019		Sant Longowal Institute of Engineering & Technology	3
A Comparative study on experimental and response surface optimization of lactic acid synergistic extraction using green emulsion liquid membrane	Anil Kumar, Avinash Thakur, Parmjit Singh Panesar,	Separation and Purification Technology	2019		Sant Longowal Institute of Engineering & Technology	3
A review on emulsion liquid membrane (ELM) for the treatment of various industrial effluent	Anil Kumar, Avinash Thakur, Parmjit Singh Panesar	Reviews in Environmental Science and Bio/Technology	2019		Sant Longowal Institute of Engineering &	0

streams					Technology	
Stability analysis of environmentally benign green emulsion liquid membrane	Anil Kumar, Avinash Thakur, Parmjit Singh Panesar	Journal of Dispersion Science and Technology	2018		Sant Longowal Institute of Engineering & Technology	3
Furfural production from rice straw using oxalic acid hydrolysis and sulphuric acid dehydration pretreatment	ASK Sinha, RR Dhanraj	PRAMANA RESEARCH JOURNAL	2019		Sant Longowal Institute of Engineering & Technology	0
Data proliferation-based estimations over distribution factor in heterogeneous wireless sensor networks	Surinder Singh et al.	Computer communications	2018	SCI	Sant Longowal Institute of Engineering & Technology	0
A dual-channel surface raphem resonance biosensor based on a photonic crystal Fiber for multianalyte sensing	Surinder Singh et al.	Journal of Computational Electronics	2019	SCI	Sant Longowal Institute of Engineering & Technology	1
Design of titanium nitride coated PCF-SPR sensor for liquid sensing applications	Surinder Singh et al.	Optical Fiber Technology	2019	SCI	Sant Longowal Institute of Engineering & Technology	0
Design approach of solid-core photonic crystal fiber sensor with sensing ring for blood component detection	Surinder Singh et al.	Journal of Nanophotonic	2019	SCI	Sant Longowal Institute of Engineering & Technology	0

Possibilities of laser amplification and measurement of the field structure of ultrashort pulses in the range of 2.7 – 3 μm in erbium-ion-doped tellurite glass fibres	Surinder Singh et al.	Quantum Electronics	2018	SCI	Sant Longowal Institute of Engineering & Technology	1
Design of XPM based all optical contention detection circuit at 120 Gbps	Surinder Singh et al.	Optical and Quantum Electronics	2019	SCI	Sant Longowal Institute of Engineering & Technology	0
340-Gb/s PoISK-DP-DQPSK optical orthogonal modulation format with coherent direct detection for high capacity WDM optical network	Surinder Singh et al.	Optical Fiber Technology	2019	SCI	Sant Longowal Institute of Engineering & Technology	0
Design of all optical contention detection circuit based on HNLF at the data rate of 120 Gbps	Surinder Singh et al.	Optical Fiber Technology	2019	SCI	Sant Longowal Institute of Engineering & Technology	0
Reconstruction of optical pulse intensity and phase based on SPM spectra measurements in microstructured tellurite fiber in telecommunication range	Surinder Singhet al.	<i>Journal of Lightwave Technology</i>	2019	SCI	Sant Longowal Institute of Engineering & Technology	1
A low leakage TG-CNTFET-based inexact full adder for low power image	Ubhi J Singh et al.	International Journal of Circuit Theory and	2019		Sant Longowal Institute of Engineering	

processing applications.		Applications			& Technology	
A Reliable Leakage Reduction Technique for Approximate Full Adder with Reduced Ground Bounce Noise	Ubhi J Singh et al.	Mathematical Problems in Engineering	2018		Sant Longowal Institute of Engineering & Technology	
Low leakage zero ground bounce noise nanoscale full adder using source biasing technique	Ubhi J Singh et al.	Journal of nanoelectronics & optoelectronics	2019		Sant Longowal Institute of Engineering & Technology	
Performance Analysis of Mobile Nodes in Mobile Ad-hoc Networks using Enhanced Manhattan Mobility Model	Ubhi J Singh et al.	Journal of Scientific and Industrial Research, NISCAIR-CSIR	2019		Sant Longowal Institute of Engineering & Technology	
A Novel Approach to Predict Mobility Pattern of Mobile Nodes in Mobile Ad-hoc Networks	Ubhi J Singh et al.	Journal of Scientific and Industrial Research, NISCAIR-CSIR	2018		Sant Longowal Institute of Engineering & Technology	
Design and Optimization of Slotted Micro-Machined Patch Antenna Using Composite Substrate	Amar Partap Singh et al.	The Applied Computational Electromagnetic Society Journal	2019		Sant Longowal Institute of Engineering & Technology	4
On the Design of Planner Antenna using Fibonacci Word Fractal Geometry in Support of Public Safety	Amar Partap Singh et al.	International Journal of RF and Microwave Computer-Aided Engineering,	2019		Sant Longowal Institute of Engineering & Technology	
On the Design and Analysis of I-Shaped	Amar Partap	IETE Journal of	2019		Sant Longowal	3

Fractal Antenna for Emergency Management	Singh et al.	Research			Institute of Engineering & Technology	
Synthesis and Validation of a Cu Meta-Based Wideband Microwave Absorber on an Antenna Array	Anupma Marwaha et al.	Journal of Electronic Materials	2019		Sant Longowal Institute of Engineering & Technology	3
A triband slotted Bow-tie wideband THz antenna design using rapheme for Wireless Applications	Anupma Marwaha et al	optik	2019		Sant Longowal Institute of Engineering & Technology	1
Utilization of rapheme oxide-based microwave absorber for pattern enhancement of patch antenna array	Anupma Marwaha et al	<u>Journal of Nanophotonic s</u>	2018		Sant Longowal Institute of Engineering & Technology	1
Elucidation of microwave absorption mechanisms in Co-Ga substituted Ba-Sr hexaferrites in X-band	Anupma Marwaha et al	<u>Journal of Materials Science Materials in Electronics</u>	2018		Sant Longowal Institute of Engineering & Technology	1
Graphene based arc Truncated terahertz antenna of wireless communication	Anupma Marwaha et al	Current nanoscience	<u>2018</u>		Sant Longowal Institute of Engineering & Technology	1
Non-invasive Temperature Measuring and Early	Dilip Kumar et al.	MAPAN, Springer.	2019	SCI	Sant Longowal Institute of	

Fault Detecting System for Manufacturing Industry		(Impact Factor-1.250)			Engineering & Technology	
A survey on QoS mechanisms in WSN for computational intelligence based routing protocols	Dilip Kumar et al.	Wireless Networks, Springer. (Impact Factor- 2.405)	2019	SCI	Sant Longowal Institute of Engineering & Technology	
QoS mechanisms for MAC protocols in wireless sensor networks: a survey	Dilip Kumar et al.	IET Communications, IET Digital Library. (Impact Factor- 1.779)	August/ 2019	SCI	Sant Longowal Institute of Engineering & Technology	
Energy Traffic Priority Scheduling MAC Protocol with QoS assurance for Hierarchical WSNs	Dilip Kumar et al.	International Journal of Electronics, Taylor & Francis. (Impact Factor- 1.779)	April/2019	SCI	Sant Longowal Institute of Engineering & Technology	
Design and analysis of distance error correction-based localization algorithm for wireless sensor networks	Dilip Kumar et al.	Transactions on Emerging Telecommunications Technologies, Wiley Online Library (Impact Factor- 1.779)	Nov/2018	SCI	Sant Longowal Institute of Engineering & Technology	
Hybrid Intelligence based Routing Protocols in Wireless Sensor Networks: A Survey	Dilip Kumar et al.	International Journal of Sensors, Wireless Communications and Control, bentham	2019	SCOPUS	Sant Longowal Institute of Engineering & Technology	

		science				
Computational intelligence-based energy efficient routing protocols with QoS assurance for wireless sensor networks: A survey	Dilip Kumar et al.	International Journal of Wireless and Mobile Computing (Inderscience Enterprises)	2019	SCOPUS	Sant Longowal Institute of Engineering & Technology	
Investigating the impact of data normalization on classification performance	Dalwinder Singh & Birmohan Singh	Applied Soft Computing	May, 2019	0	Sant Longowal Institute of Engineering & Technology	0
Wavelet and Total Variation Based Method Using Adaptive Regularization for Speckle Noise Reduction in Ultrasound Images	Nishtha Rawat, Manminder Singh & Birmohan Singh	Wireless Personal Communications	Mar, 2019	0	Sant Longowal Institute of Engineering & Technology	0
Grasshopper optimization algorithm-based approach for the optimization of ensemble classifier and feature selection to classify epileptic EEG signals	Gurwinder Singh, Birmohan Singh, Manpreet Kaur	Medical & Biological Engineering & Computing	Feb, 2019	0	Sant Longowal Institute of Engineering & Technology	0
A Hybrid Approach for Speckle Reduction in Ultrasound	Nishtha Rawat, Manminder Singh & Birmohan Singh	LNNS, Springer	Jan, 2019	0	Sant Longowal Institute of Engineering & Technology	0
Analysis of Electroencephalogram for the Recognition of Epileptogenic Area Using Ensemble Empirical Mode	Gurwinder Singh, Birmohan Singh, Manpreet	Recent Trends in Communication, Computing, and	Jan, 2019	0	Sant Longowal Institute of Engineering & Technology	0

Decomposition	Kaur,	Electronics. Lecture Notes in Electrical Engineering			Technology	
Feature Weighting for Improved Classification of Anuran Calls	Dalwinder Singh & Birmohan Singh	IEEE Xplore,	May, 2019	0	Sant Longowal Institute of Engineering & Technology	0
Hybridization of feature selection and feature weighting for high dimensional data	Dalwinder Singh & Birmohan Singh	Applied Intelligence	Nov, 2018	0	Sant Longowal Institute of Engineering & Technology	0
Prediction of Accuracy for Hepatocellular Carcinoma Patients using Cluster based Feature Ranking	PreetamPal, Birmohan Singh, Manpreet Kaur	International Journal of Medical Research & Health Sciences	Aug, 2018	0	Sant Longowal Institute of Engineering & Technology	0
Flexible fault tolerance in cloud through replicated cooperative resource group	Moin Hasan, Major Singh Goraya	Computer Communications	June, 2019	0	Sant Longowal Institute of Engineering & Technology	0
Fault tolerance in cloud computing environment: A systematic survey	Moin Hasan, Major Singh Goraya	Computers in Industry	Aug, 2018	5	Sant Longowal Institute of Engineering & Technology	4
Multi-level clustering protocol for load-balanced and scalable clustering in large-scale wireless sensor network	Harmanpreet Singh, Damnpreet Singh	The Journal of Supercomputing	Dec, 2018	0	Sant Longowal Institute of Engineering & Technology	

An energy-efficient cloud system with novel dynamic resource allocation methods	Vinod Kumar Verma et al	The Journal of Supercomputing	Mar, 2019	1	Sant Longowal Institute of Engineering & Technology	1
Next-generation Internet of things and cloud security solutions	Vinod Kumar Verma et al	International Journal of Distributed Sensor Networks	Mar, 2019	0	Sant Longowal Institute of Engineering & Technology	0
Data Proliferation Based Estimations over Distribution Factor in Heterogeneous Wireless Sensor Networks	Vinod Kumar Verma et al	ELSEVIER Computer Communications – The International Journal for the Computer and Telecommunications Industry	June, 2018	0	Sant Longowal Institute of Engineering & Technology	0
Prevention of Flooding Attacks in Mobile Ad Hoc Networks	Gurjinder Kaur., Jain V.K., Ghaba Y,	LNCS	Mar, 2019	0	Sant Longowal Institute of Engineering & Technology	0
Performance Comparison of Classifiers for Bilingual Gurmukhi-Roman Online Handwriting Recognition System	Gurpreet Singh, Manoj Kumar Sachan	International Journal of Engineering and Advanced Technology	June 2019	0	Sant Longowal Institute of Engineering & Technology	0
A Bilingual (Gurmukhi-Roman) Online Handwriting Identification and Recognition System	Gurpreet Singh, Manoj Kumar Sachan	International Journal of Recent Technology and Engineering	May 2019	0	Sant Longowal Institute of Engineering & Technology	0

3.4.6 h-Index of the Institutional Publications during the year. (based on Scopus/ Web of science)						
Title of the paper	Name of the author	Title of the journal	Year of publication	h-index	Number of citations excluding self citations	Institutional affiliation as mentioned in the publication
p53-Mdm2 Interaction Inhibitors as Novel Nongenotoxic Anticancer Agents	Dr. Harish Kumar Chopra	Current Cancer Drug Targets	2018	2	3	Sant Longowal Institute of Engineering & Technology
Exploring Low-Cost Natural Precursors as Chiral Building Blocks in Synthesis: Chiral Carbohydrate-Ionic Liquids	Dr. Harish Kumar Chopra	Mini-Reviews In Organic Chemistry	2018	2	3	Sant Longowal Institute of Engineering & Technology
Synthesis, characterization and applications of some novel DMAP-based chiral ionic liquids	Dr. Harish Kumar Chopra	Journal Of Molecular Liquids	2018	2	2	Sant Longowal Institute of Engineering & Technology

Synthesis, characterization, and organocatalytic application of chiral ionic liquids derived from (S,R)-noscipine	Dr. Harish Kumar Chopra	Synthetic Communications	2018	2	2	Sant Longowal Institute of Engineering & Technology
Enantioselective Reduction Reactions Using Chiral Ionic Liquids: An Overview	Dr. Harish Kumar Chopra	Current Organic Synthesis	2018	2	1	Sant Longowal Institute of Engineering & Technology
Chiral Recognition Methods in Analytical Chemistry: Role of the Chiral Ionic Liquids	Dr. Harish Kumar Chopra	Critical Reviews In Analytical Chemistry	2019	2	0	Sant Longowal Institute of Engineering & Technology
Optimization and production of turmeric extract-based nanoemulsion (TEBN) and its application in preservation of fatty fish fillet	Dr. Harish Kumar Chopra	Journal Of Food Processing And Preservation	2018	2	0	Sant Longowal Institute of Engineering & Technology
Development of highly selective novel fluorescence quenching probe based on Bi ₂ S ₃ -TiO ₂ nanoparticles for sensing the Fe(III)	Dhiraj	Sensors And Actuators B-Chemical	2018	2	3	Sant Longowal Institute of Engineering & Technology
A biopolymer-based composite hydrogel for rhodamine 6G dye removal: its synthesis, adsorption isotherms and kinetics	Dhiraj	Iranian Polymer Journal	2018	2	2	Sant Longowal Institute of Engineering & Technology
Experimental and theoretical investigations of Mn-N-co-doped TiO ₂ photocatalyst for visible light induced degradation of organic	Dhiraj	Journal Of Materials Research And Technology	2019	2	0	Sant Longowal Institute of Engineering &

pollutants		-Jmr&T				Technology
Investigations on Amphoteric Chitosan/TiO ₂ Bionanocomposites for Application in Visible Light Induced Photocatalytic Degradation	Dhiraj	Advances In Polymer Technology	2019	2	0	Sant Longowal Institute of Engineering & Technology
Photocatalytic degradation of monocrotophos using TiO ₂ photocatalyst: identification of intermediates by chromatographic techniques and reaction pathway	Dhiraj	Desalination And Water Treatment	2019	2	0	Sant Longowal Institute of Engineering & Technology
Semi-interpenetrating networks of biopolymer chitosan/acrylic acid and thiourea hydrogels: synthesis, characterization and their potential for removal of cadmium	Dhiraj	Iranian Polymer Journal	2019	2	0	Sant Longowal Institute of Engineering & Technology
Comparative studies of the electronic, binding and photophysical properties of a new nona-dentate hemi-cage tripodal HQ pendant trizaza-macrocyclic with unfilled, half-filled and completely filled lanthanide ions	Rohini; Baral, Minati; Kanungo, B. K.	New Journal Of Chemistry	2018	1	1	Sant Longowal Institute of Engineering & Technology
Structural effect on the central cavity of a pendent 12N3 macrocycle on bonding and photophysical properties of Eu ³⁺ and Tb ³⁺ complexes: Experimental and theoretical study	Rohini; Baral, Minati; Kanungo, B. K.	Journal Of Molecular Structure	2019	1	0	Sant Longowal Institute of Engineering & Technology
Experimental and theoretical studies on structure, bonding and luminescence properties	Rohini; Baral, Minati;	Journal Of Coordination	2019	1	0	Sant Longowal Institute of

of Eu(III) and Tb(III) complexes of a new macrocyclic based 8HQ ligand	Kanungo, B. K.	Chemistry				Engineering & Technology
Synthesis, thermodynamic, photophysical and DFT studies of some trivalent metal chelates of a hexadentate tripodal hydroxyquinolate-based ligand	Akbar, Rifat; Baral, Minati; Kanungo, B. K.	Journal Of Coordination Chemistry	2018	1	0	Sant Longowal Institute of Engineering & Technology
Experimental and theoretical investigations on acid catalysed stereoselective synthesis of new indazolyl-thiazole derivatives	Gautam, Poonam; Gautam, Deepika; Chaudhary, R. P.	Journal Of Molecular Structure	2018	1	1	Sant Longowal Institute of Engineering & Technology
Ultrasound-Assisted Facile Synthesis and Antimicrobial Studies of Alkanediyl-bis-thiazolidin-4-ones and Alkanediyl-bis-thiazinan-4-ones	Kaur, Amritpal; Kaur, Avneet Pal; Gautam, Poonam; Gautam, Deepika; Chaudhary, Ram Pal	Journal Of Heterocyclic Chemistry	2019	1	0	Sant Longowal Institute of Engineering & Technology
Overview of phytochemistry and pharmacology of <i>Adhatoda vasica</i> .	Damanjit Singh	IJAMTES	2018	0	0	Sant Longowal Institute of Engineering & Technology
Numerical inversion of Laplace transform based on Bernstein operational matrix	V. Mishra	Mathematical methods in the applied sciences	2018	1	1	Sant Longowal Institute of Engineering & Technology
Numerical Inverse Laplace Transform for Solving a Class of Fractional Differential	V. Mishra	Symmetry-based	2019	1	1	Sant Longowal Institute of

