Annual Quality Assurance Report (AQAR)

(For Autonomous Colleges)

2019-2020

By

SHAHEED BHAGAT SINGH STATE TECHNICAL CAMPUS

Moga Road (NH-95), Ferozepur-152004 (Punjab), India

राष्ट्रीय मूल्यांकन एवं प्रत्यायन परिषद

विश्वविद्यालय अनुदान आयोग का स्वायत्त संस्थान

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

An Autonomous Institution of the University Grants Commission
P. O. Box. No. 1075, Opp: NLSIU, Nagarbhavi, Bengaluru - 560 072 India

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

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 **1st June 2019- 31st May 2020**

Part – A

Data of the Institution

(data may be captured from IIQA)

1. Name of the Institution   Shaheed Bhagat Singh State Technical Campus, Ferozepur

- Name of the Head of the institution :   Dr. T. S. Sidhu
- Designation: Director
- Does the institution function from own campus   Yes
- Phone no./Alternate phone no.   01632-242138
- Mobile no.   8288012001
- Registered Email   director@sbsstc.ac.in
- Alternate Email   deanacademics@sbsstc.ac.in
- Address   :   Moga Road, NH 95
- City/Town   :   Ferozepur
- State/UT   :   Punjab
- Pin Code   :   152004

2. Institutional status:

- Autonomous Status *(provide the date of Conformant of Autonomous Status):*   29/07/2015
- Type of Institution: Co-education/Men/Women   Co-education
- Location : Rural/Semi-urban/Urban: Rural
- Financial Status: Grants-in aid/ UGC 2f and 12 (B)/ Self financing   State Funded (please specify)
- Name of the IQAC Co-ordinator/Director: Dr. T. S. sidhu
- Phone no. /Alternate phone no. :   01632-242138
- Mobile: 8288012001
- IQAC e-mail address: deanacademics@sbsstc.ac.in
- Alternate Email address: sbs.academics@gmail.com

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

   Web-link of the AQAR: (Previous Academic Year):

4. Whether Academic Calendar prepared during the year? Yes

if yes, whether it is uploaded in the Institutional website: Yes

Weblink: https://www.sbsstc.ac.in/PDFs/July-Dec%202019.pdf

5. Accreditation Details

Cycle	Grade	CGPA	Year of Accreditation	Validity Period
1st	B	2.75	2015	from: 25 –06-2015 to: 31-12-2020

6. Date of Establishment of IQAC: 28-08-2015 in 3rd Academic Council

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
Promote Paperless Communication	24/01/2020 (9th IQAC)	150
Modified Students Feedback performa	24/01/2020 (9th IQAC)	1223
Regular Meeting of IQAC	First Half and Second Half of the year	1200

> *<u>Note</u>: 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

9. Whether composition of IQAC as per latest NAAC guidelines: Yes (Uploaded in the website).

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 (Uploaded in the website).
   (Please upload, minutes of meetings and action taken report)
11. Whether IQAC received funding from any of the funding agency to support its
    activities during the year?   No

   If yes, mention the amount: Year:

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

IQAC's objective has always been to improve the academic performance of the institution and promote measures for institutional functioning towards quality enhancement.

- A modified Student Feedback Performa was approved in 9th IQAC meeting and shall be applicable from Jan-May 2020 session.
- Rubrics for the subject Mentoring and Professional Development were ratified in the 9th IQAC meeting. Faculty members are using theses Rubrics from July-Dec 2019 session.
- Marks distribution of Non-Credit courses were finalized approved in 9th IQAC.
- Introduction of Paperless communication in the Offices from Jan 2020.
- Motivation to faculty for Promoting ONE DAY as Vehicle Free and Light Free.
- Decision on staring of New courses (both AICTE and non-AICTE) from the session July 2020.
- Disposing off the Old Records as per Swatch Bharat Abhiyan of Govt. of India.
  .

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
To introduce Paperless Communication	The Institute is in the process of successfully implementing Paperless communication in all the departments.
To introduce New AICTE and non-AICTE Courses	Dean Affiliation and Approvals has completed the process of applying New courses both AICTE and non-AICTE.
To Promote ONE Day as Vehicle free and Light Free	The college is observing Wednesday as the Vehicle Free and Light Free Day
To dispose-off old records as per Swatch Bharat Abhiyan of Govt. of India.	A committee has been formed to dispose-off old records.

14. Whether the AQAR was placed before statutory body? Yes

　　Name of the Statutory body: Academic Council　　Date of meeting(s): 25-02-2020

15. Whether NAAC/or any other accredited body(s) visited IQAC or interacted with it to assess the functioning? **No**

　　　　　　　　　　　　　　　　　Date:

16. Whether institutional data submitted to AISHE: Yes

　　　　Year: 2019-20　　　　　Date of Submission: 06-03-2020

17. Does the Institution have Management Information System? **Yes**

If yes, give a brief description and a list of modules currently operational.
(Maximum 500 words)

The Institute has adopted a Management Information System for Academics, HRMS, Finance & Accounts and for grading students in examinations. The MIS has been used in practice to store student data such as personal data, Fee, Exam records and library details. There is an online system of filling examination forms by students in their logins and viewing of their results. Continuous Internal and external assessment is uploaded by faculty in MIS through their logins based upon which the performance of student's performance is analyzed. It also helps to view fee category wise student data, admission status for all classes, cast category wise statistical report, admission fee summary report, library status details etc. Apart from this it let you know exact status of admitted and vacant seats of any class. Details of fee collected, class wise, and fee category wise analysis.

The faculty and staff mark their attendance on Biometric system, their data, payroll and leaves are managed by MIS. The institute also promotes online system of fee management through payments of fee of students and receipt directly through their Institute logins.