Equations						Engineering & Technology
Efficient higher order derivative-free multipoint methods with and without memory for systems of nonlinear equations	J.R. Sharma	International journal of computer mathematics	2018	1	3	Sant Longowal Institute of Engineering & Technology
Ball Convergence of an Efficient Eighth Order Iterative Method Under Weak Conditions	J.R. Sharma	Mathematics	2018	1	2	Sant Longowal Institute of Engineering & Technology
A fast and efficient composite Newton-Chebyshev method for systems of nonlinear equations	J.R. Sharma	Journal of complexity	2018	0	0	Sant Longowal Institute of Engineering & Technology
Design and Analysis of a New Class of Derivative-Free Optimal Order Methods for Nonlinear Equations	J.R. Sharma	International journal of computational methods	2018	1	1	Sant Longowal Institute of Engineering & Technology
An Efficient Class of Traub-Steffensen-Like Seventh Order Multiple-Root Solvers with Applications	J.R. Sharma	Symmetry-based	2019	1	1	Sant Longowal Institute of Engineering & Technology
On a Class of Efficient Higher Order Newton-like Methods	J.R. Sharma	Mathematical modelling and analysis	2019	1	1	Sant Longowal Institute of Engineering & Technology
Generalized Kung-Traub method and its multi-step	J.R. Sharma	Journal of complexity	2019	0	0	Sant Longowal

iteration in Banach spaces						Institute of Engineering & Technology
An Efficient Class of Weighted-Newton Multiple Root Solvers with Seventh Order Convergence	J.R. Sharma	Symmetry-basel	2019	0	0	Sant Longowal Institute of Engineering & Technology
On a Reduced Cost Higher Order Traub-Steffensen-Like Method for Nonlinear Systems	J.R. Sharma	Symmetry-basel	2019	0	0	Sant Longowal Institute of Engineering & Technology
One-Point Optimal Family of Multiple Root Solvers of Second-Order	J.R. Sharma	Mathematics	2019	0	0	Sant Longowal Institute of Engineering & Technology
An Efficient Derivative Free One-Point Method with Memory for Solving Nonlinear Equations	J.R. Sharma	Mathematics	2019	0	0	Sant Longowal Institute of Engineering & Technology
On a Bi-Parametric Family of Fourth Order Composite Newton-Jarratt Methods for Nonlinear Systems	J.R. Sharma	Mathematics	2019	0	0	Sant Longowal Institute of Engineering & Technology
Development of Optimal Eighth Order Derivative-Free Methods for Multiple Roots of Nonlinear Equations	J.R. Sharma	Symmetry-basel	2019	0	0	Sant Longowal Institute of Engineering & Technology

Convergence Analysis of Weighted-Newton Methods of Optimal Eighth Order in Banach Spaces	J.R. Sharma	Mathematics	2019	0	0	Sant Longowal Institute of Engineering & Technology
Convergence Ball and Complex Geometry of an Iteration Function of Higher Order	J.R. Sharma	Mathematics	2019	0	0	Sant Longowal Institute of Engineering & Technology
Bianchi-III cosmological model with BVDP in modified $f(R,T)$ theory	R.K.Mishra	Mathematics	2018	1	1	Sant Longowal Institute of Engineering & Technology
Synthesis, characterization and swelling rapheme of silver nanoparticles containing superabsorbent based on grafted copolymer of polyacrylic acid/Guar gum	Dhaliwal, A. S.	VACUUM	2018	01	06	Sant Longowal Institute of Engineering & Technology
Photon Interaction Parameters Investigations for Some ZnO-Al ₂ O ₃ -Fe ₂ O ₃ -P ₂ O ₅ Glasses at 59.4 keV Incident Photon Energy	Dhaliwal, A. S.	GLASS PHYSICS AND CHEMISTRY	2019	00	00	Sant Longowal Institute of Engineering & Technology
Enhanced efficiency of thin film GaAs solar cells with plasmonic metal nanoparticles	Verma S S	ENERGY SOURCES PART A- RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS	2018	01	03	Sant Longowal Institute of Engineering & Technology
Plasmon enhanced light trapping in thin film GaAs	Verma S S	PHYSICS LETTERS A	2019	01	01	Sant Longowal

solar cells by Al nanoparticle array						Institute of Engineering & Technology
Optical Properties Simulation of Magneto-Plasmonic Alloys Nanostructures	Sinha M M, Verma S S	PLASMONICS	2019	01	02	Sant Longowal Institute of Engineering & Technology
Limits on contact interactions and leptoquarks at HERA	Kaur P as a member of ZEUS Collaboration	Physical review D	2019	01	01	Sant Longowal Institute of Engineering & Technology
Charm production in charged current deep inelastic scattering at HERA	Kaur P as a member of ZEUS Collaboration	JOURNAL OF HIGH ENERGY PHYSICS	2019	01	01	Sant Longowal Institute of Engineering & Technology
A state-of-art literature survey of Grey Relational Analysis (GRA) applications in competitive business environment	Arvind Jayant,	International journal of industrial and systems engineering, Vol.30, No. 4, pp 425-448.	2018	0	01	Sant Longowal Institute of Engineering & Technology
Fabrication of Micro-Channels on Pure-Ti by USM and Its Surface Roughness Analysis	Pardeep Gupta,	Ciencia e Technical, Vitivinicola, Vol. 33(7), 2018, pp. 92-97.	2018	0	0	Sant Longowal Institute of Engineering & Technology
Manufacturing Excellence through Total Productive	Pardeep	International Journal	2018	0	0	Sant Longowal

Maintenance Implementation in an Indian Industry: A Case Study	Gupta,	of Mechanical and Production Engineering, Research and Development, Vol. 9(3), June 2019, 1593-1604.				Institute of Engineering & Technology
Metallurgical, impact and fatigue performance of electron beam welded duplex stainless-steel joints	A.S. Shahi,	Journal of Materials Processing Technology (Publisher: Elsevier) 272 137-148.	2019	0	0	Sant Longowal Institute of Engineering & Technology
Impact Toughness, Fatigue Crack Growth and Corrosion Behaviour of Thermally Aged UNS S32205 Duplex Stainless Steel,	A.S. Shahi,	Transactions of Indian Institute of Metals (Publisher: Springer),	2019	0	0	Sant Longowal Institute of Engineering & Technology
Modeling and desirability approach-based multi-response optimization of WEDM parameters in machining of aluminum metal matrix composite	Rajesh Kumar,	Journal of the Brazilian Society of Mechanical Sciences and Engineering, Vol. 40(9), September 2018	2018	01	05	Sant Longowal Institute of Engineering & Technology

Adaptive artificial intelligence for automatic identification of defect in the angular contact bearing	Rajesh Kumar,	Neural Computing and Applications, Springer, Vol. 29(8), 2018, 277–287.	2018	01	01	Sant Longowal Institute of Engineering & Technology
Role of signal processing, modelling and decision making in the diagnosis of rolling element bearing defect: A review	Rajesh Kumar,	Journal of Non-destructive Evaluation, Springer	Vol. 38(1), January 2019 ISSN: 0195-9298	01	02	Sant Longowal Institute of Engineering & Technology
Modeling of the effect of process parameters on tensile strength of friction stir welded rare earth ZE-41 magnesium alloy joints	Kulwant Singh,	International Journal of Applied Engineering Research, Volume 13, Number 5 (2018), pp 2882-2891, IF: 0.149 (SJIR)	2018	0	0	Sant Longowal Institute of Engineering & Technology
Predicting impact behaviour of friction stir welded ZE-41 Magnesium alloy joints	Kulwant Singh,	Indian Journal of Science and Technology, Vol 11(16), DOI;10.17485/ijst/2018/v11i16/121652pp 1-12	2018	0	0	Sant Longowal Institute of Engineering & Technology
Effect of weld cooling rates	Harish	Journal of	2018	0	0	Sant

on mechanical and metallurgical properties of submerged arc welded pressure vessel steel	Kumar Arya,	Pressure Vessel Technology , Volume 140 (No.4), pp 041406-1 to 041406-7, Transactions of the ASME				Longowal Institute of Engineering & Technology
Modelling and Evaluation of the Hunting Behaviour of a High-Speed Railway Vehicle on Curved Track.	Kumar, Vivek,	Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit 233, no. 2 (220–36. Doi:10.1177/0954409718789531	2019	0	0	Sant Longowal Institute of Engineering & Technology
Erosion wear evaluation of hvof sprayed wc-12co coating on some pipeline materials using taguchi approach,	Anuj Bansal,	Kovove Mater., Vol 57, 113–120.	2019	0	0	Sant Longowal Institute of Engineering & Technology
Effect of Copper and Magnesium Stoichiometric Additions and Thermal Aging on the Mechanical Properties of Cast Aluminium Alloys.	Rakesh Kumar,	Indian Journal of Science and Technology , 11(48), 2018,1–7.	2018	0	01	Sant Longowal Institute of Engineering & Technology

Study on Morphology and Mechanical Properties of Stoichiometrically Developed Al-Cu-Mg Cast Alloy	Rakesh Kumar,	International Journal of Mechanical Engineering and Technology , 10(04), 2019, 661–670.	2019	0	01	Sant Longowal Institute of Engineering & Technology
Experimental investigation on surface characteristics in Electrical Discharge Surface Grinding (EDSG) of 6061Al/Al ₂ O ₃ p 10% composite	Singh, Shankar,	Advances in Materials and Processing Technologies (Taylor and Francis), Volume 5, Issue 1, pp. 1-24, 2019.	2019	0	0	Sant Longowal Institute of Engineering & Technology
A new method to generate artificial microstructure of dual phase steel using Teacher-Learner Based Optimization	R. K. Saxena,	Sadhna, Springer, 2019, Vol 44:85, pp-1-18. (https://doi.org/10.1007/s12046-019-1054-8) Online ISSN 0973-7677, Print ISSN 0256-2499.	2019	0	0	Sant Longowal Institute of Engineering & Technology
Lactic acid extraction using environmentally benign Green emulsion ionic liquid membrane	Kumar, Anil; Thakur, Avinash; Panesar, Parmjit Singh	Journal Of Cleaner Production	APR 20 2018	1	15	Sant Longowal Institute of Engineering &

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Nutritional constituents of pseudo cereals and their potential use in food systems: A review	Mir, Nisar Ahmad; Riar, Charanjit Singh; Singh, Sukhcharn	Trends In Food Science & Technology	MAY 2018	1	9	Sant Longowal Institute of Engineering & Technology
Rheological and structural properties of protein isolates extracted from dephenolized sunflower meal: Effect of high intensity ultrasound	Malik, Mudasir Ahmad; Saini, Charanjiv Singh	Food Hydrocolloids	AUG 2018	1	7	Sant Longowal Institute of Engineering & Technology
Biocatalytic strategies in the production of galacto-oligosaccharides and its global status	Panesar, Parmjit S.; Kaur, Rupinder; Singh, Ram S.; Kennedy, John F.	International Journal Of Biological Macromolecules	MAY 2018	1	7	Sant Longowal Institute of Engineering & Technology
Extraction of hexavalent chromium by environmentally benign green emulsion liquid membrane using tridodecylamine as an extractant	Kumar, Anil; Thakur, Avinash; Panesar, Parmjit Singh	Journal Of Industrial And Engineering Chemistry	FEB 25 2019	1	6	Sant Longowal Institute of Engineering & Technology
Changes in the GABA and polyphenols contents of foxtail millet on germination and their relationship with in vitro antioxidant activity	Sharma, Seema; Saxena, Dharmesh C.; Riar, Charanjit S.	Food Chemistry	APR 15 2018	1	5	Sant Longowal Institute of Engineering & Technology
Composite Film Developed From the Blends of Sesame Protein Isolate and Gum Rosin and Their Properties Thereof	Sharma, Loveleen; Singh, Charanjiv	Polymer Composites	MAY 2018	1	5	Sant Longowal Institute of Engineering & Technology
Edible films developed from carboxylic acid cross-linked sesame protein isolate: barrier, mechanical, thermal,	Sharma, Loveleen; Sharma, Harish	Journal Of Food Science And	FEB 2018	1	5	Sant Longowal Institute of Engineering

crystalline and morphological properties	Kumar; Saini, Charanjiv Singh	Technology -Mysore				& Technology
Gluten free approach in fat and sugar amended biscuits: A healthy concern for obese and diabetic individuals	Singh, Ajay; Kumar, Pradyuman	Journal Of Food Processing And Preservation	MAR 2018	1	5	Sant Longowal Institute of Engineering & Technology
Stability analysis of environmentally benign green emulsion liquid membrane	Kumar, Anil; Thakur, Avinash; Panesar, Parmjit Singh	Journal Of Dispersion Science And Technology	2018	1	5	Sant Longowal Institute of Engineering & Technology
A comparative study on experimental and response surface optimization of lactic acid synergistic extraction using green emulsion liquid membrane	Kumar, Anil; Thakur, Avinash; Panesar, Parmjit Singh	Separation And Purification Technology	MAR 18 2019	1	4	Sant Longowal Institute of Engineering & Technology
Effect of pH and holding time on the characteristics of protein isolates from Chenopodium seeds and study of their amino acid profile and scoring	Mir, Nisar A.; Riar, Charanjit S.; Singh, Sukhcharn	Food Chemistry	JAN 30 2019	1	3	Sant Longowal Institute of Engineering & Technology
Physical, Mechanical, Morphological, and Barrier Properties of Elephant Food Yam Starch, Whey Protein Concentrate and psyllium Husk Based Composite Biodegradable Films	Sukhija, Sakshi; Singh, Sukhcharn; Riar, Charanjit S.	Polymer Composites	APR 2018	1	3	Sant Longowal Institute of Engineering & Technology
Proximate composition, nutritional profile and health benefits of legumes – A review	Kamboj, Rajni; Nanda, Vikas	Legume Research	JUN 2018	1	3	Sant Longowal Institute of Engineering & Technology
Rheological, thermal, micro structural and functional	Majid, Ishrat; Dar,	Food	APR	1	3	Sant Longowal

properties of freeze dried onion powders as affected by sprouting	B. N.; Nanda, Vikas	Bioscience	2018			Institute of Engineering & Technology
Development of crosslinked sesame protein and pineapple extract-based bilayer coatings for shelf-life extension of fresh-cut pineapple	Sharma, Loveleen; Saini, Charanjiv Singh; Sharma, Harish Kumar	Journal Of Food Processing And Preservation	FEB 2018	1	3	Sant Longowal Institute of Engineering & Technology
Comparative study of raw and germinated Chenopodium (Chenopodium album) flour on the basis of thermal, rheological, minerals, fatty acid profile and phytocomponents	Jan, Romee; Saxena, D. C.; Singh, Sukhcharn	Food Chemistry	DEC 15 2018	1	2	Sant Longowal Institute of Engineering & Technology
Optimization of antioxidant activity, textural and sensory characteristics of gluten-free cookies made from whole raphe quinoa flour	Jan, Khan Nadiya; Panesar, P. S.; Singh, Sukhcharn	Lwt-Food Science And Technology	JUL 2018	1	2	Sant Longowal Institute of Engineering & Technology
A review on emulsion liquid membrane (ELM) for the treatment of various industrial effluent streams	Kumar, Anil; Thakur, Avinash; Panesar, Parmjit Singh	Reviews In Environmental Science And Bio-Technology	MAR 2019	1	2	Sant Longowal Institute of Engineering & Technology
Physicochemical, molecular and thermal properties of high-intensity ultrasound (HIUS) treated protein isolates from album (Chenopodium album) seed	Mir, Nisar A.; Riar, Charanjit S.; Singh, Sukhcharn	Food Hydrocolloids	NOV 2019	1	1	Sant Longowal Institute of Engineering & Technology
Effect of chemical composition, granule structure and crystalline form of pigmented rice starches on their functional characteristics	Bhat, Farhan Mohiuddin; Riar, Charanjit Singh	Food Chemistry	NOV 1 2019	1	1	Sant Longowal Institute of Engineering & Technology