The Institute has adopted a Management Information System for Academics, HRMS, and Finance & Accounts and for grading students in examinations. The MIS has been used in practice to store student data such as personal data, Fee, Exam records and library details. There is an online system of filling examination forms by students in their logins and viewing of their results. Continuous Internal and external assessment is uploaded by faculty in MIS through their logins based upon which the performance of students performance is analyzed. It also helps to view fee category wise student data, admission status for all classes, cast category wise statistical report, admission fee summary report, library status details etc. Apart from this it let you know exact status of admitted and vacant seats of any class. Details of fee collected, class wise, and fee category wise analysis.

The faculty and staff mark their attendance on Biometric system, their data, payroll and leaves are managed by MIS. The institute also promotes online system of fee management through payments of fee of students and receipt directly through their Institute logins.

The institute used the following modules of ERP

ACADEMICS:
Student data management
HRMS
Employee data management
Biometric attendance, Leave Management
Payroll
FINANCE AND ACCOUNTS
Fee Management
Receipts and Payments
EXAM AND GRADING
Exam form filling,
Conduct of exam
Declaration of Result

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	Date of Revision
UG	CSE	30/07/2019
UG	ECE	01/07/2019
UG	EE	12/07/2019
UG	CHE	09/07/2019
UG	B.Sc. Agri	30.05.2019

1.1.2 Programmes/ courses focussed on employability/ entrepreneurship/ skill development during the Academic year

Programme with Code	Date of Introductin	Course with Code	Date of Introduction
ECE	09/07/2019	Workshop on Python Programming	08/11/2019 to 09/11/2019
CE	09/07/2019	Mentoring & professional development(BMPD101B)	09/07/2019
ECE	09/07/2019	Mentoring and Professional Development(BMPD-331-18)	01/07/2019
CE	14/01/2020	Mentoring & professional development(BMPD201B)	14/01/2020
CE	09/07/2019	Surveying and Geomatics Lab (BTCE-306-18) Fluid Mechanics Lab (BTCE-307-18) Solid Mechanics Lab (BTCE-308-18) Mentoring and Professional Development (BMPD-301-18) Training-I (BTCE-332-18)	09/07/2019
CE	14/01/2020	Concrete Testing Lab (BTCE-406-18) Transportation Lab (BTCE-407-18) Training-II Mentoring and Professional Development (BMPD-401-18)	14/01/2020
CE		Concrete Technology Lab (BTCE 505A)	

	09/07/2019	Transportation Engineering Lab (BTCE-506A) Training-II (BTCE507A) Professional Skills-III (BTHU-501A)	09/07/2019
CE	14/01/2020	Computer Aided Structural Drawing II (BTCE605A) Geotechnical Engineering Lab (BTCE606A) Professional Skills-IV (BTHU601A	14/01/2020
CE	09/07/2019	Software Lab (BTCE705A) Environmental Lab (BTCE706A)	09/07/2019
CE	14/01/2020	Training –III (BTCE707A) Project-I (BTCE708A) Project (BTCE804A)	14/01/2020
CHE	10/07/2019	HASS-II (BTHU-401B) to HASS-IV (BTHU-601B)	10/07/2019
ME	09/07/2019	Professional skills BTHU-901A Mentoring and Professional Development BMPD 401-18	09/07/2019

1.2 Academic Flexibility

1.2.1 New programmes/courses introduced during the Academic year

Programme/Course	Date of introduction
PG Diploma (Cyber Security)	Department has applied for both courses to University
B.Voc, (Data and Web Analytics)	Department has applied for both courses to University
Foundational Course in Humanities (Development of Societies or Philosophy) HSMC101-18/HSMC102-18	01/07/2019
Mentoring and Professional Development BMPD-331-18 & BMPD-341-18	01/07/2019
Universal Human Values – 2: Understanding Harmony HSMC122-18	01/07/2019
Environmental Sciences EVS-101-18	01/07/2019
Total Quality Management	09/07/2019
Internet of Things	14/01/2020

1.2.2 Programmes in which Choice Based Credit System (CBCS)/Elective Course System implemented at the College level during the Academic year.

Name of Programme adopting CBCS	UG	PG	Date of implementation of CBCS / Elective Course System	UG	PG
B.Tech (Electronics and	UG	---	01/07/2019	UG	---

Communications)					

1.3 Curriculum Enrichment

1.3.1Value-added courses imparting transferable and life skills offered during the year

Value added courses	Date of introduction	Number of students enrolled
Mentoring & Professional Development	01/07/2019	105
Technical aptitude and GK	01/07/2019	28
Mentoring & Professional Development	01/07/2019	16
Mentoring & Professional Development	01/07/2019	16
Professional Skills (BTHU-101A) - (BTHU-601A)	15/07/2019	33
Mentoring & Professional Development	01/07/2019	16
Professional skills	15/07/2019	90
NSS	01/06/2019	200

1.3.2Field Projects / Internships under taken during the year

Project/Programme Title	No. of students enrolled for Field Projects / Internships
Industrial Training	328
Survey Camp	102
Major Project (Final Year students)	18

1.4 Feedback System

1.4.1Whether structured feedback received from all the stakeholders.

1) Students	2) Teachers	3) Employers	4) Alumni	5)Parents
Yes	Yes	Yes	Yes	Yes

1.4.2 How the feedback obtained is being analyzed and utilized for overall development of the institution? (maximum 500 words)

Feedback forms of a particular subject teacher are evaluated on the basis of marks given by the students and in case any improvement is needed proper action is taken. In case of teachers monthly meeting are conducted by head of the department for their feedback and needed measures are taken for development of institution.

The feedback collected from the students is anonymous. The data is analyzed by the Head of Department concerned and in case of any major finding from the feedback; the faculty members are provided necessary inputs for further improvement and corrective course of action. Hence, the faculty gets to know their weak areas and build upon these to provide a better teaching-learning experience. Feedback forms of a particular subject teacher are evaluated on the basis of marks given by the students and in case any improvement is needed proper action is taken. In case of teachers monthly meeting are conducted by head of the department for their feedback and needed measures are taken for development of institution.

Further, the overall academic, administrative, professional development and research contributions of every teacher are analyzed by the HOD and the Director once in a year and feedback from the teacher is obtained about difficulties and suggestions with regard to academic assignments /self growth. The feedback from alumni is also collected to get their suggestions for improvement of overall working of the department. Further, the feedback from designated faculty members, Industry persons and alumni is

obtained for revision of curriculum to keep the study scheme updated with new emerging technologies.

CRITERION II -TEACHING-LEARNING AND EVALUATION

2.1 Student Enrolment and Profile

2.1. 1 Demand Ratio during the year

Name of the Programme	Number of seats available	Number of applications Received	Students Enrolled
B.Tech. CSE	126	107	105
M.Tech CSE	18	___	___
B.Tech ECE	63	11	11
M.Tech ECE	18	___	___
B.Tech EE	63	21	15
B.Tech. CE	63	15	15
MCA	60	16	16
PGDCA	60	10	05
BCA	60	67	60
B.Tech. CHE	32	18	09
B.Arch.	20	12	09
B. Tech. ME	126	23	23
B.Sc.Agriculture	30	40	30

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
2019-20	1202	25	88	06	08

2.3 Teaching –Learning Process

2.3.1Percentage 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 *(LMS, e-Resources)*	ICT tools and resources available	Number of ICT enabled classrooms	Number of smart classrooms	E-resources and techniques used

102	97	LCD Projectors,Internet, Laptop,NPTEL Video Lectures, mobile/web learning	39	39	PPTs, NPTEL Video Lectures-Library-Books Software's, online data bases, e-reference books, e-thesis, Swayam, Lectures through PPT, Using ICT enabled classroom for teaching, Using online LMS Platforms Google classroom, Zoom, Google meet

2.3.2 Students mentoring system available in the institution? Give details. (maximum 500 words)

The faculty members of the department are assigned as Mentors of every batch/year. The mentors deal with the complaints/ grievances of students and ask suggestions about the departmental activities. Female faculty members are also assigned task as mentors to take care about the difficulties faced by girl students.

Mentoring System has emerged as a strong response to the plight of students at-risk. Departments at Shaheed Bhagat Singh State Technical Campus, Ferozepur offers a highly-efficient Mentoring system through which a group of students consisting of 12-15 students are assigned to a faculty member at the commencement of the program. Mentors meet their students and guide them with their studies and extra-curricular activities. They also provide advice relating to selection of major, career guidance and personal problems. The mentors act as guides to the students during their summer and final projects. The mentoring system of all Departments ensures that the students adapt to the dynamic learning environment and lead their ways into highly successful careers.

Department has an integrated mentoring system where the faculty acts as a link between the students and the institution and perform the following functions-

Mentors are assigned to monitor and guide students all through the four years.

Mentors coordinate with the parents regarding the progress of the students.

Mentors also keep track of the mentees' performance during the Summer internship by continuous interaction with the industry guide designated to the student by the company.

Mentors communicate with fellow faculty and promote mentees at the time of difficulty / opportunity to help them develop further in their areas of interest.

Head of the Department also act as a mentor and monitor different activities of the assigned mentors and the students. The Academic Committee of the Institute discusses the mentoring related issues at least twice in a semester and revises or upgrade the system if necessary

Number of students enrolled in the institution	Number of fulltime teachers	Mentor: Mentee Ratio
1227	102	01 :12

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. off faculty with Ph.D
175	102	73	23	30

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 fulltime teachers receiving awards from state level, national level, international level	Designation	Name of the award, fellowship, received from Government or recognized bodies
2019-2020	Dr Rajni (International level)	Professor	Appreciation letter received from Editor-in-Chief for reviewing paper submitted to Journal of Engineering Science and Technology (JESTEC, Malaysia (Scopus indexed)
2019-2020	Dr Rajni (National level)	Professor	Appreciation certificate for organizing One Week AICTE sponsored on "Virtual Instrumentation in Academics, Research and Industry
2019	Dr Rajni (National level)	Professor	Received Certificate of Appreciation for delivering expert talk on "Virtual Instrumentation in hazardous environment" in one week national level AICTE sponsored STTP on "Virtual Instrumentation in Academics, Research and Industry" held during 08-13 July, 2019
2019-2020	Dr. Sanjeev Dewra (International Level)	Associate Professor	Appreciation as Reviewer of OPTIK-ELSVIER.
2019	Dr. Sanjeev Dewra (National Level.)	Associate Professor	Appreciation letter for the successful conduct of AICTE Sponsored STTP on VIARI-2019 as Co-Coordinator during July 08-13, 2019
2019-2020	Dr. Sanjeev Dewra (National Level)	Associate Professor	Editorial Board Member of different Journals like RTECS,IJCRCE,JTSSN
2019	Dr. Vikram Mutneja (National level)	Associate Professor	Received Certificate of Appreciation for delivering expert talk on "An Introduction to MATLAB Programming" in AICTE sponsored national level one week FDP on "Mathematical Methods and Computations in Engineering" during 01-06 July, 2019
2019	Dr. Vikram Mutneja (National level)	Associate Professor	Received Certificate of Appreciation for delivering expert talk on "Virtual Instrumentation" in one week national level Short Term Training Program on "Virtual Instrumentation in Academics, Research and Industry" held in Department of Electronics & Communication Engineering, SBSSTC, Ferozepur during 08-13 July, 2019
2019	Dr. Vikram Mutneja	Associate	Received Certificate of Appreciation for organizing one