Effect of composition, granular morphology and crystalline structure on the pasting, textural, thermal and sensory characteristics of traditional rice cultivars	Bhat, Farhan Mohiuddin; Riar, Charanjit Singh	Food Chemistry	MAY 15 2019	1	1	Sant Longowal Institute of Engineering & Technology
Characteristics of β -glucan extracted from raw and germinated foxtail (<i>Setaria raphe</i>) and kodo (<i>Paspalum scrobiculatum</i>) millets	Sharma, Seema; Saxena, Dharmesh C.; Riar, Charanjit S.	International Journal Of Biological Macromolecules	15-Oct-18	1	1	Sant Longowal Institute of Engineering & Technology
Effect of Egg Albumen, Vegetable Oil, Corn Bran, and Cooking Methods on Quality Characteristics of Chicken Nuggets Using Response Surface Methodology	Ashok Kumar Pathera, Charanjit Singh Riar, Sanjay Yadav, and Pradeep Kumar Singh	Korean Journal Of Food Science And Animal Resources	Oct-2018	1	1	Sant Longowal Institute of Engineering & Technology
Effect of addition of different levels of β -glucan from minor millet on the functional, textural and sensory characteristics of cake premix and cake	S Sharma, DC Saxena, CS Riar	Journal Of Food Measurement And Characterization	Jun-18	1	1	Sant Longowal Institute of Engineering & Technology
Exploring the influence of heat moisture treatment on physicochemical, pasting, structural and morphological properties of mango kernel starches from Indian cultivars	Bharti, Indu; Singh, Sukhcharn; Saxena, D. C.	Lwt-Food Science And Technology	AUG 2019	1	1	Sant Longowal Institute of Engineering & Technology
Influence of alkali treatment on physicochemical, pasting, morphological and structural properties of mango kernel starches derived from Indian cultivars	Bharti, Indu; Singh, Sukhcharn; Saxena, D. C.	International Journal Of Biological Macromolecules	MAR 15 2019	1	1	Sant Longowal Institute of Engineering & Technology
Textural, in vitro antioxidant activity and sensory characteristics of cookies made from blends of wheat-quinoa grown in India	Jan, Khan Nadiya; Panesar, P. S.; Singh, Sukhcharn	Journal Of Food Processing And Preservation	MAR 2018	1	1	Sant Longowal Institute of Engineering & Technology

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Assessment of raphe-chemical properties, fatty acid, amino acid and mineral profile of bee pollen from India with a multivariate perspective	Thakur, M and Nanda V	Journal Of Food And Nutrition Research	2018	1	1	Sant Longowal Institute of Engineering & Technology
Dynamic Changes in Health-Promoting Properties and Eating Quality During Off-Vine Ripening of Tomatoes	Siddiqui, Mohammed Wasim; Lara, Isabel; Ilahy, Riadh; Tlili, Imen; Ali, Asgar; Homa, Fozia; Prasad, Kamlesh; Deshi, Vinayak; Lenucci, Marcello Salvatore; Hdider, Chafik	Comprehensive Reviews In Food Science And Food Safety	NOV 2018	1	1	Sant Longowal Institute of Engineering & Technology
Thermal, structural and rheological characterization of protein isolate from sesame meal	Saini, Charanjiv Singh; Sharma, Harish Kumar; Sharma, Loveleen	Journal Of Food Measurement And Characterization	MAR 2018	1	1	Sant Longowal Institute of Engineering & Technology
Recent developments on sustainable solvents for emulsion liquid membrane processes	Kumar, Anil; Thakur, Avinash; Panesar, Parmjit Singh	Journal Of Cleaner Production	DEC 10 2019	1	1	Sant Longowal Institute of Engineering & Technology
L(+)-Lactic Acid Production by Immobilized Lactobacillus casei Using Low Cost Agro-Industrial Waste as Carbon and Nitrogen Sources	Thakur, Avinash; Panesar, Parmjit Singh; Saini, Manohar Singh	Waste And Biomass Valorization	MAY 2019	1	1	Sant Longowal Institute of Engineering & Technology
Parametric Optimization of Lactic Acid Production by	Thakur, Avinash;	Periodica Polytechnica	2018	1	1	Sant Longowal

Immobilized Lactobacillus casei Using Box-Behnken Design	Panesar, Parmjit Singh; Saini, Manohar Singh	a-Chemical Engineerin g				Institute of Engineering & Technology
Effect of parboiling and puffing processes on the physicochemical, functional, optical, pasting, thermal, textural and structural properties of selected Indica rice	Kumar, Shiv; Prasad, Kamlesh	Journal Of Food Measurem ent And Characteriz ation	SEP 2018	1	0	Sant Longowal Institute of Engineering & Technology
Development and parameter optimization of maize flat bread supplemented with asparagus bean flour	Shah, Tajamul Rouf; Prasad, Kamlesh; Kumar, Pradyuman	Food Science And Technology	2018	1	0	Sant Longowal Institute of Engineering & Technology
A biopolymer-based composite hydrogel for rhodamine 6G dye removal: its synthesis, adsorption isotherms and kinetics	Navneet Bhullar, Kamlesh Kumari*, Dhiraj Sud	Iranian Polymer Journal, 27(7)	2018 Impa ct factor 1.278	01	02	Sant Longowal Institute of Engineering & Technology
Data proliferation-based estimations over distribution factor in heterogeneous wireless sensor networks	Surinder Singh et al.	Computer communications	2018	91	0	Sant Longowal Institute of Engineering & Technology
A dual-channel surface raphem resonance biosensor based on a photonic crystal Fiber for multianalyte sensing	Surinder Singh et al.	Journal of Computati onal Electronics	2019	27	1	Sant Longowal Institute of Engineering & Technology
Design of titanium nitride coated PCF-SPR sensor for liquid sensing applications	Surinder Singh et al.	Optical Fiber Technology	2019	54	0	Sant Longowal Institute of Engineering & Technology

Design approach of solid-core photonic crystal fiber sensor with sensing ring for blood component detection	Surinder Singh et al.	Journal of Nanophotonics	2019	34	0	Sant Longowal Institute of Engineering & Technology
Possibilities of laser amplification and measurement of the field structure of ultrashort pulses in the range of 2.7 – 3 μm in erbium-ion-doped tellurite glass fibres	Surinder Singh et al.	Quantum Electronics	2018	41	1	Sant Longowal Institute of Engineering & Technology
Design of XPM based all optical contention detection circuit at 120 Gbps	Surinder Singh et al.	Optical and Quantum Electronics	2019	51	0	Sant Longowal Institute of Engineering & Technology
340-Gb/s PoISK-DP-DQPSK optical orthogonal modulation format with coherent direct detection for high capacity WDM optical network	Surinder Singh et al.	Optical Fiber Technology	2019	54	0	Sant Longowal Institute of Engineering & Technology
Design of all optical contention detection circuit based on HNLF at the data rate of 120 Gbps	Surinder Singh et al.	Optical Fiber Technology	2019	54	0	Sant Longowal Institute of Engineering & Technology
Reconstruction of optical pulse intensity and phase based on SPM spectra measurements in micro structured tellurite fiber in telecommunication range	Surinder Singh et al.	<i>Journal of Lightwave Technology</i>	2019	182	1	Sant Longowal Institute of Engineering & Technology
Design and Optimization of Slotted Micro-Machined Patch Antenna Using Composite Substrate	Amar Partap Singh et al.	The Applied Computational	2019	26	4	Sant Longowal Institute of Engineering

		Electromagnetic Society Journal				& Technology
On the Design of Planner Antenna using Fibonacci Word Fractal Geometry in Support of Public Safety	Amar Partap Singh et al.	International Journal of RF and Microwave Computer-Aided Engineering,	2019	35		Sant Longowal Institute of Engineering & Technology
On the Design and Analysis of I-Shaped Fractal Antenna for Emergency Management	Amar Partap Singh et al.	IETE Journal of Research	2019	20	3	Sant Longowal Institute of Engineering & Technology
Synthesis and Validation of a Cu Meta-Based Wideband Microwave Absorber on an Antenna Array	Anupma Marwaha et al	Journal of Electronic Materials	2019	87	3	Sant Longowal Institute of Engineering & Technology
A triband slotted Bow-tie wideband THz antenna design using rapheme for Wireless Applications	Anupma Marwaha et al	Optik	2019	46	1	Sant Longowal Institute of Engineering & Technology
Utilization of rapheme oxide-based microwave absorber for pattern enhancement of patch antenna array	Anupma Marwaha et al	Journal of Nanophotonics	2018	34	1	Sant Longowal Institute of Engineering & Technology
Elucidation of microwave absorption mechanisms in Co-Ga substituted Ba-Sr hexaferrites in X-band	Anupma Marwaha et al	Journal of Materials Science Materials in	2018	63	1	Sant Longowal Institute of Engineering &

		Electronics				Technology
Graphene based arc Truncated terahertz antenna of wireless communication	Anupma Marwaha et al	Current nanoscience	2018	37	1	Sant Longowal Institute of Engineering & Technology
Non-invasive Temperature Measuring and Early Fault Detecting System for Manufacturing Industry	Dilip Kumar et al.	MAPAN, Springer. (Impact Factor-1.250)	2019	13		Sant Longowal Institute of Engineering & Technology
A survey on QoS mechanisms in WSN for computational intelligence based routing protocols	Dilip Kumar et al.	Wireless Networks, Springer. (Impact Factor-2.405)	2019	186		Sant Longowal Institute of Engineering & Technology
QoS mechanisms for MAC protocols in wireless sensor networks: a survey	Dilip Kumar et al.	IET Communications, IET Digital Library. (Impact Factor-1.779)	August/2019	53		Sant Longowal Institute of Engineering & Technology
Energy Traffic Priority Scheduling MAC Protocol with QoS assurance for Hierarchical WSNs	Dilip Kumar et al.	International Journal of Electronics, Taylor & Francis. (Impact Factor-1.779)	April/2019	47		Sant Longowal Institute of Engineering & Technology
Design and analysis of distance error correction–based localization algorithm	Dilip Kumar et al.	Transactions on Emerging	Nov/2018	18		Sant Longowal Institute of

for wireless sensor networks		Telecomm unications Technologi es, Wiley Online Library (Impact Factor- 1.779)				Engineering & Technology
Hybrid Intelligence based Routing Protocols in Wireless Sensor Networks: A Survey	Dilip Kumar et al.	Internation al Journal of Sensors, Wireless Communica tions and Control, bentham science	2019	3		Sant Longowal Institute of Engineering & Technology
Computational intelligence- based energy efficient routing protocols with QoS assurance for wireless sensor networks: A survey	Dilip Kumar et al.	Internation al Journal of Wireless and Mobile Computing (Inderscien ce Enterprises)	2019	16		Sant Longowal Institute of Engineering & Technology
A low leakage TG-CNTFET– based inexact full adder for low power image processing applications.	Ubhi J Singh et al.	Internation al Journal of Circuit Theory and Application s	2019	47		Sant Longowal Institute of Engineering & Technology
A Reliable Leakage Reduction Technique for Approximate Full Adder with Reduced Ground Bounce Noise	Ubhi J Singh et al.	Mathemati cal Problems in Engineerin g	2018	50		Sant Longowal Institute of Engineering & Technology

Low leakage zero ground bounce noise nanoscale full adder using source biasing technique	Ubhi J Singh et al.	Journal of nanoelectronics & optoelectronics	2019	18		Sant Longowal Institute of Engineering & Technology
Performance Analysis of Mobile Nodes in Mobile Ad-hoc Networks using Enhanced Manhattan Mobility Model	Ubhi J Singh et al.	Journal of Scientific and Industrial Research, NISCAIR-CSIR	2019	46		Sant Longowal Institute of Engineering & Technology
A Novel Approach to Predict Mobility Pattern of Mobile Nodes in Mobile Ad-hoc Networks	Ubhi J Singh et al.	Journal of Scientific and Industrial Research, NISCAIR-CSIR	2018	46		Sant Longowal Institute of Engineering & Technology
Investigating the impact of data normalization on classification performance	Birmohan Singh	Applied Soft Computing	May, 2019	4	0	Sant Longowal Institute of Engineering & Technology
Wavelet and Total Variation Based Method Using Adaptive Regularization for Speckle Noise Reduction in Ultrasound Images	Birmohan Singh	Wireless Personal Communications	Mar, 2019	4	0	Sant Longowal Institute of Engineering & Technology
Grasshopper optimization algorithm-based approach for the optimization of ensemble classifier and feature selection to classify epileptic EEG signals	Birmohan Singh	Medical & Biological Engineering & Computing	Feb, 2019	4	0	Sant Longowal Institute of Engineering & Technology
A Hybrid Approach for Speckle Reduction in Ultrasound	Birmohan Singh	LNNS, Springer	Jan, 2019	4	0	Sant Longowal Institute of

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Analysis of Electroencephalogram for the Recognition of Epileptogenic Area Using Ensemble Empirical Mode Decomposition	Birmohan Singh	Recent Trends in Communication, Computing, and Electronics. Lecture Notes in Electrical Engineering	Jan, 2019	4	0	Sant Longowal Institute of Engineering & Technology
Feature Weighting for Improved Classification of Anuran Calls	Birmohan Singh	IEEE Xplore,	May, 2019	4	0	Sant Longowal Institute of Engineering & Technology
Hybridization of feature selection and feature weighting for high dimensional data	Birmohan Singh	Applied Intelligence	Nov, 2018	4	0	Sant Longowal Institute of Engineering & Technology
Prediction of Accuracy for Hepatocellular Carcinoma Patients using Cluster based Feature Ranking	Birmohan Singh,	International Journal of Medical Research & Health Sciences	Aug, 2018	4	0	Sant Longowal Institute of Engineering & Technology
Flexible fault tolerance in cloud through replicated cooperative resource group	Major Singh Goraya	Computer Communications	June, 2019	4	0	Sant Longowal Institute of Engineering & Technology
Fault tolerance in cloud computing environment: A	Major Singh Goraya	Computers in Industry	2018	5	7	Sant Longowal

systematic survey						Institute of Engineering & Technology
Multi-level clustering protocol for load-balanced and scalable clustering in large-scale wireless sensor network	Damnpreet Singh	The Journal of Supercomputing	Dec, 2018	2	1	Sant Longowal Institute of Engineering & Technology
An energy-efficient cloud system with novel dynamic resource allocation methods	Vinod Kumar Verma	The Journal of Supercomputing	Mar, 2019	5	1	Sant Longowal Institute of Engineering & Technology
Next-generation Internet of things and cloud security solutions	Vinod Kumar Verma	International Journal of Distributed Sensor Networks	Mar, 2019	5	0	Sant Longowal Institute of Engineering & Technology
Data Proliferation Based Estimations over Distribution Factor in Heterogeneous Wireless Sensor Networks	Vinod Kumar Verma	ELSEVIER Computer Communications – The International Journal for the Computer and Telecommunications Industry	June, 2018	5	0	Sant Longowal Institute of Engineering & Technology
Performance Comparison of Classifiers for Bilingual Gurmukhi-Roman Online Handwriting Recognition System	Manoj Kumar Sachan	International Journal of Engineering and Advanced Technology	June 2019	3	0	Sant Longowal Institute of Engineering & Technology