	(National level)	Professor	week STTP on "Virtual Instrumentation in Academics, Research and Industry" as Co-coordinator, during 08-13 July, 2019
2019	Dr. Vikram Mutneja (National level)	Associate Professor	Received Certificate of Appreciation for delivering expert talk on "Machine Learning and Associated Technologies" in national level AICTE Sponsored two week FDP on "Big Data Analytics using Machine Learning Techniques" during 09-20 December, 2019
2020	Inderjeet Singh Gill (from District Administration)	Associate Professor	Got appreciation letter from District Administration on republic day, 2020
2019	Inderjeet Singh Gill (Institute level)	Associate Professor	Got letter of appreciation from Director, SBSSTC, Ferozepur for organizing 5th State Level Mega Job fair under Punjab Government initiative of "Ghar Ghar Rozgar" mission in November,2019
2020	Navdeep Kaur (from District Administration)	Assistant Professor	Got appreciation letter on republic day, 2020
2020	Navdeep Kaur (State level)	Assistant Professor	Got award in Punjab state youth festival at Chandigarh University Gharuan [30-31 January,2020]
2019-2020	Amit Grover (International)	Assistant Professor	Editorial Board Member of different Journals like IJRET, IJSER
2019	Amit Grover (National level)	Assistant Professor	Appreciation letter from the Director of the institute for the successful conduct of Two weeks Faculty Development Programme on BIG DATA ANALYTICS USING MACHINE LEARNING TECHNIQUES as Co-Coordinator During December 09-20, 2019.
2019	Amit Grover (Institute)	Assistant Professor	Received certificate of Appreciation from the Director of the institute for the successful conduct of Two Days Workshop on Python Programming as Co-Coordinator During November 07-08, 2019.
2020	Dr. Amit Arora	Associate Professor	Appreciation certificate from Minister of Technical Education and Industrial Training, Government of in the field of Cultural Activities, Blood Donation and Drug de addiction campaign for the year 2019-20 on Republic Day 26th Jan. 2020.
2020	Dr Lalit Sharma	Professor	Prabhat Gaurav Samman by Sindhu Prabhat News & CBG Edu International.
2019	Ms Anupam Mittal (National level)	Assistant Professor	Received Certificate of Appreciation for organizing national level AICTE sponsored STTP on "Virtual Instrumentation in Academics, Research and Industry" held during 08-13 July, 2019

2.5 Evaluation Process and Reforms

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	Programme Code	Examination Session	Semester/Year	Last date of the last semester-end/ year-end examination	Date of declaration of results of semester-end/ year-end examination
B. Tech.	ME	Nov./ Dec. - 2019	1st Semester	26.12.2019	11.02.2020
			3rd Semester	09.12.2019	13.02.2020
			5th Semester	04.12.2019	28.02.2020
			7th Semester	03.12.2019	06.02.2020
		May./ Jun. - 2020	2nd Semester	----	----
			4th Semester	----	----
			6th Semester	----	03.11.2020
			8th Semester	07.10.2020	03.11.2020
B. Tech.	EE	Nov./ Dec. - 2019	1st Semester	26.12.2020	11.02.2020
			3rd Semester	09.12.2019	13.02.2020
			5th Semester	04.12.2019	05.02.2020
			7th Semester	03.12.2020	06.02.2020
		May./ Jun. - 2020	2nd Semester	----	----
			4th Semester	----	----
			6th Semester	----	29.10.2020
			8th Semester	----	30.10.2020
B. Tech.	CE	Nov./ Dec. - 2019	1st Semester	26.12.2020	11.02.2020
			3rd Semester	09.12.2019	13.02.2020
			5th Semester	04.12.2019	05.02.2020
			7th Semester	03.12.2020	06.02.2020
		May./ Jun. - 2020	2nd Semester	----	----
			4th Semester	----	----
			6th Semester	----	03.11.2020
			8th Semester	09.10.2020	03.11.2020

B. Tech.	ECE	Nov./ Dec. - 2019	1st Semester	26.12.2020	11.02.2020
			3rd Semester	09.12.2019	07.02.2020
			5th Semester	04.12.2019	05.02.2020
			7th Semester	03.12.2020	05.02.2020
		May./ Jun. - 2020	2nd Semester	----	----
			4th Semester	----	----
			6th Semester	----	29.10.2020
			8th Semester	09.10.2020	30.10.2020
B. Tech.	CHE	Nov./ Dec. - 2019	1st Semester	26.12.2020	11.02.2020
			3rd Semester	09.12.2019	13.02.2020
			5th Semester	04.12.2019	05.02.2020
			7th Semester	03.12.2020	06.02.2020
		May./ Jun. - 2020	2nd Semester	----	----
			4th Semester	----	----
			6th Semester	----	03.11.2020
			8th Semester	07.10.2020	30.10.2020
B. Tech.	CSE	Nov./ Dec. - 2019	1st Semester	26.12.2020	11.02.2020
			3rd Semester	09.12.2019	13.02.2020
			5th Semester	04.12.2019	05.02.2020
			7th Semester	03.12.2020	06.02.2020
		May./ Jun. - 2020	2nd Semester	----	----
			4th Semester	----	----
			6th Semester	----	03.11.2020
			8th Semester	07.10.2020	30.10.2020
BCA	BCA	Nov./ Dec. - 2019	1st Semester	19.12.2020	11.02.2020
			3rd Semester	09.12.2019	07.02.2020
			5th Semester	06.12.2019	05.02.2020
		May./ Jun. - 2020	2nd Semester	----	----

			4th Semester	----	----
			6th Semester	14.10.2020	30.10.2020
MCA	MCA	Nov./ Dec. - 2019	3rd Semester	05.12.2019	07.02.2020
			5th Semester	02.12.2019	05.02.2020
		May./ Jun. - 2020	4th Semester	----	----
			6th Semester	13.10.2020	30.10.2020
PGDCA	PGDCA	Nov./ Dec. - 2019	1st Semester	19.12.2019	11.02.2020
		May./ Jun. - 2020	2nd Semester	14.10.2020	30.10.2020
B.Arch	B.Arch	Nov./ Dec. - 2019	1st Semester	23.12.2019	11.02.2020
			3rd Semester	12.12.2019	06.02.2020
			5th Semester	12.12.2019	05.02.2020
			7th Semester	15/07/2019	20.02.2020
			9th Semester	15.12.2019	28.02.2020
		May./ Jun. - 2020	2nd Semester	----	----
			4th Semester	----	----
			6th Semester	----	----
			8th Semester	----	29.10.2020
			10th Semester	----	30.10.2020

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*

Number of complaints or grievances about evaluation	Total number of students appeared in the examination	Percentage
16	1227	1.3

2.6 Student Performance and Learning Outcomes

2.6.1 Program outcomes, program specific outcomes and course out comes for all programs offered by the institution are stated and displayed in website of the institution (to provide the weblink)

CSE	https://www.sbsstc.ac.in/dptCSengg.php?dept=%27CSE%27
ECE	https://www.sbsstc.ac.in/dptECengg.php
EE	https://www.sbsstc.ac.in/dptEEengg.php
CE	https://www.sbsstc.ac.in/dptCEengg.php
CHE	https://www.sbsstc.ac.in/dptCHengg.php

	ME	https://www.sbsstc.ac.in/dptMEengg.php
	CA	https://www.sbsstc.ac.in/CO.php
	Architecture	https://www.sbsstc.ac.in/dptArch.php

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
CSE	B. Tech. (CSE)	117	116	99.14
ECE	B.Tech (ECE)	28	28	100
ECE	M.Tech (ECE)	____	――――	――――
EE	B.Tech (EE)	17	17	100
CE	B. Tech.(CE)	109	76	70
MCA	MCA	8	7	87.5
BCA	BCA	14	5	35.7
PGDCA	PGDCA	10	7	70
CHE	B.Tech(CHE)	10	6	60
Architecture	B.Arch.	52	44	85
ME	B.Tech (ME)	74	____	____

Agriculture	B.Sc.	30	26	83.33

2.7 Student Stratification Survey

2.7.1 Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design the questionnaire) (results and details be provided as weblink)

A feedback survey to assess the students' satisfaction on the curriculum, teaching learning processes and infrastructure is made. Opinion of all the students is collected using a questionnaire of structured feedback forms. Students' feedback is rated on 5-point scale from 1 to 5. There are a number of closed and open-ended questions in the feedback questionnaire. Most of the students are satisfied with the syllabus covered and the teaching style of the teachers. Students also find teachers fair in internal evaluation process. The teaching, mentoring process, Academics, placement and library facilitates, social and emotional growth is shown satisfactory. Students are satisfied with the illustrations of teachers for explaining concepts through examples and applications. Most of the students are fully satisfied with the teachers' identification of students' strengths and weaknesses to encourage them with providing right level of challenges. The students' feedback also shows that they also agree that the institution makes effort to engage them in the monitoring, review and continuous quality improvement of the teaching learning   process.
https://docs.google.com/forms/d/e/1FAIpQLSd9IcfRHSqUZxNpk3teYnwR5w5488L1B4CwSFQWvpcR5pi7SA/view form

CRITERION III- RESEAECH, INNOVATIONS AND EXTENSION

3.1 Promotion of Research and Facilities

3.1.1 The institution provides seed money to its teachers for research,

YES (if yes give details) The institution provides seed money to its teachers for research but none of the faculty members have availed it during 1st June 2015-31 May 2016.

Name of the teacher getting seed money	The amount of seed Money	Year of receiving grant	Duration of the grant
____	____	____	____

3.1.2 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
International	Dr Vishal Sharma	Marie Skłodowska Curie Fellow in Aston institute of Photonics technologies (AiPT), Aston University, Birmingham, UK	18/09/2019	European Union

3.2 Resource Mobilization for Research

 3.2.1 Research funds sanctioned and received from various agencies, industry and other organizations

Nature of the Project	Duration	Name of the funding Agency	Total grant sanctioned	Amount received during the Year
Major projects	____	___	___	___
Minor Projects	___	___	___	___
Interdisciplinary Projects	___	___	___	___
Industry sponsored Projects	___	___	___	___
Projects sponsored by the University/ College	___	___	___	___
Students Research Projects *(other than compulsory by the College)*	___	___	___	___
International Projects	___	___	___	___
Any Other (Specify)	___	___	___	___

3.2.2 Number of ongoing research projects per teacher funded by government and non-government agencies during the years

1. Rs. 23.69Lacs sanctioned to PhD Research Scholar Ms Navjot Kaur under the guidance of Dr. Monika Sachdeva in 2015
2. AICTE sponsored Short term training program of 1 week on "Virtual Instrumentation in Academics, Research and Industry " (sanctioned in 2018-19)
3. AICTE sponsored MODROB project for "Up gradation of Optical and Wireless Communication laboratory" (sanctioned in 2018-19)

3.3 Innovation System

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 Dept.	Dates
Workshop on Python Programming	ECE	07/11/2019 - 08/11/2019
Energy Environment problems and their solutions for sustainable development	EE	19/11/2019
Video lecture on 'Green Building to Green Cities'	CE	07/08/2019
Two day training programme on Energy Conservation Building Code(ECBC 2017)	CE	29/08/2019 - 30/08/2019
Earthquake Resistant Design of Buildings	CE	28/01/2020
AICTE sponsored STTP on "Mathematical methods and Computations in Engineering"	CHE	01/07/2019 to 06/07/2019

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

Technical Events	SBSSTC, FEROZEPUR	CE UTSAV 2K'19 ISCE	15/10/2019, 16/10/2019	Technical Events

3.3.3 No. of incubation centre created, start-ups incubated on campus during the year

Incubation Centre	Name	Sponsored By
—	—	—

Name of the Start -up	Nature of Start-Up	Date of Commencement
—	—	—

3.4 Research Publications and Awards

3.4.1 Ph.Ds awarded during the Year

Name of Department	No. of Ph.Ds awarded
CSE	02
ECE	01
Chemical Engineering	2

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	CSE	___	----
International	CSE	06	----
National	ECE	___	----
International	ECE	05	1.36
International	ECE	02	0.45
International	ECE	01	----
International	ECE	05	1.38
International	CE	06	----
International	CA	2	----
International	CHE	20	A . For SCI papers: 2.46 B. For Scopus Indexed Paper(SJR): 0.162
National	Architecture	03	----
International	ME	25	0.26
National	AGRI	02	----