A Bilingual (Gurmukhi-Roman) Online Handwriting Identification and Recognition System	Manoj Kumar Sachan	International Journal of Recent Technology and Engineering	May 2019	3	0	Sant Longowal Institute of Engineering & Technology
Wavelet and Total Variation Based Method Using Adaptive Regularization for Speckle Noise Reduction in Ultrasound Images	Manminder Singh	Wireless Personal Communications	Mar, 2019	2	0	Sant Longowal Institute of Engineering & Technology
Design and Analysis of a New Improved Force Linear Switched Reluctance Motor for Transit Application	Prof. Shilendra K. Jain	International Journal Of Research	2019	0	0	Sant Longowal Institute of Engineering & Technology
Measurement and Optimization of Performance Parameters of Linear Switched Reluctance Motor Using Finite Element Method	Prof. Shilendra K. Jain	Mapan-Journal Of Metrology Society Of India	2019	0	0	Sant Longowal Institute of Engineering & Technology
Adaptive network architecture and firefly algorithm for biogas heating model aided by photovoltaic thermal greenhouse system	Dr. V.K. Jain	Energy & Environment	2018	1	1	Sant Longowal Institute of Engineering & Technology
Ameliorated grey wolf optimization for economic load dispatch problem	Dr. J.S. Dhillon	Energy	2019	1	5	Sant Longowal Institute of Engineering & Technology
Hybrid artificial algae algorithm for economic load dispatch	Dr. J.S. Dhillon	Applied Soft Computing	2018	1	5	Sant Longowal Institute of Engineering

						& 'Technology
Profit based unit commitment using hybrid optimization technique	Dr. J.S. Dhillon	Energy	2018	1	4	Sant Longowal Institute of Engineering & 'Technology
Multi-objective combined heat and power unit commitment using particle swarm optimization	Dr. J.S. Dhillon	Energy	2019	1	3	Sant Longowal Institute of Engineering & 'Technology
Unit commitment considering dual-mode combined heat and power generating units using integrated optimization technique	Dr. J.S. Dhillon	Energy Conversion And Manageme nt	2018	1	3	Sant Longowal Institute of Engineering & 'Technology
Multi-objective thermal power load dispatch using chaotic differential evolutionary algorithm and Powell's method	Dr. J.S. Dhillon	Soft Computing	2018	1	3	Sant Longowal Institute of Engineering & 'Technology
Modified Binary Differential Evolution Algorithm to Solve Unit Commitment Problem	Dr. J.S. Dhillon	Electric Power Componen ts And Systems	2018	1	3	Sant Longowal Institute of Engineering & 'Technology
Multiobjective thermal power load dispatch using adaptive predator-prey optimization	Dr. J.S. Dhillon	Applied Soft Computing	2018	1	1	Sant Longowal Institute of Engineering & 'Technology
A Novel Random Transition Based PSO Algorithm to Maximize the Lifetime of	Dr. J.S. Dhillon	Wireless Personal Communic	2018	1	1	Sant Longowal Institute of

Wireless Sensor Networks		ations				Engineering & Technology
Dual head static clustering algorithm for wireless sensor networks	Dr. J.S. Dhillon	Aeu-International Journal Of Electronics And Communications	2018	1	1	Sant Longowal Institute of Engineering & Technology
A conglomerated ion-motion and crisscross search optimizer for electric power load dispatch	Dr. J.S. Dhillon	Applied Soft Computing	2019	0	0	Sant Longowal Institute of Engineering & Technology
Profit based unit commitment using memetic binary differential evolution algorithm	Dr. J.S. Dhillon	Applied Soft Computing	2019	0	0	Sant Longowal Institute of Engineering & Technology
Maximal coverage hybrid search algorithm for deployment in wireless sensor networks	Dr. J.S. Dhillon	Wireless Networks	2019	0	0	Sant Longowal Institute of Engineering & Technology
Design of Digital IIR Filter with Conflicting Objectives Using Hybrid Predator-Prey Optimization	Dr. J.S. Dhillon	Circuits Systems And Signal Processing	2018	0	0	Sant Longowal Institute of Engineering & Technology
Non-interactive approach to solve multi-objective thermal power dispatch problem using composite search algorithm	Dr. J.S. Dhillon	Applied Soft Computing	2018	0	0	Sant Longowal Institute of Engineering & Technology
Graphene Based Wideband Arc Truncated Terahertz	Dr. S.Marwaha	Current Nanoscienc	2018	1	2	Sant

Antenna for Wire-less Communication		e				Longowal Institute of Engineering & Technology
A triband slotted bow-tie wideband THz antenna design using graphene for wireless applications	Dr. S.Marwaha	Optik	2019	0	0	Sant Longowal Institute of Engineering & Technology
Utilization of graphene oxide-based microwave absorber for pattern enhancement of patch antenna array	Dr. S.Marwaha	Journal Of Nanophotonics	2018	0	0	Sant Longowal Institute of Engineering & Technology
Thermographic evaluation of mindfulness meditation using dynamic IR imaging	Dr. A.S. Arora	Infrared Physics & Technology	2018	1	2	Sant Longowal Institute of Engineering & Technology
An automated approach to enhance the thermographic evaluation on orofacial regions in lateral facial thermograms	Dr. A.S. Arora	Journal Of Thermal Biology	2018	1	2	Sant Longowal Institute of Engineering & Technology
A Novel Face Liveness Detection Algorithm with Multiple Liveness Indicators	Dr. A.S. Arora	Wireless Personal Communications	2018	1	1	Sant Longowal Institute of Engineering & Technology
Distribution transformer failure modes, effects and criticality analysis (FMECA)	Dr. Sanjeev Singh	Engineering Failure Analysis	2019	1	2	Sant Longowal Institute of Engineering & Technology

Comprehensive Controller Implementation for Wind-PV-Diesel Based Standalone Microgrid	Dr. Sanjeev Singh	Ieee Transactions On Industry Applications	2019	0	0	Sant Longowal Institute of Engineering & Technology
An approach for classification of malignant and benign microcalcification clusters	Dr. Manpreet Kaur	Sadhana-Academy Proceedings In Engineering Sciences	2018	1	1	Sant Longowal Institute of Engineering & Technology
Grasshopper optimization algorithm-based approach for the optimization of ensemble classifier and feature selection to classify epileptic EEG signals	Dr. Manpreet Kaur	Medical & Biological Engineering & Computing	2019	0	0	Sant Longowal Institute of Engineering & Technology
Assessment of Energy-Population-Urbanization Nexus with Changing Energy Industry Scenario in India	Dr. A.K. Aggarwal	Land	2019	1	2	Sant Longowal Institute of Engineering & Technology
Development of LDA Based Indicator for the Detection of Unbalance and Misalignment at Different Shaft Speeds	Dr. Raj Kumar	Experimental Techniques	2019	0	0	Sant Longowal Institute of Engineering & Technology
Optimization of ozone bleaching conditions for improving wheat straw pulp quality using response surface methodology	Ghatak, HR (Ghatak, Himadri Roy)	Ozone-Science & Engineering	Mar 4, 2019	1	01	Sant Longowal Institute of Engineering & Technology
Effect of introducing ozone prior to elemental chlorine free bleaching of wheat straw pulp on pulp, paper and effluent properties	Ghatak, HR (Ghatak, Himadri Roy)	Cellulose Chemistry And Technology	Jan-Feb 2019	0	00	Sant Longowal Institute of Engineering &

						Technology
Improvement in pulp quality and effluent properties using methanol as carbohydrate protector during ozone bleaching of wheat straw pulp	Ghatak, HR (Ghatak, Himadri Roy)	Appita	Oct-Dec 2018	0	00	Sant Longowal Institute of Engineering & Technology
Additives to decrease cellulose chain scission during ozone bleaching of wheat straw pulp	Ghatak, HR (Ghatak, Himadri Roy)	Nordic Pulp & Paper Research Journal	Sep 2018	0	00	Sant Longowal Institute of Engineering & Technology
A biopolymer-based composite hydrogel for rhodamine 6G dye removal: its synthesis, adsorption isotherms and kinetics	Kamlesh Kumari	Iranian Polymer Journal	July 2018	1	02	Sant Longowal Institute of Engineering & Technology
Semi-interpenetrating networks of biopolymer chitosan/acrylic acid and thiourea hydrogels: synthesis, characterization and their potential for removal of cadmium	Kamlesh Kumari	Iranian Polymer Journal	Feb 2019	0	00	Sant Longowal Institute of Engineering & Technology
A comparative study on experimental and response surface optimization of lactic acid synergistic extraction using green emulsion liquid membrane	Avinash Thakur	Separation And Purification Technology	March, 2019	0	00	Sant Longowal Institute of Engineering & Technology
Extraction of hexavalent chromium by environmentally benign green emulsion liquid membrane using tridodecylamine as an extractant	Avinash Thakur	Journal Of Industrial And Engineering Chemistry	Feb., 2019	1	03	Sant Longowal Institute of Engineering & Technology
L(+)-Lactic Acid Production by Immobilized Lactobacillus	Avinash	Waste And Biomass	May,	1	01	Sant Longowal

casei Using Low Cost Agro-Industrial Waste as Carbon and Nitrogen Sources	Thakur	Valorization	2019			Institute of Engineering & Technology
A review on emulsion liquid membrane (ELM) for the treatment of various industrial effluent streams	Avinash Thakur	Reviews In Environmental Science And Bio/Technology	March 2019	0	0	Sant Longowal Institute of Engineering & Technology
3.4.7 Faculty participation in Seminars/Conferences and Symposia during the year :						
No. of Faculty	International level		National level		State level	Local level
Attended Seminars/ Workshops	24		38		1	19
Presented papers	30		24		0	2
Resource Persons	4		15		1	6
3.5 Consultancy						
3.5.1 Revenue generated from Consultancy during the year						
Name of the Consultant(s) department	Name of Consultancy project		Consulting/Sponsoring Agency		Revenue generated (amount in rupees)	
----	----		----		----	
3.5.2 Revenue generated from Corporate Training by the institution during the year						
Name of the Consultant(s) & Department	Title of the Programme	Agency seeking training	Revenue generated (amount in rupees)		Number of trainees	
ELECTRICAL & INSTRUMENTATION ENGINEERING	Imparted practical training to AMIE students.	The Institute of Engineers (India)	70000/-		7 students participated in 2018 18 students participated in 2019	
Prof. P.S. Panesar, Programme Incharge (IGNOU), Deptt. of Food Engg. & Technology	- Post-graduate Diploma in Quality Management - Diploma in Value Added products for cereals and Oil Seeds - Diploma In Value Added	Students of IGNOU	11400/-		17 students	

	Product in Fruits and Vegetables			
3.6 Extension Activities				
3.6.1 Number of extension and outreach programmes conducted in collaboration with industry, community and Non- Government Organisations through NSS/NCC/Red cross/Youth Red Cross (YRC) etc., during the year				
Title of the Activities	Organising unit/ agency/ collaborating agency	Number of teachers coordinated in such activities	Number of students participated in such activities	
Six Monthly Interactions Of Head Of Institution With Addl Dte Gen,Ph Hp&Chd,Chandigarh At Patiala On 24th August 2018	Thapar institute, Patiala	ANO,Lt Vinod Kumar Meena, alongwith Dean(SW)	NCC cadets of Punjab	
Second anniversary of surgical strike day on 28/9/18 at 4:30 pm	NCC SLIET	ANO, Lt Vinod Kumar Meena, alongwith Director, Dean(SW), CSO, Security personnel	All NCC cadets alongwith some other students	
Rashtriya Ekta Diwas on 31st October 2018	NCC SLIET alongwith all government offices	ANO, Lt Vinod Kumar Meena, alongwith Director, Dean (Academics),Dean(SW), CSO, Security personnel	All NCC cadets alongwith some other students	
Armed forces flag day on 7th December 2018	NCC SLIET in collaboration with District Defence Services Welfare Officer, Sangrur	ANO, Lt Vinod Kumar Meena	All NCC cadets alongwith some other students	
communal harmony week from 19th to 25th November 2018 and flag day on 24th November 2018	NCC SLIET in collaboration with National Foundation for Communal Harmony,9thfloor,' C'Wing,LokNayak Bhawan, Khan Market, New Delhi- 110003	ANO, Lt Vinod Kumar Meena	All NCC cadets alongwith some other students	
ATC(Annual Training Camp)-114 of NCC w.e.f. 12 Jun to 21	ASRA Group of Institution Patiala	ANO, Lt Vinod Kumar Meena	3 NCC cadets	

Jun 2019.	in collaboration with 14 PB BN NCC Nabha		
Motivational and Career Awareness session at Bhamabaddi, Sangrur	NSS, SLIET (Sept./Oct. 2018)	01	10 (SLIET Students) 50 village children/students
Sewa Visit to Pingalwada	NSS, SLIET (28.10.2019)	02	30

3.6.2 Awards and recognition received for extension activities from Government and other recognized bodies during the year

Name of the Activity	Award/recognition	Awarding bodies	No. of Students benefited
Bharat Scout & Guides, Punjab	Nipun Certificate	Bharat Scout & Guides	47
Smart India Hackathon	Finalists	MHRD	06
	Participated and cleared first level	Texas	04
Baja SAE India 2019	1 st in durability award	Baja SAE India	19
	Pride of Punjab winner		
Mega ATV Championship (Goa)	2 nd Runner up in Flat Dirt race	Auto sports India	27
Aravalli Terrain Vehicle Championship (ATVC)	Overall 2 nd position	Infleagule Motorsports & AICTE	24
	First Endurance race		
	Best Driver award		
	First runner up in Suspension and Traction		
	First runner up in Manoeuvrability		
	Second runner up in Acceleration		
Efficycle 2018	Overall winner	Society of Automotive Engineers (SAE)- Northern India Section	09
	1 st in Endurance Race		
	1 st in Cost Award		
	1 st in Drive Excellence		
Eco Green Vehicle Challenge (EGVC2019)	Overall winner	Society of Automotive Engineers (SAE)- Western India Section	08
	Endurance award		
	Manoeuvrability Award		
	Design runner up award		
7 th Season of International Go Kart Championship (IGC-2019)	Overall 2 nd winner	Society of Automotive Engineers (SAE)	20
	Best build Quality winner		
	Endurance 1 st Runners up		
Go Kart Design	Design Evolution -3rd	ISNEE(Indian	22

Challenge Season6-2018	Disassemble test-2 nd		Society of New Era Engineers)	
	Accetation-3rd			
	Autocross-3rd			
	Skidpad-3rd			
	Endurance Race-4th			
	Overall-4th			
3 rd Season of Indian Karting Championship	Secured overall Rank 15 among 155 teams		Nexus motors sports	22
Code Vita	Job offer/ internship		TCS	04 students got job offer and 01 students got internship
Code jam	Qualified for 2 nd round		Google	04
Hackwithinfy	Qualified for 2 nd round		Infosys	02
3.6.3 Students participating in extension activities with Government Organisations, Non-Government Organisations and programmes such as Swachh Bharat, Aids Awareness, Gender Issue, etc. during the year				
Name of the scheme	Organising unit/ agency/ collaborating agency	Name of the activity	Number of teachers coordinated in such activities	Number of students participated in such activities
SLIET Electoral Literacy Club	SLIET Electoral Literacy Club	Training program on EVM/VVPAT Voting machines on 23.01.2019	01	60
SLIET Electoral Literacy Club	SLIET Electoral Literacy Club	Celebration of National Voter’s day on 25.01.2019	10	80
SLIET Electoral Literacy Club	SLIET Electoral Literacy Club	SVEEP(Systematic Voter’s Education and Electoral Participation on 14.04.2019	05	90
ISTE	ISTE SLIET STUDENT CHAPTER	Hostel Quiz 02.01.2019	01	800
ISTE	ISTE SLIET STUDENT CHAPTER	Brain Storming27.01.209-15.02.2019	01	200
ISTE	ISTE SLIET STUDENT CHAPTER	Department face off 30.01.2019-02.02.2019	01	100