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
CSE	05
ECE	02
CE	02
MCA	01
CHE	2
Architecture	02

3.4.4 Patents published/awarded during the year

Patent Detail	Patent Status/Published Filed	Patent Number	Date of Award
----	----	----	----

3.4.5 Bibliometrics of the publications during the last Academic year based on average citation index in Scopus/ Web of Science or Pub Med/ Indian Citation Index

Title of Paper	Name of the	Title of the	Year of	Citation	Institutional	Numb

	Author	journal	Publication	Index	affiliation as mentioned in the publication	er of citations excluding self citations
Lung Cancer Detection on Computed Tomography Images Using Digital Image Processing Techniques	Dr.Gulshan Kumar	Journal of Advanced Research in Dynamical & Control Systems	2019	____	SBSSTC, Ferozepur	____
An Approach for Facial Emotion Recognition Using Heuristic and Component Analysis	Dr.Gulshan Kumar	Journal of Advanced Research in Dynamical & Control Systems	2019	____	SBSSTC, Ferozepur	____
A Survey of Deep Learning and Its Applications: A New Paradigm to Machine Learning	Dr.Gulshan Kumar	Archives of Computational Methods in Engineering	2019	4	SBSSTC, Ferozepur	4
Applications of Generative Adversarial Networks (GANs): An Updated Review	Dr.Gulshan Kumar	Archives of Computational Methods in Engineering	2019	____	SBSSTC, Ferozepur	____
Assessment of ground water contamination by inorganic impurities in Ferozepur district of Punjab.	Gurjeet Kaur, Sangeeta Sharma, Umesh Kumar Garg	Asian Journal of Chemistry	2019	29	SBSSTC, Ferozepur	____
Investigations on the role of YSZ as bond coat to enhance corrosion resistance of HAP for bio implant applications.	Shalinder Kaur, Sangeeta Sharma, Neeraj Bala	Protection of metals and physical chemistry of surfaces (Springer)	2019	0.68	SBSSTC, Ferozepur	____
BER Analysis of Convolutional Encoded DWT-OFDM and coded	Simmi Garg, AK Sharma, Anand K. Tyagi.	Research & Reviews: Journal of Physics	2019	____	SBSSTC, Ferozepur	____

FFT-OFDM under Different Simulation Conditions.						
Two Efficient Schemes for Providing feedback connection to Recursive Convolution Encoder.	Simmi Garg, AK Sharma, Anand K. Tyagi.	IUP Journal of Electrical and Electronics Engg.	2019	────	SBSSTC, Ferozepur	────
Investigation of optical and dielectric properties of Nickel Zinc Ferrites Synthesized at different pH values	Richa, Anand K. Tyagi, DS Ahlawat & Amrik Singh,	Int. Journal of Scientific Research and Review	2019	────	SBSSTC, Ferozepur	────
BER reduction in DWT-OFDM systems using a Novel Error Correction Scheme	Simmi Garg, AK Sharma, Anand K. Tyagi.	Research & Reviews: Journal of Physics	2019	────	SBSSTC, Ferozepur	────
On dispersion and Selection of Quadratic Permutation Coefficients	Simmi Garg, AK Sharma, Anand K. Tyagi.	Int. Journal of Emerging Tech. & Innovative Research	2019	5.87	SBSSTC, Ferozepur	────
A Study on Investment Objectives of Working Women in Punjab	Nidhi Aggarwal, Raminder Pal Singh	International Journal of Research and Analytical Reviews	2019	────	SBSSTC, Ferozepur	────
Usage of Technology and Job Satisfaction of College Academic Faculty	Sunanda Sharma, Raminder Pal Singh	International Journal of Advance and Innovative Research	2019	────	SBSSTC, Ferozepur	────
Co-Curricular Activities of College Academic Staff and Job Satisfaction	Sunanada Sharma, Raminder Pal Singh	International Journal of Management Technology and Eng.	2019	────	SBSSTC, Ferozepur	────
E-Had: A Distributed and Collaborative Detection Framework for Early Detection of	NileshPatil, C. Rama Krishna, Krishan Kumar, Sunny Behal	Elsevier Journal of King Saud University-Computer and	2019	─────	SBSSTC, Ferozepur	3

		Information Sciences,				
Distributed Denial of Service Attacks: A Threat or Challenge	Jasmeen Kaur Chahal, Abhinav Bhandari, Sunny Behal	Journal of New Review of Information Networking	2019	_____	SBSSTC, Ferozepur	1
Novel Approach to Detect DDoS Intrusion from Vehicular Ad hoc Networks	Anil Behal, Sunny Behal	International Journal of Research in Electronics and Computer Engineering (IJRECE)	2019	_____	SBSSTC, Ferozepur	_____
ACO optimized self-organized tree-based energy balance algorithm for wireless sensor network	Vishal Kumar Arora, Vishal Sharma, Monika Sachdeva	Journal of Ambient Intelligence and Humanized Computing	2019	_____	SBSSTC, Ferozepur	11
A distributive,multi-hop,adaptive,tree-based energy-balanced routing approach	Vishal Kumar Arora, Vishal Sharma, Monika Sachdeva	International Journal of Communication Systems	2019	_____	SBSSTC, Ferozepur	3
A multiple pheromone ant colony optimization scheme for energy-efficient wireless sensor networks	Vishal Kumar Arora, Vishal Sharma, Monika Sachdeva	Soft computing	2020	_____	SBSSTC, Ferozepur	3
MCA An Analysis of Evaluation Metrics of GANs	Gulshan Kumar	International Conference on Information Technology and Applications (ICITA)	2019	2	SBSSTC, Ferozepur	2
An improved ensemble approach for effective intrusion detection	Gulshan Kumar	The Journal of Supercomputin	2020	_____	SBSSTC, Ferozepur	_____
MLEsIDSs: machine learning-based ensembles for intrusion detection systems—a review	Gulshan Kumar	The Journal of Supercomputing,	2020	_____	SBSSTC, Ferozepur	_____
A comparative study of corrosion resistance of	Sangeeta Sharma, Shalinder Virdi,	Material Chemistry and Physics	2019	2.78	SBSSTC, Ferozepur	_____