ISTE	ISTE SLIET STUDENT CHAPTER	Tech- Auction23.02.2019	01	100
3.7 Collaborations				
3.7.1 Number of Collaborative activities for research, faculty exchange, student exchange during the year				
Nature of Activity		Participant	Source of financial support	Duration
International Project: Project: Design and Development of Novel Optoelectronic Devices for High Speed Reconfigurable Optical Access Networks		From India- Dr. Surinder Singh, Prof. ECE Department SLIET, Longowal & From ASEAN side Dr. Quang Minh, Head of Laboratory of Materials and Engineering Science, Hanoi, Vietnam Dr. Amin Malekmohammadi, Department of Electrical & Electronic Engineering, University of Nottingham, Malaysia.	DST	3 years
International Project: Project: Indo-Russian Joint project entitled "Optical Metrology of Ultra-Short Pulses for Design of Flexible MIMO Based Next Generation Optical Communication Networks".		Coordinator Prof. Surinder Singh from SLIET, Longowal with Russian partner Dr. Elena Anashkina, Institute of Applied Physics of Russian Academy of Sciences (IAP RAS), Russia	DST	2 years

3.7.2 Linkages with institutions/industries for internship, on-the-job training, project work, sharing of research facilities etc. during the year					
Nature of linkage	Title of the linkage	Name of the partnering institution/ industry /research lab with contact details	Duration (From)	Duration (to)	Participant
Industrial Training of SLEIT Students	Internship/Training Program	Rail Coach Factory, Kapurthala, Punjab	23/05/2019	05/07/2019	05
Industrial Training of SLEIT Students	Internship/Training Program	Diesel Loco Modernization Works, Ministry of Railway, Patiala, Punjab	23/05/2019	05/07/2019	03
Industrial Training of SLEIT Students	Internship/Training Program	Bihar State Power (Holding) Company Limited, Patna, Bihar	23/05/2019	05/07/2019	05
Industrial Training of SLEIT Students	Internship/Training Program	Tirhut Dugdh Utpadak Sahkari Sang Ltd., Muzaffarpur, Bihar	23/05/2019	05/07/2019	07
Industrial Training of SLEIT Students	Internship/Training Program	Barauni Refinery (IOCL), Barauni, Begusarai, Bihar	23/05/2019	05/07/2019	20
Industrial Training of SLEIT Students	Internship/Training Program	Himachal Pradesh State Electricity Board Limited, Hamirpur (H.P.)	23/05/2019	05/07/2019	25
Industrial Training of SLEIT Students	Internship/Training Program	Federal-Modul Goetze (India) Limited, Bahadurgarh, Patiala (Pb.)	23/05/2019	05/07/2019	01

Industrial Training of SLEIT Students	Internship/Training Program	Pepsico India Holdings Pvt. Ltd., Channo, Sangrur (Pb.)	23/05/2019	05/07/2019	05
Industrial Training of SLEIT Students	Internship/Training Program	Ralson India Limited, Ludhiana (Pb)	23/05/2019	05/07/2019	02
Industrial Training of SLEIT Students	Internship/Training Program	Bonn Nutrients Pvt. Ltd., Ludhiana (Pb)	23/05/2019	05/07/2019	02
Industrial Training of SLEIT Students	Internship/Training Program	Lincoln Electric India, Chennai, Tamilnadu	23/05/2019	05/07/2019	02
Industrial Training of SLEIT Students	Internship/Training Program	Plasto Power Engineers, Sangrur, Punjab	23/05/2019	05/07/2019	01
Industrial Training of SLEIT Students	Internship/Training Program	Truneek	23/05/2019	05/07/2019	50
Expert Talk	Visiting Expert form Industry Adobe India	Mr. Milind Kumar Jha, Sr. Program Manager, Adobe India	24 th September 2018	24 th September 2018	109
Expert Talk	Visiting Expert form Industry Panasonic India	Mr. Pankaj Rana, Head-Mobility Division, India, South Asia, Middle East & Africa, Panasonic India Pvt. Ltd.	27 th March 2019	27 th March 2019	280
Expert Talk	Visiting Expert form Industry Quark City, Mohali	Mr. Rajesh Sharma, Chief Operating Officer (COO), Quark City, Mohali	29 th March 2019	29 th March 2019	113
Internship	Internship	<ul style="list-style-type: none"> NIT Uttrakhand Federal Mogul Corporation Limited, Patiala 	June- 19	June- 19	04 students of PG completed internship

		<ul style="list-style-type: none"> Ghahir Agro Industry Limited, Sangrur Pharmaffiliates Analytics & Synthetics (P) Ltd., Plot No. 225, Industrial Area Phase-II, Panchkula, Haryana- 134 109 			
3.7.3 MoUs signed with institutions of national, international importance, other universities, industries, corporate houses etc. during the year					
Organisation	Date of MoU signed	Purpose and Activities	Number of students/teachers participated under MoUs		
Institute of Materials Science, Vietnam Academy of Science and Technology 18 Hoang Quoc Viet, Cau Giay, Hanoi, Vietnam and SLIET, Longowal	05/10/2018	Development of joint research projects Visit of personnel exchange – faculty members, research and young scientists Exchange of scientific and technical information Co-organization of short term training and faculty development programmes, seminars, symposia and conferences Other activities as may be agreed upon by the parties.	1 student and 1 teacher participated under MoU		
Pharmaffiliates Analytics & Synthetics (P) Ltd., Plot No. 225, Industrial Area Phase- II, Panchkula, Haryana- 134 109 and SLIET, Longowal	06/12/2018	Pharmaffiliates Analytics & Synthetics (P) Ltd., Plot No. 225, Industrial Area Phase- II, Panchkula, Haryana- 134 109 may offer summer/winter internship to the PG students of Chemistry and Food Engg. & Technology Department. Possibility will be explored to initiate teaching and R&D collaboration in the area of Chemistry/ Biotechnology as per need of both the organizations, possibilities may also be explored for sponsoring PG/ Ph.D. projects by Pharmaffiliates Panchkula with mutual consultation.	04 students of PG completed internship		

Homi Bhabha Cancer Hospital (HBCH Tata Memorial Centre), Sangrur and SLIET, Longowal	28/12/2018	Summer and winter internship for the students Laboratory experiments Start of new M.Sc. course in Institute Start of teaching and R&C collaboration in the area of Medical images, Radiation Physics	No information available in this office may please take information from concerned
1. Atal Bihari Vajpayee Govt. Institute of Engineering and Technology, Pragatinagar, Shimla, and SLIET, Longowal	June- 2019	Exchange of scientific and technical information, visits by and exchange of students for the purpose of study and research, undertaking collaborative research activities, jointly organize events such as seminars, workshops, conferences and training etc.	No information available in this office may please take information from concerned
2. Federal Research Center, Institute of Applied Physics of the Russian Academy of Sciences (IAP RAS), 46 Ulyanov Street, Nizhny Novgorod, Russia And SLIET, Longowal	July- 2019	Development of joint research projects, visit and personnel exchanges- faculty members, research scientists and students, exchange of scientific and technical information, Co-organizations of STP/FDP, seminars, symposia and conferences	1 Faculty participated under MoU

CRITERION IV – INFRASTRUCTURE AND LEARNING RESOURCES

4.1 Physical Facilities

4.1.1 Budget allocation, excluding salary for infrastructure augmentation during the year

Budget allocated for infrastructure augmentation	Budget utilized for infrastructure development		
Rs. 889.27 Lakh	Rs. 690.32 Lakh		
4.1.2 Details of augmentation in infrastructure facilities during the year			
Facilities	Existing	Newly added	
Campus area	447 Acres	--	
Class rooms	66 Nos.	--	
Laboratories	132		

Seminar Halls	6	
Classrooms with LCD facilities	Nil	7
Classrooms with Wi-Fi/ LAN	Nil	7
Seminar halls with ICT facilities	Nil	7
Video Centre	--	--
No. of important equipments purchased (\geq 1-0 lakh) during the current year.	--	10
Value of the equipment purchased during the year (Rs. in Lakhs)		27436880.00
Others		
Guest House	1	-
Health Centre	1	-
Shopping Complex	1	-
Restaurant	1	-
Shops Alt-2	3	-
Shops near Transit Accommodation	1	-
Transit Accommodation	1	-
Bank and post office	1	-
Administrative Block	1	-
Auditorium Building	1	-
Estate Office	1	-
Check post	1	-
Bus Shelters	2	-
Coffee Booth	2	-
Faculty Club	1	-
Swimming Pool	1	-
LPG Godown	1	-
Community Centre	1	-
Electrical Sub Station	2	-
Over head Tank	2	-
Sports Complex	1	-

Stadium			1	-		
Student Activity Centre			1	-		
Hostels			13	-		
K.V School			1	-		
Houses			505	-		
Director Residence			1	-		
Workshops			10	-		
4.2 Library as a Learning Resource						
4.2.1 Library is automated {Integrated Library Management System (ILMS)}						
Name of the ILMS software		Nature of automation (fully or partially)		Version		Year of automation
Alice for Window		Partially		6.00		2002
4.2.2 Library Services:						
	Existing		Newly added		Total	
	No.	Value	No.	Value	No.	Value Value
Text Books	101168	--	2312	1301632.15	103480	--
Reference Books	--	--	--	--	--	--
e-Books	--	--	--	--	--	--
Journals	8812	5156085	--	--	8812	5156085
e-Journals	6980	9200000	4930	92 Lakh	11910	18400000
Digital Database	03	Sponsored	03	Sponsored	06	Sponsored
CD & Video	--	--	--	--	--	--
Library automation	--	--	--	--	--	--
Weeding (Hard & Soft)	--	--	--	--	--	--
Others (specify) (M.Tech. & Ph.D. thesis)	1153	--	111	--	1264	--
4.2.3 E-content developed by teachers such as: e-PG-Pathshala, CEC (under e-PG-Pathshala CEC (Under Graduate) SWAYAM other MOOCs platform NPTEL/NMEICT/any other Government initiatives & institutional (Learning Management System (LMS) etc						
Name of the teacher	Name of the module		Platform on which module is developed		Date of launching e - content	
----	----		----		----	
4.3 IT Infrastructure						
4.3.1 Technology Upgradation (overall)						

	Total Computers	Computer Labs	Internet	Browsing Centres	Computer Centres	Office	Departments	Available bandwidth (MGBPS)	Others
Existing	2689	20	1	24	02	46	11	1	---
Added	55	0	--	--	--	--	--	--	----
Total	2744	20	1	24	02	46	11	1	----

4.3.2 Bandwidth available of internet connection in the Institution (Leased line)

1 GBPS

4.3.3 Facility for e-content

Name of the e-content development facility*	Provide the link of the videos and media centre and recording facility
---	--

NPTTEL Video lectures	10.1.0.102/localguru (available on INTRANET)
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* E-content development (recording) facility is not available in the Library.

4.4 Maintenance of Campus Infrastructure

4.4.1 Expenditure incurred on maintenance of physical facilities and academic support facilities, excluding salary component, during the year

Assigned budget on academic facilities	Expenditure incurred on maintenance of academic facilities	Assigned budget on physical facilities	Expenditure incurred on maintenance of physical facilities
2789.16 Lakh	2138.38 Lakh	889.27 Lakh	675.77 Lakh

4.4.2 Procedures and policies for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc. (maximum 500 words) (information to be available in institutional Website, provide link)

Consequent upon the decision, taken by Govt. of India in 1985, to tender a valuable, yet humble tribute to the everlasting memory of the revered saint, Sant Longowal Institute of Engineering and Technology took its shape. The institute was established by Ministry of Human Resource and Development (MHRD), Govt. of India in the year 1989 and was formally inaugurated on 20th December 1991.

There are 14 Hostels which includes 10 nos. Boys Hostels, 03 nos. Girl Hostels and 01 no. PG Hostel (Girls), with an upgraded facility including Sports grounds, Wi-Fi, Bed, Mattress, Table, Chair, TV room, Carom Board, Volleyball Ground etc.. Following are the academic building in the Institute.

Science Block, Mechanical Block, Workshops, Chemical & food Block, Computer Block, Electronic Block Old, Electronic Block New, EDP Block, Library Buildings, Student Activities Centre.

Moreover other buildings in the campus are Administrative Block, Auditorium Building, Guest House, Transit Accommodation, Director Residence, Estate Office I/c ESS-I & ESS-II, Faculty Club, Swimming Pool, Shopping Complex, Restaurant, Post Office, Bank (Central Bank of India), three shops in-front of girls hostels, three Shops near Boys Hostel no. 07, stadium with 400 meter track, 02 nos. pump Houses and sewerage pump house (01 no.) with Oxidation pounds and pump house (01 no.) with lifting facility

of treated waste water to irrigate the plants of institute in the forest areas, KV School Building with well equipped furniture and sport facilities, 02 no. Over head water tanks, 02 nos. Bus Stands, Security Check Posts at Duggan main gate & Longowal Main Gate, Main Boundary Wall Campus more than 7 feet height and there is excellent road networking inside the campus.

In addition to the above the Institute also have Residential Buildings (505 No.) wherein the detail of verius type of accommodation in as follows: Type-I Qtrs = 72, Type Qtrs –II = 90, Type –III Qtrs = 219, Type – IV Qtrs = 84 & Type –V Qtrs = 40.

Maintenance of various facilities and Institute area (447 Acre approxi.) under taken through the various work heads as follows:-

1. Annual Repair & Maintenance of Hostel & Academic Buildings (Civil & Internal Public Health) at SLIET, Longowal.
2. Annual Repair & Maintenance of Residential & Other Buildings (Civil & Internal Public Health) at SLIET, Longowal.
3. Annual Repair & Maintenance of External Water Supply and Sewerage System at SLIET, Longowal.
4. Supply of Hardware materials as per list required for carrying-out Annual Repair and Maintenance of buildings at SLIET, Longowal.
5. Supply of Sanitary materials as per list required for carrying out Annual Repair and Maintenance of buildings at SLIET, Longowal.
6. ARM & Development of Horticulture work at SLIET, Longowal.
7. Providing sanitation Services at SLIET, Longowal.
8. Requirement of outsourcing workers at SLIET, Longowal.
9. ARM of Electrical Work at SLIET, Longowal.
10. ARM of Roads inside Campus at SLIET, Longowal.

The security in campus is ensured through the outsourcing security personals / manpower.

<http://sliet.ac.in/wp-content/uploads/2019/12/IQAR-Report-2019-1.pdf>

CRITERION V - STUDENT SUPPORT AND PROGRESSION

5.1 Student Support

5.1.1 Scholarships and Financial Support

	Name /Title of the scheme	Number of students	Amount in Rupees
Financial support from institution	Poor Student Aid Fund	05	Rs. 88000/-
Financial support from other sources			
a) National	Online scholarships	626	As per funding Agencies
b) International	Nil	Nil	Nil

1. Remedial Classes for Integrated Certificate Diploma (ICD) and Under-graduate (UG) students by the teaching departments

2. Meetings with Class Representatives (CRs) by Heads of the Departments (HODs) and Academic Section, from time to time

3. Merit Scholarships to Integrated Certificate Diploma (ICD), Under-graduate (UG) and Post-graduate (PG) students under SLIET Merit Scheme during National Festivals

4. Tuition Fee waiver to poor and needy students					
5. UG and PG students allowed to attend national conferences by the Institute under Grant in Aid.					
5.1.2 Number of capability enhancement and development schemes such as Soft skill development, Remedial coaching, Language lab, Bridge courses, Yoga, Meditation, Personal Counselling and Mentoring etc.,					
Name of the capability enhancement scheme		Date of implementation	Number of students enrolled	Agencies involved	
Online Programming Competition		10.08.2018	25	SLIET SOFTWARE DEVELOPMENT CLUB	
Mathematics Competition		06.10.18	24	-Do-	
Code-Camp1		19.01.19	20	-Do-	
Code Baton		15.03.19	45	-Do-	
Work shop on advanced Learner’s Programme for degree students		25-26 th Jan .2019	60-70 student participated	Communication Skills And Personality Development Club	
Two day workshop on mental ability		Feb.27-28,2019	50-60 students participated	C.S.P.D C.	
For ICD students					
Two days workshop on Communication Skills		20.02.2019	60-70 students participated	C.S.P.D C.	
Informal meetings(03) with ICD students			70-100 students participated	C.S.P.D C.	
Let’s LEARN TO TALK”		As per their study schedule & availability of students	50-60 students participated	C.S.P.D.C	
Daily yoga		Daily	Open for all students, staff & Faculty	Health Yoga club committee	
Meditation		Daily	Open for all students, staff & Faculty	Health Yoga club committee	
International Yoga day		21.06.2018	Open for all students, staff & Faculty	Health Yoga club committee	
Physical Training (PT)		July, 2018	250	SLIET, Longowal	
5.1.3 Students benefited by guidance for competitive examinations and career counselling offered by the institution during the year					
Year	Name of the scheme	Number of benefited students by Guidance for Competitive	Number of benefited students by Career Counselling	Number of students who have passed in the competitive exam	Number of students placed

		examination	activities		
N/A					
5.1.4 Institutional mechanism for transparency, timely redressal of student grievances, Prevention of sexual harassment and ragging cases during the year					
Total grievances received		No. of grievances redressed		Average number of days for grievance redressal	
07		07		90	
5.2 Student Progression					
5.2.1 Details of campus placement during the year					
On Campus			Off Campus		
Name of Organization Visited	Number of Students Participated	Number of Students Placed	Name of Organization Visited	Number of Students Participated	Number of Students Placed
Hindustan Unilever Limited, Gurugram (Hul)	84	04	BYJU’S	10	03
			Msrb Food Products Pvt. Ltd., Ambala	01	01
Tata Consultancy Service	52	11	Varun Beverages Limited, Noida	01	01
Catalystone Info Solutions Pvt. Ltd.	41	02	Np Fresh Food Pvt. Ltd., Ludhiana	02	02
Cogniter Technologies, Mohali	44	05	Rir Certification Pvt. Ltd., Gurgaon	01	01
Infosys Limited	187	58	Jai Beverages Pvt Ltd.	01	01
Ashriya Infotech Pvt. Limited	42	09	Technoplanet Lab Pvt. Ltd.	01	01
Sangrur Agro Pvt. Ltd.	10	04	Vacmet	01	01
Godrej & Boyce Mfg.Co.Ltd., Mumbai	55	06	Newtos Enviro Engineering Noida(Up)	02	02
Cheema Boilers Limited	37	06			
Ludhiana Beverages Private Limited, Ludhiana (Coca Cola)	22	03			
Bunge India Private Ltd.	34	02			
Bikano Food Pvt. Ltd.	48	03			

Torrent Group	35	04			
Anglo-Eastern Ship Management (India) Pvt. Ltd.	20	02			
Welspun Corp. Limited	25	03			
Vardhman Group	40	05			
Ralson Group	15	10			
Covalent Laboratories Pvt. Ltd	12	10			
Mahindra & Mahindra Ltd.	62	03			
Jindal Steel & Power Limited	60	06			
Chc Asia Consulting, Quark City, Mohali	02	01			
Sofster, Mohali	16	06			
Kangaro, Ludhiana	19	04			
M/S Kandhari Beverages Pvt Ltd (Coca-Cola)	11	02			
Eastman Cast & Forge Ltd., Ludhiana	48	02			
Satyam Auto Components Ltd., Ludhiana	28	03			
New Swan Group, Ludhiana	17	01			
Artesian Software Technologies Llp, Mohali	58	0			
Jaro Education, Mumbai	130	0			
Hpcl Mittal Refinery, Bathinda	19	0			
Standard Tractor, Barnala	20	0			
Nestle	29	0			

5.2.2 Student progression to higher education in percentage during the year

Year	Number of students enrolling into higher education	Programme graduated from	Department graduated from	Name of institution joined	Name of Programme admitted to
2018	01	M.Sc. (Chemistry)	Chemistry	IIT, Roorkee	Ph.D.
2018	01	M.Sc	Physics	IIT, Jodhpur	Ph.D

2018	02	M.Sc. (Maths)	Mathematics	SLIET	Ph.D.
2018	01	M.Sc. (Maths)	Mathematics	IIT, Patna	Ph.D.
2018	02	M. Tech.	Food Engg. & Technology	SLIET, Longowal	M.Tech.
2018	01	Post Graduate Diploma	Food Engg. & Technology	IIM, Lucknow	Post Graduate Diploma
2018	04	M.Tech.	Computer Science & Engineering	NIT, Delhi IIT, BHU IIT, Jammu IIT, Lucknow	Ph.D.
2018	01	Degree Chemical Engineering	Chemical Engineering	IIT, Bombay	M. Tech
2019	2	M Tech	EIE, SLIET	EIE, SLIET	PhD
2019	2	B Tech	EIE, SLIET	EIE, SLIET	M Tech
2019	1	B Tech	EIE, SLIET	NIT Karnataka	M Tech
2018	1	B Tech	EIE, SLIET	IIT Madras	MS Research
2018	1	B Tech	EIE, SLIET	University of Allahabad	M Sc
2018	1	B Tech	EIE, SLIET	NIT Agartala	M Tech
2018	1	B Tech	EIE, SLIET	MNIT Jaipur	M Tech
2018	1	B Tech	EIE, SLIET	IIT Guwahati	M Tech
2018	2	M Tech	EIE, SLIET	EIE, SLIET	PhD
2018	1	B Tech	EIE, SLIET	EIE, SLIET	M Tech

5.2.3 Students qualifying in state/ national/ international level examinations during the year (eg: NET/SET/SLET/GATE/GMAT/CAT/GRE/TOFEL/Civil Services/State Government Services)

Items	No. of Students selected/qualifying	Registration number/roll number for the exam
NET	2	1750513
		PGPHY/1750406
SET	--	--
SLET	1	1750506
GATE	33	1750455
		PGPHY/1750406
		PGPHY/1750405

		ME19S118040093
		ME19S118040004
		ME19S118040006
		ME19S118040004
		ME19S118040136
		ME19S118040141
		ME19S118040105
		ME19S118040130
		ME19S118040062
		ME19S118040032
		ME19S118040102
		ME19S118040110
		ME19S118040128
		ME19S118040088
		GCS-SL/15/4013
		GCS-SL/15/4018
		GCS-SL/15/4023
		GCS-SL/15/4025
		GCS-SL/15/4028
		GCS-SL/15/4039
		GCS-SL/15/4048
		GCS-SL/15/4105
		GCS-SL/15/4206
		GCS-SL/15/1630207
		GCT-SL/15/4114
		GCT-SL/15/4117
		GCT-SL/15/4126
		GCT-1630133
GMAT	--	--
CAT	--	--
GRE	--	--
TOFEL	1	898/48
Civil Services	--	--
State Government Services	--	--
Any Other	02 (Selected in HPCL and DRDO)	GCT-1630125
		GCT-1630127
Private Company/Any Other	3	NA
Railway-Group D/State Govt. Services	1	NA
5.2.4 Sports and cultural activities / competitions organised at the institution level during the year		
Activity	Level	Participants
Sliet Open Table Tennis (B&G) Tournament	6.8.18 – 10.08.2018	

Sliet Open Chess(B&G) Tournament	28.8.18-31.8.18					
Sliet Open Badminoton(B & G)Tournament	24.9.18-28.9.18					
Inter Hostel Basketball (B&G)Tournament	21.1.19-30.1.19					
Inter Hostel Volleyball(B&G)Tournament	21.1.19-30.1.19					
Inter Hostel Cricket Tournament	1.2.19 -10.2.19					
Sliet Open Yoga(B&G) Tournament	7.2.19					
Sliet Open Taekwondo Championship(Boys And Girls)	21.2.19-22.2.19					
Conducted Football Camp By IYSA Coaches &Arsenal Coaches Total Number Of Boys Team =12Girls Team =4	5.3.19-7.3.19					
Annual Sports Meet 2019(Boys And Girls)	12.3.19					
Sliet Open Squash (B&G) 2019	15.4,19-16.4.19					
Cultural						
Madhuram (cultural 2019) Institutional Level		265				
5.3 Student Participation and Activities						
5.3.1 Number of awards/medals for outstanding performance in sports/cultural activities at national/ international level (award for a team event should be counted as one)						
Year	Name of the award/ medal	National/ International	Sports	Cultural	Student ID number	Name of the student
2019	Utkansm’19 NIT Jalandhar	National		Cultural Fashion show	GME/1731847	Kartik Malhotra Head BMW team
April 2018	Silver	---	Atheletics H-Jump		Gwt 1731812	Barkha kumari
	Bronze		Atheletics J-Throw		Gwt 1731812	Barkha kumari

	Bronze		D-Throw		Gee 110579	Dishwani Sonkar
	Bronze		Relay 4x400m		Gwt1731812, Gcs1731338, Gin1731913, Gct1731107	Barkha kumari, Pushpanjali, Reechal, Nidhi
	Silver		Kabaddi		Gwt1731836	Gurjeet singh
	Silver		Kabaddi		Gme1640155	Satnam Singh
	Silver		Kabaddi		Pg/wlf175015 2	Sarboji
	Silver		Kabaddi		Gcs1731312	Manjot singh
	Silver		Kabaddi		Gme1731729	Yadwinder Singh
	Silver		Kabaddi		Dme/cac1610 28	Satyam Kumar
	Silver		Kabaddi		Dft/cfp161005 0	Taranjeet Singh
	Silver		Kabaddi		Dct/cpt161015 7	Harpreet Singh
	Silver		Kabaddi		Gec1830291	Harsh Raj
	Silver		Kabaddi		Gcs 1731378	Kulpuneet Singh
	Silver		Kabaddi		Gwt1831057	Ashutosh Singh
	Silver		Kabaddi		Dcs/cde18111 52	Ravi Prakash mishra
	Silver		Yoga		Gcs1830017	Yash Raj thakur
	Silver		Yoga		Gwt1731874	Ankit kumar tiwari
	Silver		Yoga		Gft1731940	Anal pushp
	Silver		Yoga		Cwg1712214	Abhishek yadav
	Silver		Yoga		Gcs1740560	Kanha jain
April 2019	Bronze		Atheletic s 400m		Gin1731913	Reechal

	Silver		800m		Gcs1630200	Sangeeta
	Silver		L-jump		Gee1731518	Shreya priya
	Silver		4*400m relay(w)		Gwt 1731812 Gin1731913 Gct1731107 Gec1737932	Barkha kumari Reechal Nidhi Anjali
April 2019	Bronze	---	4*100 realy (W)		Gwt 1731812 Gin1731913 Gec1737932 Gee1731518	Barkha kumari Reechal Anjali Shreya Priya
	Silver		J-throw		Gcs1731381	Nitin Nishant
	Silver		Shotput		Gme1731723	Bikram Singh
					Gme1731767	Nitin kumar Sharma
	Bronze		Volleybal I		Gft1731946	Anikait Tondon
	Bronze		Volleybal I		Gec1630031	Umesh Chander
	Bronze		Volleybal I		Gin1630002	Anil Kumar
	Bronze		Volleybal I		Din/csmm161 0433	Avinash Kumar
	Bronze		Volleybal I		Gct1830751	Karan Rana
	Bronze		Volleybal I		Gwt1630178	Ashish Tiwari
	Bronze		Volleybal I		Cfp1610565	Pradeep Sharma
	Bronze		Volleybal I		Gwt1731818	Sharanjeet Singh
	Bronze		Volleybal I		Gme1630083	Gaurav Sharma
	Bronze		Volleybal I		Gin1830364	Anand Kumar shukla

	Bronze		Volleyball		Din/csmm1610065	Nikhil Anand
17 Feb 2019	Junior(Silver)		-58kg		Dincsmm1712774	Sarthak Patiyal
14 th Inter District & Tricity Taekwondo Championship At Guru Nanak Vbt Polytechnic Mohali	Senior (Gold)		-54kg		Gcs1830048	Ashutosh Kumar
	Junior(Gold)		-58kg		Dmecff1712059	Sumit Barnawal
	Senior(Gold)		-63kg		Pgphy1750403	Ahsaan Ali
	Senior(Silver)		-58kg		Dincsmm1712797	Aanand Kumar
	Senior(Silver)		-63kg		Gcs1731375	Pavittar Singh
	Senior(Silver)		-68kg		Dmecff1610147	Gopal Krishna Yadav
	Junior(Silver)		-63kg		Dmectd1811652	Achal Sandilya
	Senior(Silver)		-74kg		Dmecff1712623	Rahul Kumar
	Senior(Gold)		-74kg		Dincsmm1610460	Kundan Kumar
	Junior(Silver)		-74kg		Dincsmm1712784	Aryan Sanjeev
5.3.2 Activity of Student Council & representation of students on academic & administrative bodies/committees of the institution (maximum 500 words)						
Presently there is no student council in the Institute.						
5.4 Alumni Engagement						
5.4.1 Whether the institution has registered Alumni Association? Yes/No, if yes give details (maximum 500 words):						
Yes Alumni Association is registered with No.DIC/DRA/10723 of 2017. The Alumni Association working on the upliftment of student in various aspects.						
5.4.2 No. of registered Alumni:						
2230 (Since the body is registered in Feb 2017, the process of registration is started through website and Google page. At present we had registered approximate 2200 Alumni without membership fee and approximately 30 alumni with registration fee.)						
5.4.3 Alumni contribution during the year (in Rupees) :						
Alumni contribute approximately Rs 60,000 through membership fee only.						

5.4.4 Meetings/activities organized by Alumni Association :		
Date	Activity	Remarks
September 21, 2018 Abhivaykti	Mr. Ramandeep Singh (GEC-92 Batch) CEO QOS Technology	Industrial Revolution 4.0: Evolving Jobs and Cyber Security
October 07, 2018	NCR Chapter Meet	
October 08, 2018 Abhivaykti	Mr. Sunil Sood (GCS-91 Batch) Vice President & Head Global Sales Support Network Assurance at Ericsson.	<ul style="list-style-type: none"> •Career Journey from SLIET to Ericsson •Latest Trends in Virtualization and Tele-Communication
November 17, 2018	Annual Alumni Meet SLIET Campus	Student Alumni Interaction Meeting with T&P Reunion
February 2, 2019 Abhivaykti	Mr. Parveen Sharma (GCS-97 Batch) National Director IT at Shardul Amarchand Mangaldas & Co	Demystifying Digital Transformations
February 26, 2019	NCR Chapter Meet	
April 23, 2019 Abhivaykti	Mr. Sahli Chauhan (DCE 2k15 passout)	Machine Learning
June 9, 2019	Bihar Chapter Establishment and Bihar Alumni Meet	1st Alumni Meet of 'Bihar Chapter'
CRITERION VI –GOVERNANCE, LEADERSHIP AND MANAGEMENT		
6.1 Institutional Vision and Leadership		
6.1.1 Mention two practices of decentralization and participative management during the last year (maximum 500 words)		
<p>Sant Longowal Institute of Engineering & Technology (SLIET) is an autonomous body having the status of Deemed-to-be-University since 2007, fully funded and established by the Government of India. It is controlled by SLIET Society, registered under Societies Registration Act, 1860. As per Memorandum of Associations, Director, SLIET or any other Competent Authority of the Institute may delegate his powers to others employees of the Institute for betterment of the Institute. Director, SLIET has a team of following officers for execution of Institute's day to day affairs:</p> <ol style="list-style-type: none"> 1. All academic related matters of the students are decentralized and are being looked after by Dean (Academics). 2. All hostel/mess related matters of the students are decentralized and now being dealt with by Dean (Student Welfare). 3. Work related to research & consultancy activities in the Institute is looked after by Dean (Research & Consultancy). 4. Works related to store, purchase infrastructure facilities, repair & maintenance of the Institute is decentralized and is being looked after by Dean (Planning & Development). 5. New position of Dean (Faculty & Staff Welfare) is created to look after the faculty and staff affairs. Dean (Faculty & Staff Welfare) is working for the welfare of the Institute staff and 		

<p>faculty, helping the Director while framing rules related to leave, recruitment, health centre, trainings etc.</p> <p>6. Registrar is looking after all the Administration and Accounts related matters.</p> <p>7. Director has delegated his powers related to sanction of leave to faculty & staff to Dean (FSW), concerned HOD/Section Incharge.</p>
<p>6.1.2 Does the institution have a Management Information System (MIS)?</p> <p>Yes/No/Partial: Yes/Partial</p>
<p>Partial (a) Central Library b) Central Admission Cell c) Examination Cell d) Accounts Section e) Store & Purchase Section</p> <p>ERP Development in progress.</p>
<p>6.2 Strategy Development and Deployment</p>
<p>6.2.1 Quality improvement strategies adopted by the institution for each of the following (with in 100 words each):</p>
<p>❖ Curriculum Development</p> <p>The Institute has been alive to the fast-changing social, economic and industrial scenario. The Institute has adopted the semester system in place of the annual system of examination for effective organization of teaching, Learning and evaluation. This includes the introduction of continuous evaluation on the criteria of attendance, minor tests, assignments/classroom performance and end term examination (ETE). Institute has implemented AICTE Model Curriculum since 2018.</p>
<p>❖ Teaching and Learning</p> <ul style="list-style-type: none"> • Transparency is maintained in the whole of the admission process. • Reservation of seats for differently-abled individuals is strictly followed as directed by the Central Government. • The Semester system has been introduced and continuous evaluation has been made part of the evaluation programme. • The Institute has established a Training & Placement Cell which looks after the placement of all the students of the Institute. • Chief Counsellor is coordinating counselling system through class counsellors. • Tutor Guardian and Student Mentorship Scheme to bridge the gap between faculty and students.
<p>❖ Examination and Evaluation</p> <ul style="list-style-type: none"> • Examinations are conducted at a centralised place having a CCTV and mobile jammers to prevent examination related malpractices by the students. • Seating arrangement and details are provided to the students before examinations. • For the smooth conduct of evaluation, each department arranges the centralised evaluations of the end term examinations. • The evaluated answer sheets are shown to the students to introspect their mistakes so that can be rectified in future. • Academic calendar is modified to allow students to see evaluated answer sheets of end term examinations.
<p>❖ Research and Development</p> <ul style="list-style-type: none"> - The research work is undertaken by the faculty and research scholars of the Institute in the interdisciplinary areas to provide preventive and productive solutions for the problems of industry and community. - Targets are fixed at Department level for submitting externally funded projects.