biocompatible coating on titanium alloy and stainless steel.	Neeraj Bala					
Assessment of quality of soil in Ferozepur district, Ferozepur	Sangeeta Sharma, Samant Sharma, Amandeep Kaur	Pollution research	2019	21	SBSSTC, Ferozepur	——
Biogenic synthesis of gold nanoparticles and their applications- A review	Amandeep Kaur, Sangeeta Sharma	Asian journal of chemistry	2019	29	SBSSTC, Ferozepur	——
Synthesis, characterization and anti-bacterial activities of new bivalent complexes of transition metals.	Veenu Chugh, Rimpi Mehani, Sangeeta Sharma	Asian journal of Chemistry	2019	29	SBSSTC, Ferozepur	——
Comparative study of enhancement of stainless steel alloy by plasma spray technique and biomimetic deposition	Shalinder kaur, Sangeeta Sharma, Neeraj Bala	Asian journal of chemistry	2019	29	SBSSTC, Ferozepur	——
Study of enhancement of corrosion resistance property of stainless steel alloy by plasma spray technique and biomimetic deposition	Shalinder kaur, Sangeeta Sharma, Neeraj Bala	Protection of metal and physical chemistry of surfaces	2019	——	SBSSTC, Ferozepur	——
Some novel anti-bacterial macrocyclic complexes for gram +ve and gram _ve bacteria.	Sangeeta Sharma, Rimpi Mehani Ne'e Chopra, Veenu Chugh	Oriental Journal Of Chemistry	2019	0.36,	SBSSTC, Ferozepur	——
Environmental contaminant dyes: sources and effects	Narinderjit Kaur, Sangeeta Sharma and Ekta Khosla	Pollution Research	2020	18	SBSSTC, Ferozepur	——
Binary cationic dyes-counter ion extraction by reverse micelles.	Narinderjit Kaur, Sangeeta Sharma and Ekta Khosla	Tenside Surfactants Detergents	2020	0.86	SBSSTC, Ferozepur	——

Titanium-Niobium Alloy Thin Films at Substrate Temperature (100C,200C and 300C) using Field Emission Scanning Electron Microscopy (DOI: 10. 35940 /ijrte.B1534.0982S1119)	Aditi & Anand K Tyagi	Int. Journal of Recent Tech. & Engg.	2019	―――	SBSSTC, Ferozepur	5.92
Assessment of Annual Effective Dose from the Indoor Radon in Bathinda District of Punjab in India	Amit Arora, R. Mehra, R. Garg, Anand K Tyagi	Nature Environment and Pollution Technology	2019	―――	SBSSTC, Ferozepur	0.28
Studies on titanium oxide core, transparent polymer shell nanocomposite thin films (DOI: https://doi.org/10.1016/j.matpr.2020.03.269)	Neha Narang & Anand K.Tyagi	Materials Today P (Elsevier B.V.	2020	―――	SBSSTC, Ferozepur	1.09
On the optimization of number of sub-interleavers for Turbo Codes	Simmi Garg, AK Sharma, Anand K. Tyagi.		2019	―――	SBSSTC, Ferozepur	1.517
Effect of Zirconium Doping on Phase Development, Structural, Micro-structural and Dielectric Properties of Ba6(Ti1-xZrx)5O18 Ceramics Synthesized by Auto Combustion Method	Karamveer Kaur and Anand K Tyagi	Journal of Materials Science and Engg.	2019	―――	SBSSTC, Ferozepur	―――
Synthesis, characteristics and Application of non-ionic Gemini	Lalit Sharma	Tenside Surfactants Detergents Hanser,	2020	0.75	SBSSTC, Ferozepur	―――

Title	Author(s)	Journal	Year	Impact Factor	Affiliation	
Surfactants as Reverse Micellar systems for encapsulation of some ☐-amino acids in n-hexane.		Germany				
Synthesis of non-ionic Gemini Surfactants & study of their Micellar and Reverse Micellar behavior	Lalit Sharma	Letters in Organic Chemistry Banthem Science	2019	0.723	SBSSTC, Ferozepur	____
Impact of Qualification on job satisfaction and job performance of college academic staff	Sunanada Sharama, Raminder Pal Singh	Think India (Quarterly Journal)	2019	____	SBSSTC, Ferozepur	____
Impact of Government Policies on Women Entrepreneurs	Leena Malhotra, Rakesh Kumar, Raminder Pal Singh	Indian Journal of Social research	2019,	-____	SBSSTC, Ferozepur	____
An Exploratory study among women entrepreneurs in selected area of Punjab	Leena Malhotra, Rakesh Kumar, Raminder Pal Singh	Our Heritage Journal	2020	____	SBSSTC, Ferozepur	____
Hopf bifurcation analysis in a multiple delayed innovation diffusion model with Holling II functional response	Dr. Rakesh Kumar	Mathematical Methods in the Applied Sciences	2019-2020	____	SBSSTC, Ferozepur	____
Bifurcation analysis of a nonlinear diffusion model: Effect of evaluation period for the diffusion of a technology	Dr. Rakesh Kumar	Arab Journal of Mathematical Sciences	2019-2020	____	SBSSTC, Ferozepur	____
Experimental Study on Condensation and Evaporation Rate with Counter Flow Liquid desiccant Cooling System	Rakesh Kumar, Arun Kumar Asati & Rajesh Sharma	International journal of Management, Technology and Engineering	2019	____	SBSSTC, Ferozepur	____
Nanoporous oxide surface obtained on	Anil Kumar, MK Kushwha	Materials performance	2019	____	SBSSTC, Ferozepur	____