<ul style="list-style-type: none"> - “SLIET Research Projhect Award” (SRPA) is introduced under which cash incentives to the SLIET Faculty for obtaining Externally Funded Projects from Extra-Mural Funding Agencies is given. - “SLIET Quality Publication Award” (SQPA) has been introduced for Institute students under which they are give cash incentive for publishing research papers in Web of Science Journals with impact factor 1.0 or above.
<p>❖ Library, ICT and Physical Infrastructure / Instrumentation</p> <ul style="list-style-type: none"> - Library is automated with 30 number of computers, 01 printer for general access. Online access to content management system for e-learning and has a participation in resource sharing networks/consortia (like INFLIBNET). - Reading room remains open on 24X7 basis - Register is maintained in the Library to raise demand of books by the students.
<p>❖ Human Resource Management</p> <ul style="list-style-type: none"> - Human Resources are managed effectively through the meetings of the management with the heads of the departments/ sections. - On need basis time to time the staff is transferred from one department/ section to another to make effective utilization of human resources.
<p>❖ Industry Interaction / Collaboration</p> <ul style="list-style-type: none"> - Institute has a centralized Training and Placement Cell, which conducts various activities for the students. The Cell works to enrich the knowledge of the students by organizing Seminars/ Workshops/ Webinars/ Classes with help of experts invited from industry and educational Institutes. - Dean (Research & Consultancy) is looking after promotion of Industry- Institute Collaboration.
<p>❖ Admission of Students</p> <ul style="list-style-type: none"> - The admissions to Certificate-Diploma Program, Lateral Entry to UG Programs and Ph.D. Programs are made through SLIET Entrance Test (SET) conducted by the Institute at national level. - All admissions in the Institute including for Ph.D. programmes are made on merit following reservation policy of the Centre Government. - Admission to UG 4-year program is through JEE (Mains), for M.Sc program it is through CCMN along-with other NITs/IITs and CFTIs. The institute holds its own National Level Entrance test for the vacant seats (if any). - The admissions to M.Tech programs is being done through CCMT along-with other NITs/IITs and CFTIs. The admission to MBA program is based on CMAT score and the institute may hold its own National Level Entrance test for the vacant seats (if any) Admissions to the Ph.D. Programmes are based on written test/ interview of the candidates short-listed by the Departmental Research Committee (DRC) of the Department concerned. The admission process is online with each-and-every information available online for the information of the candidates
<p>6.2.2 : Implementation of e-governance in areas of operations:</p>
<p>❖ Planning and Development</p> <ul style="list-style-type: none"> - All the tenders are invited through e-tendering process - All the procurement is being made using GeM Portal.
<p>❖ Administration</p>

The Institute has invited applications for recruitment of both Teaching & Non-teaching through Online mode.				
❖ Finance and Accounts ERP Module has already been introduced in the Finance & Accounts Section of the Institute.				
❖ Student Admission and Support All the process related to admission at SLIET like application for admission, submission of Fee, issuance of Admit Cards for Entrance Tests & counselling are done using online module.				
❖ Examination Process of ERP has already been initiated.				
6.3 Faculty Empowerment Strategies				
6.3.1 Teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies during the year				
Year	Name of teacher	Name of conference/ workshop attended for which financial support provided	Name of the professional body for which membership fee is provided	Amount of support (Rs.)
2018	Amar Partap Singh Parwaha	"8 th International Conference on Information Science and Technology (ICIST 2018)"	University of Cordoba & City University of Hongkong at Andalusia (Cordoba, Granada and Seville), Spain	168458
2018	Surita Maini	"8 th International Conference on Information Science and Technology (ICIST 2018)"	University of Cordoba & City University of Hongkong at Andalusia (Cordoba, Granada and Seville), Spain	167909
2018	Jagpal Singh Ubhi	8 th International Conference on Information Science and Technology (ICIST 2018)	University of Cordoba & City University of Hongkong at Andalusia (Cordoba, Granada and Seville), Spain.	168032
2018	Sardool Singh Ghumman	The 2018 International Conference on Nanoscience + Technology (ICN+T)	City Of BRNO, CZECH REPUBLIC	181973
2018	Surinder Singh	International Conference on Nanoscience, Nanotechnology and Advanced Materials (IC2NW)	Academics Word, at Brisbane, Australia.	118384
2018	Manab Bandhu Bera	ISER – 411 th International Conference on Agricultural and Biological Science (icabs – 2018)	The International Society for Engineers & Researchers (ISER) and in Association with PET at Melbourne, Australia.	173084
2018	Sunil Kumar	The 13 th International conference on Bond Graph Modeling and Simulation (ICBGM '2018)	The Society for Modeling & Simulation International at University of Bordeaux, Bordeaux, France.	
2018	Payal Malik	International Workshop on Nanotechnology : Nanoparticle Synthesis and Conjugation Chemistry for Bioapplications	Guru Jambheshwar University of Science & Technology, Hisar. (Haryana).	8776
2018	Himanshu Rani	International Workshop on Nanotechnology :	Guru Jambheshwar University of Science & Technology, Hisar.	9625

		Nanoparticle Synthesis and Conjugation Chemistry for Bioapplications	(Haryana).	
2018	Vivek Kumar	"The 13 th International Conference on Bond Graph Modeling and Simulation (ICBGM '2018)	The Society for Modeling & Simulation International at University of Bordeaux, Bordeaux, France.	
2018	Pankaj Kumar Das	The 2018 International Conference of Electrical and Electronics Engineering	IAENG International Association of Engineers, London (U.K.)	128162
2018	Mohd. Majid	International Conference of Mechanical Engineering ICME 2018	IAENG International Association of Engineers, WCE 2018 at London (U.K.)	250157
2018	Indraj Singh,	International Conference in Mechanical Engineering (ICME 2017)	IAENG International Association of Engineers, WCE 2018 at London (U.K.)	116664
2018	Pradyuman Kumar	435 th International Conference on Engineering and Natural Science (ICENS)	The IRES, at Kuala Lumpur, Malaysia.	131464
2018	Kamlesh Prasad	"The IRES -445 th International conference on Food and Agricultural Engineering (ICFAE)"	Institute of Research Engineers & Scientists (IRES) in association with PET, at London, U.K.	151547
2018	Charanjiv Singh Saini	"The IRES -445 th International conference on Food and Agricultural Engineering (ICFAE)"	Institute of Research Engineers & Scientists (IRES) in association with PET, at London, U.K.	149311
2018	Lakhvinder Singh Solanki	"ISER – 408 th International Conference on Science, Technology, Engineering and Management (ICSTEM)"	The International Society for Engineers and Researchers (ISER), at Toronto, Canada	58721
2018	Damanpreet Singh	"ISER-425 th International Conference on Science, Technology, Engineering and Management (ICSTEM-2018)"	The International Society for Engineers and Researchers (ISER), at Vienna, Austria.	183936
2018	Amarjit Singh Dhaliwal	International Conference on Nanoscience Nanotechnology and Advanced Materials (IC2NM)	Academic World, at Pattaya, Thailand	122500
2018	Ajat Shatru Arora	International Conference on Unmanned Aerial Vehicles in Environment	Hokkaido University, Sapporo, Japan.	138161
2018	Ashwani Kumar Aggarwal	International Conference on Unmanned Aerial Vehicles in Environment	Hokkaido University, Sapporo, Japan.	122615
2018	Manoj Kumar Sachan	Seventh International Conference on Advances in Computing, Electronics and Communication – ACEC 2018	Institute of Research Engineers and Doctors (IREDD) at Kuala Lumpur, Malaysia.	105119
2018	Major Singh Goraya	Seventh International Conference on Advances in Computing, Electronics and	Institute of Research Engineers and Doctors (IREDD) at Kuala Lumpur, Malaysia.	105119

		Communication – ACEC 2018		
2018	Pratibha Tyagi	Seventh International Conference on Advances in Social Science, Management and Human Behaviour – SMHB 2018	Institute of Research Engineers and Doctors (IRED) at Kuala Lumpur, Malaysia.	116379
2018	Jaspal Singh Gill	438 th International conference in Metallurgy Technology and Materials – ICMTM 2018	Institute of Research Engineers & Scientists (IRES) in association with PET, at London, U.K.	127993
2018	Mahesh Kumar Arora	International Conference on Research Developments in Arts, Social Science & Humanities (ASH-2018)	Punjab University Campus, Chandigarh.	6725
2018	Pushpa Jha	Energy Quest-2018	Wessex Institute, at New Forest, United Kingdom.	73506
2018	Jagpal Singh Ubhi	Workshop on “Sustainable Environment and Energy Development (SEED) International Workshop”	National Tsing Hua University (NTHU), Hsinchu, Taiwan.	
2018	Surita Maini	Workshop on “Sustainable Environment and Energy Development (SEED) International Workshop”	National Tsing Hua University (NTHU), Hsinchu, Taiwan.	
2018	Manoj Kumar Goyal	Refresher Course on “Refrigeration and Air Conditioning”	Chitkara University, Vill. Jansla, Rajpura	
2018	Avinash Thakur	International Symposium on functional Materials: Energy and Biomedical Applications (ISFM-2018)	Jointly By IIT Kanpur, PU, Chandigarh & UIC, USA at Chandigarh.	7641
2019	Alka Singla	STC “Wireless Propagation”	NITTTR, Chandigarh	
2018	Parmjit Singh Panesar	International conference on Biotechnological Research and Innovation for Sustainable Development (BioSD-2018)	CSIR-IICT, Hyderabad during November, 22-25, 2018.	
2019	Sunil Kumar	STC on “Research and Professional Skills (RPS-2019)”	NIT, Kurukshetra.	11100
2019	Murari Mohan Sinha	International Conference on Advance Materials – ICAM 2019	Nirmalagiri college, Kannur, Kerala.	37075
2019	Anil Kumar Singla	6 th International conference on Production & Industrial Engineering (CPIE 2019)	Dr. B.R. Ambedkar NIT, Jalandhar.	16500
2019	Anuj Bansal	6 th International conference on Production & Industrial Engineering (CPIE 2019)	Dr. B.R. Ambedkar NIT, Jalandhar.	17960
2019	Jonny Singla	6 th International Conference on production & Industrial	Dr. B.R. Ambedkar NIT, Jalandhar.	12450

		Engineering (CPIE-2019)				
2019	Sumit Kumar	6 th International conference on Production & Industrial Engineering (CPIE 2019)	Dr. B.R. Ambedkar NIT, Jalandhar.		17642	
6.3.2 Number of professional development / administrative training programmes organized by the University for teaching and non teaching staff during the year						
Year	Title of the professional development programme organised for teaching staff	Title of the administrative training programme organised for non-teaching staff	From Date	To date	No. of participants (Teaching staff)	No. of participants (Non-teaching staff)
2018	STTP on “Mathematical Modeling and Statistical Techniques”	--	30.07.2018	03.08.2018	48	---
2018	STTP on “Waste Management Practices for Environmental Sustainability”	--	10.09.2018	14.09.2018	47	---
2018	STTP on “Recent Trends in Electronics & Communication Engineering”	--	24.09.2018	28.09.2018	41	---
2018	STTP on “Recent Trends in Mechatronics and Robotics”	--	10.12.2018	14.12.2018	35	---
2018	STTP on “Emerging Trends in Computing and Networking”	--	18.12.2018	22.12.2018	30	---
2019	STTP on “Artificial Intelligence and its Sustainability” under Twinning Activity organized at NIT UK (Parent Campus)	--	18.03.2019	22.03.2019	28	---
2019	STC on “Research Methodology and Statistics” under Twinning Activity organized at NIT UK (Satellite Campus)	--	27.05.2019	31.05.2019	34	---
2019	STTP on “Advance in Separation Processes and Purification Techniques”	--	03.06.2019	07.06.2019	44	---

2019	--	STTP on "Office Automation and system management	10.06.2019	14.06.2019	---	23
6.3.3 No. of teachers attending professional development programmes, viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programmes during the year						
Title of the professional development programme		Number of teachers who attended	From	To	Duration In Day	
Faculty Development Program for Student Induction (FDP-SI)" Conducted by AICTE		02	20 July, 2018	26 July, 2018	1 week	
Advances in Separation Processes and Purification Techniques (ASPPT-2019) organized by Department of Chemical Engineering and Department of Chemistry		03	3 June , 2019.	7 June , 2019.	5 days	
NANOTECHNOLOGY: Nanoparticle Synthesis and Conjugation Chemistry for Bioapplications held at Guru Jambheshwar University of Science and Technology, Hisar, Haryana		01	16 July, 2018	20 July, 2018	5 days	
Professional Development Training Programme under TEQIP-III at I.I.M.Shillong		01	10 September 2018	14, September 2018	5 days	
Short term course on "Materials Characterization Techniques" organised by NIT Srinagar		01	24 June, 2019	28 June, 2019	5 days	
Professional Development Training, IIM Shillong, (For Principals/Directors) at IIM Shillong (India)		01	10 September 2018	14 September 2018	5 days	
Participated in RICET-2019, TRACK –II, SLIETCON- 2019, NITTTR, Chandigarh.		02	1 March, 2019	2 March, 2019	2 days	
Participated in Workshop on Outcome Based Education (OBE) System SLIET.		02	26.04.2019	26.04.2019	1 day	
Short Term Training Programme on Mathematical Modelling and Statistical Techniques (MMST-2018)		02	30 July, 2018	03 August, 2018	5 days	
NPTEL FDP Course "Introduction to Polymer Physics"		01	Aug-Sep, 2018)	(Aug-Sep, 2018)	8 weeks	
Short Term Training Program on Waste Management Practices for Environmental Sustainability (WMPES-2018)		03	10 Sept., 2018	14 Sept., 2018	5 days	
Orientation Workshop on Outcome		1	28th May,	28th May,	1 day	

Based Education and Accreditation on by National Board of Accreditation, New Delhi		2018	2018	
Wireless Propagation	1	25/02/2019	01/03/2019	5 days
TEQIP-III Sponsored One Week Short Term Training Programme on Recent Trends in Electronics & communication engineering	5	24/9/2018	28/9/2018	5 days
TEQIP-III Sponsored One Week Short Term Training Programme on Artificial Intelligence and Sustainable Applications	2	18/3/2019	22/3/2019	5 days
FDP on Deep Learning and Application	01	27 th May, 2019	31 st May, 2019	5 days
FDP (NPTEL-AICTE) on Deep Learning	01	July, 2018	Oct, 2018	3 Months
STTP on Waste Management Practices for Environment Sustainability (WMPES-18)	01	10 th September-2018	14 th September, 2018	5 days
STTP on Recent Trends in Electronics and Communication Engineering (RIECE-18)	03	24 th September, 2018	28 th September, 2018	5 days
STTP on Mathematical Modelling and Statistical Techniques (MMST-2018)	01	30 th July, 2018	3 rd August 2018	5 days
Analog CMOS Integrated Circuit Design	01	14 th April, 2018	16 th April, 2018	3 days
STTP on Emerging Trends in Computing and Networking (ETCN)	04	18 th December-2018	22 nd December 2018	5 days
Professional Development Training under TEQIP-III	02	27 th May 2019	31 st May 2019	5 days
STTP on "Artificial Intelligence and Sustainable Applications"	40	18 March, 2019	22 March, 2019	5 days
Faculty Development Program on Student Induction program	82	20th July, 2018	26th July, 2018	1 Week
"Research Methodology" NIT Jaipur	02	27 May, 2019	31 May, 2019	5 days
Professional Development Training" IIM Udaipur	01	27 May, 2019	31 May, 2019	5 days
"Professional Development Training" at IIM Indore	02	17, June 2019	21, June 2019	5 days
"Professional Development Training" at IIM Kashi Pur	01	27 January, 2019	31 January, 2019	5 days
"Professional Development Training" at IIM Kozhikode	01	18 June 2019	22 June 2019	5 days
STTP under TEQIP III on waste management practices for environmental stability department of Chemical Engg., SLIET	01	10 Sept., 2018	14 Sept., 2018	5 days
6.3.4 Faculty and Staff recruitment (no. for permanent/fulltime recruitment):				
Teaching		Non-teaching		

Permanent	Fulltime	Permanent	Fulltime
0	0	0	4
6.3.5 Welfare schemes for			
Teaching	As per Govt. Norms		
Non teaching	As per Govt. Norms		
Students	Online/Offline Scholarship by State/ Govt. of India		
	1) SC and OBC scholarship under Dr. Ambedkar Scheme Punjab State Government.		
	2) SC/ST/OBC/EBC scholarship under BIHAR State Government.		
	3) Central Sector scheme for person with disability (N.S.P. 2.0)		
	4) INDIAN –POSTAL services for the students of their employs.		
	5) Minority Scholarship (NSP 2.0 Portal)		
	6) MCM Scholarship		
	7) SC, ST & OBC scholarship from Jharkhand State Govt.		
	8) SC, ST & OBC scholarship from Himachal State Govt.		
	9) SC and Gen. Scholarship from Utter Pradesh State Govt.		
	10) SC, ST & OBC scholarship from Telangana State Govt.		
	11) Scholarship for the students of Railway employs wards (Rail Coach Factory).		
	12) Scholarship for the Punjab student’s ward of Punjab Building and Constructing Workers Welfare, Board.		
	13) Indian Oil Education Scholarship Scheme.		
	14) State scholarship of Utrakhand State.		
	15) State scholarship of Rajasthan State		
	16) PMSSS for J & K students.		
	17) Scholarship of Delhi Govt.		
	18) SC, ST & OBC scholarship from Haryana State Govt.		
	19) Poor students aid Fund- By Institute		
20) AICTE (T.F.W)			
6.4 Financial Management and Resource Mobilization			
6.4.1 Institution conducts internal and external financial audits regularly (with in 100 words each)			
Internal Financial Audit: The accounts of the Institute open to Inspection by the Govt of India/Audit Party of the Principal Accounts Office/Chief Controller of Accounts, MHRD, New Delhi. The Account shall be audited by the internal auditors/Chartered Accountants of the Institute and the Institute have hired the service of Chartered Accountant for Internal Audit, the Internal Audit of the Institute has been conducted upto financial year 2018-19.			
External Financial Audit: The Institute is fully funded by the Govt. of India and Grant is being regularly received from MHRD, New Delhi. The account of the Institute open to Inspection by the Govt of India/Audit Party of the Principal Accounts Office/Chief Controller of Accounts, MHRD, New Delhi. The Accounts of the Institute finally to be audited by the Comptroller and Auditor General of India U/s 20(1) of the CAG of India (duties, powers & conditions of service) Act, 1971. The Audit of the Institute has been conducted upto the financial year 2018-19 by the Audit Party AG Punjab and Audit Report for the			

year 2018-19 is awaited from the office of The Principal Director of Audit (Central), Chandigarh.				
6.4.2 Funds / Grants received from management, non-government bodies, individuals, philanthropies during the year(not covered in Criterion III) : NIL				
Name of the non government funding agencies/ individuals		Funds/ Grants received in Rs.		Purpose
--		--		--
6.4.3 Total corpus fund generated		752.14 Lakh (as on 31.03.2019)		
6.5 Internal Quality Assurance System				
6.5.1 Whether Academic and Administrative Audit (AAA) has been done?				
Audit Type	External		Internal	
	Yes/No	Agency	Yes/No	Authority
Academic	No	No	Yes	SLIET
Administrative	No	No	Yes	SLIET
6.5.2 What efforts are made by the University to promote autonomy in the affiliated/constituent colleges? (if applicable)				
Not applicable				
6.5.3 Activities and support from the Parent – Teacher Association (at least three)				
Till date such support is not in existence but the Institute has Initiated the process for this activity and from the next academic session, this activity is included in the Academic Calendar of the Institute.				
6.5.4 Development programmes for support staff (at least three)				
1. STTP on “Office Automation and System Management” held o 10.06.2019 to 14.06.2019 and total participants were 23.				
2. Staff members were deputed for attending STTP at NITTTR, Kolkata and Bhopal.				
6.5.5. Post Accreditation initiative(s) (mention at least three)				
i) To extend Central Computing facility and to make it available for students and staff for 24x7 with biometric entry.				
ii) Mentoring and counselling, weekly one-hour has been fixed in time table so that class counsellors can interact with their respective classes to extend counselling and mentoring.				
iii) Engagement of behavioural male and female consultant on weekly visit basis for needy male and female students and staff, respectively.				
6.5.6				
a. Submission of Data for AISHE portal : (Yes /No) : YES				
b. Participation in NIRF : (Yes /No) : YES				
c. ISO Certification : (Yes /No) : NO				
d. NBA or any other quality audit : (Yes /No) : NO				
6.5.7 Number of Quality Initiatives undertaken during the year				
Year	Name of quality initiative by IQAC	Date of conducting activity	Duration (from-----to-----)	Number of participants
2019	Workshop on Outcome Based	06.05.2019	One Day (06.05.2019)	112 (1 st session = 60 &

	Education System			2 nd Session = 52)
2018	AICTE sponsored 7 days Faculty Development Program on 'Student Induction Program'	20.07.2018 to 26.07.2018	7 days (20.07.2018 to 26.07.2018)	86

CRITERION VII – INSTITUTIONAL VALUES AND BEST PRACTICES

7.1 - Institutional Values and Social Responsibilities

7.1.1 Gender Equity (Number of gender equity promotion programmes organized by the institution during the year)

Title of the programme	Period (from-to)	Participants	
		Female	Male
NIL	NIL	NIL	NIL

7.1.2 Environmental Consciousness and Sustainability/Alternate Energy initiatives such as:

- The Institute is spread in and sprawling over approximately 447 acres. It expresses through refreshing shades revealing the environment and conditions truly designed to give the human spirit true satiety and comfort. Large plantations carried out at the Institute make the Institute a living beauty, a sign of endless and inexhaustible plenty. Live atmosphere enhances working environment bringing a softening, humanizing touch to the surroundings. Institute plays host to a number of migratory birds giving the glimpse of some of the rarest species of birds in the world. Splendor of the natural environment and beauty of the birds are the perfect setting for a spiritual and academic aesthete. Dotted with green parks, strolling areas, gymnasium, swimming pool, herbal nursery, a lake with a created home for doves, the Institute is a mini-paradise extending a warm welcome and symbolizes the 'Modern Gurukul' of 21st Century. Various of plants are regularly being planted in the Institute area.
- Plant 5 trees before installation of each Air Conditioner (ACs).
- Institute observes No Motor Vehicle Day on every Friday.

Percentage of power requirement of the University met by the renewable energy sources NIL

7.1.3 Differently-abled (Divyangjan) friendliness

Provision of barrier free environment for persons with disabilities by providing ramps along with guide tiles in the various SLIET buildings has been provided in various civil modification works in the existing buildings of SLIET has been undertaken in this regard, such as in Mechanical Block, Science Block, central Library, Health Centre, Chemical Block, Computer Block, EIE& ECE Block, Administrative Block, Girls Hostel No. 1, 2 & 3, Guest House, Boys Hostel No. 1, 2, 3, 6, 7 & 10, Work Shop and Student Activates Centre.

In addition to above 2 no. ramps towards access to the 1st floor of building has also been provided for person with disabilities i.e 01 no. PWD ramps in between Chemical food Block and Science Block and another PWD Ramp for access to Electronic Block and Computer Block.

New PWD toilets including all PWD fitting has been constructed in different buildings (Chemicals & Food Block, Science Block and Mechanical Block).

Modifications of Bathrooms & Toilets with PWD fitting in various Academic in building and Hostels have been made for the convenience of persons with disability.

Following initiative has been undertaken by the Institute for the perseverance of ecosystem.

1. A open oxidation pond for the treatment of waste water.
2. Use of waste water for irrigation of forest area of Institute.
3. Use of polythene is banned in the Institute.
4. One day (Friday) is observed as vehicle free day in the Academic Area of the Institute.
5. Organization of seminars for providing cleaning awareness around the Institute and surrounding village area.
6. One day (Thursday) in a week is observations natural light day, wherein minimum utilization of electric appliances is ensured in the various working place of Institute.

Items Facilities	Yes/No	No. of Beneficiaries
Physical facilities	Yes	04
Provision for lift	No	NIL
Ramp/ Rails	Yes	04
Braille Software/facilities	No	NIL
Rest Rooms	No	NIL
Scribes for examination	Yes	04
Special skill development for differently abled students	No	NIL
Any other similar facility	No	NIL

7.1.4 Inclusion and Situatedness

Enlist most important initiatives taken to address locational advantages and disadvantages during the year

Year	Number of initiatives to address locational advantages and disadvantages	Number of initiatives taken to engage with and contribute to local community	Date and duration of the initiative	Name of the initiative	Issues addressed	Number of participating students and staff
2019	03	03	21.02.2019	Development activities under Unnat Bharat Abhiyan	03	18
2019	03	03	31.05.2019	Development activities under Unnat	03	18

				Bharat Abhiyan		
7.1.5 Human Values and Professional Ethics						
Code of conduct (handbooks) for various stakeholders						
Title	Date of Publication	Follow up (maximum 100 words each)				
Student Guide	11.07.2018	This booklet has been brought out with an intention of familiarizing newly admitted students with the Institute in general and hostels in particular. The booklet contains the information regarding institute administration, hostel administration, hostel/mess rules and discipline rules. Further, this booklet enlists the facilities available and the responsibilities of the students to maintain these facilities in the Campus. Students are advised to go through this booklet carefully before the normal activities of the Institute.				
Internal Complaints Committee	03.06.2019	The Women’s Cell of Sant Longowal Institute of Engineering & Technology (SLIET), Longowal was established in accordance with the directives of Honorable Supreme Court of India to ensure safety, security and dignity of women at workplace. It is established with an object to create a congenial working environment which is free of sexual harassment or gender based discrimination for all women employees and students and to heighten awareness and sensitivity to this important issue amongst all concerned.				
7.1.6 Activities conducted for promotion of universal Values and Ethics						
Activity	Duration (from---	Duration (to-----	Number of participants			
Orientation Programme	11.07.2018	27.07.2018	235 students			
Orientation Programme	06.08.2018	07.08.2018	620 students			
7.1.7 Initiatives taken by the institution to make the campus eco-friendly (at least five)						
Following initiative has been undertaken by the Institute for the perseverance of ecosystem.						
1. A open oxidation pond for the treatment of waste water.						
2. Use of waste water for irrigation of forest area of Institute.						
3. Use of polythene is banned in the Institute.						
4. One day (Friday) is observed as “NO MOTOR VEHICLE DAY” in the Academic Area of the Institute.						
5. Organization of seminars for providing cleaning awareness around the Institute and surrounding village area.						

6. Every Thursday is observations as “NATURAL LIGHT DAY”, wherein minimum utilization of electric appliances is ensured in the various working places of the Institute.
7.2 Best Practices
Describe at least two institutional best practices Upload details of two best practices successfully implemented by the institution as per NAAC format in your institution website, provide the link
<ul style="list-style-type: none"> • Institute Innovation Cell • Tutor Guardian and Student Mentorship Scheme • Competitive Examination Cell (CEC)
Upload details of two best practices successfully implemented by the institution as per NAAC format in your institution website, provide the link
http://iic.sliet.ac.in/ http://sliet.ac.in/tutor-guardian-and-student-mentor-scheme/
7.3 Institutional Distinctiveness
Provide the details of the performance of the institution in one area distinctive to its vision, priority and thrust Provide the weblink of the institution in not more than 500 words
<p>Sant Longowal Institute of Engineering & Technology (SLIET) is an autonomous body having the status of Deemed-to-be-University since 2007, fully funded and established by the Government of India. It is controlled by SLIET Society, registered under Societies Registration Act, 1860. The Institute awards its own Certificates, Diplomas and Degrees including M.Tech., M.B.A., M.Sc. and Ph.D. Further, it is clarified that: (a) The courses run by SLIET are duly approved by AICTE / UGC. The educational programmes of this institute are non-conventional, innovative, practical oriented and contain all aspects of new education policy, Govt. of India. The Institute offers programmes at Integrated Certificate Diploma (ICD), Degree, Post-graduate (M.Tech., M.B.A. and M.Sc.) and Ph.D. levels in Engineering and Technology, Science, Humanities, Management. The Institute has spread over more than four hundred acres of land.</p> <p>The main distinctive point of the Institute is that it offer flexible, modular, layered, multipoint entry/exit programmes in Engineering & Technology. The Institute offer higher level programmes (Ph.D.) after acquiring necessary competence at lower level programmes (Certificate level) of the Institute.</p> <p>The Institute provides non-formal education and training to persons from unorganized sectors and school drops-out through its extension services, to enable them to acquire basic technical skills, so that they are successfully employed.</p> <p>Admission to ICD (Integrated Certificate-Diploma) programme (3 year) through All India SLIET Entrance Test (SET) after Matric exam. • Provision of voluntarily exit after successfully completing 2 years (with requisite number of credits) of ICD Programme. • Provision of entry in 2nd year of ICD after ITI/Certificate with two years industrial experience. • Diploma is awarded to students who completes 3 years of ICD with the prescribed credits as per teaching scheme successfully. • 50% of the SLIET Diploma holders fulfilling the requisite criteria will be promoted to 2nd year of B.E. on the basis of All India SLIET Entrance Test (SET) conducted by SLIET, Longowal.</p> <p>The Institute offers following Courses:</p>

- i) Three Year Integrated Certificate -Diploma (ICD) Programme
- ii) Under Graduate Programme
 - a) B.E.(4 Year)
 - b) B.E.(Lateral Entry)
- iii) Post Graduate Programmes
 - a) M. Tech.
 - b) M.B.A.
 - c) M.Sc.
- iv) Ph.D. Programmes

Some of the necessary facilities for its students are as under:

Hostels: SLIET is a residential campus with ten hostels for boys and four for girls, accommodating about 3400 students which include about 1000 girl students equipped with all the requirements. The Institute has Workshop

Central Library, Computing Facilities, Health Centre, Bank, Post Office, Telephone Exchange and Shopping Centre, Student Activity Centre, Training and Placement Cell, NSS, NCC, Industrial visits, educational tours, departmental societies, SPICMACAY chapter, technical & cultural festivals, night playing facilities, eating points and reading rooms during the extra hours, green parks, strolling areas, gymnasium, swimming pool, herbal nursery are available.

Equal Opportunities Cell: The equal opportunities cell has been established in the Institute to oversee the effective implementation of policies and programmes for deprived groups [SC's, ST's, OBC's (non-creamy layer, minorities)] as per Government of India guidelines in order to enhance their employability.

<http://sliet.net.in/Default.html>

8. Future Plans of action for next academic year (500 words)

- Subject-wise learning attainments and shall be the part of the course file
- To extend Central Computing facility and to make it available for students and staff for 24x7 with biometric entry.
- To implement total quality management (TQM) in laboratories,
- To strengthen and maintain documentation of the activities of Innovation Centre
- To strengthen mentoring and counselling, weekly one-hour slot on Wednesday, may be fixed in time table so that class counsellors can interact with their respective classes to extend counselling and mentoring.
- Strengthen the documentation related to student activities, department wise.
- Strengthen the provision for students and staff for behavioural counselling.

Name Prof. (Dr.) J.S. Dhillon

Signature of Coordinator, IQAC

Name Prof. (Dr.) Shailendra Kumar Jain

Signature of the Chairperson, IQAC