titanium grade 5 alloy to analyze surface hardness and antiwear character		and characterization				
Tribological behaviour of nanoporous anodic film obtained on titanium grade 5 alloy	Anil Kumar, MK Kushwha	Advanced science engineering and medicine	2019	___	SBSSTC, Ferozepur	___
Anodization Of Titanium Alloy (GRADE-5) And Influence Of Anodic Voltage And Electrolytic Concentration On Morphology And Aesthetic Appearance Of An Oxide Layer.	Anil Kumar and Manoj Kumar Kushwaha	Journal of Emerging Technologies and Innovative Research,India	2019	___	SBSSTC, Ferozepur	___
Improve Tribological Properties of Nanostructured Alumina Templates using chemical synthesis	Ghanshyam Dassan d Manoj Kumar Kushwaha	Annals of Agri Bio Research. hisar, India.	2019	___	SBSSTC, Ferozepur	___
Nanoporous Surface Treatment of Aluminium by Anodization in Oxalic Acid.	Ghanshyam Dassan d Manoj Kumar Kushwaha	Nanoporous Surface Treatment of Aluminium by Anodization in Oxalic Acid.	2019	___	SBSSTC, Ferozepur	___
Combined mild and hard novel fabrication approach for nanoporous membrane.	Gurpreet Singh Walia, Harminder Singh, Jasleen Kaur,· Manoj Kumar Kushwaha, Anupinder Singh. N. S. Saini	Journal of the Brazilian Society of Mechanical Sciences and Engineering	2019	___	SBSSTC, Ferozepur	___
Various Aspects of BioLubricants.	Amit Arora, Sukhjinder Singh Sandhu and Narendra Singh	EM International, Poll Res. 38	2019	___	SBSSTC, Ferozepur	___

Effect of temperature gradient on creep analysis of functionally graded cylinder	Kohli G.S., Singh, Tejeet and Singh, H.	Materials Today	2019	____	SBSSTC, Ferozepur	____
Analysis of steady state creep behavior in spherical vessels made of composite material	Sandhu S.S., Singh, Tejeet and Gupta, V.K.	Materials Today	2019	____	SBSSTC, Ferozepur	____
Effect of Fillers of Various Sizes on Mechanical Characterization of Natural Fibre Polymer Hybrid Composites	Singh H., and Singh, Tejeet	Materials Today	2019	____	SBSSTC, Ferozepur	____
Investigation Occupational Hand Arm vibration exposure among drop forging workers	Bhambari, K., Singh, I., Singh, Tejeet and Singh, H.	A Journal of Composition Theory	2019	____	SBSSTC, Ferozepur	____
Discomfort for Drop forging subjects by Vertical Whole body Vibration	Bhambari, K., Singh, I., Singh, Tejeet and Singh, H.	A Journal of Composition Theory	2019	____	SBSSTC, Ferozepur	____
Effect of Particle Content and Temperature on Steady State Creep in Thick Composite Cylinder	Kohli, G. S., Singh, Tejeet and Singh, H	Lecture Notes in Mechanical Engineering	2019	____	SBSSTC, Ferozepur	____
Removal of pollutants of textile industry by electrocoagulation	Amit Arora, R.K. Kamboj and Ashish Gupta	International Journal of Pollution research	2019	____	SBSSTC, Ferozepur	____
Effect of crumb rubber on compressive strength of concrete	Amit Arora1, Parampreet Kaur2,3*, Munish Kumar4 and Sidhant Chopra5	Eco. Env. & Cons.	2019	____	SBSSTC, Ferozepur	____
A Review on Friction Stir welding of Aluminium Aloys	Yogita Sharma	Proceeding of 6th National Conference on recent advances	2019	____	SBSSTC, Ferozepur	____

		in material Sci. Engg. " RAMSE-2019"				
Review on parametrics studies of laser bean machine process	Yogita Sharma	IJEAM	2019	____	SBSSTC, Ferozepur	____
Invention of cost saving dead body modern cremation	Yogita Sharma	Proceeding of 6th National Conference on ERA 2019	2019	____	SBSSTC, Ferozepur	____
Wear Chracterstics of thermally sprayed nickel coatings	Yogita Sharma	International Journal of Scientific & Technology Research	2019	____	SBSSTC, Ferozepur	____
Regulating Thermal Comfort Using FenestrationnDesign Techniques - Impact of solar Heat Gain	Yogita Sharma	International Journal of Scientific & Technology Research	2019	____	SBSSTC, Ferozepur	____
Traditional Construction Techniques in Himachal Pardesh	Yogita Sharma	International Journal of Scientific & Technology Research-	2019	____	SBSSTC, Ferozepur	____
Biocoal - Quality control and assurance	Amit Arora, Ashish Gupta et al.	Biomass and Bioenergy	2020	____	SBSSTC, Ferozepur	____
Creep Analysis in Thick Composite Cylinder considering Large Strains	Kohli, G. S., Singh, Tejeet and Singh, H	J. of Brazilian Society of Mechanical Science and Engineering	2020	____	SBSSTC, Ferozepur	____
Analysis of Steady State Creep Behaviour in Spherical Vessels Made of Composite Material.	S.Singh Sandhu, T. Singh and V. K. Gupta	Materials Today (SCOPUS, Elsevier)	2020	____	SBSSTC, Ferozepur	____
Assessment of antioxidant potential of Trillium govanianum a critically endangered medicinal plant of	Kundra R, SS Samant, Sharma RK	Proceedings of National Academy of Sciences, India Section B: Biological	2019	____	SBSSTC, Ferozepur	____

		Sciences				
North-western Indian Himalaya		Sciences				
HTC of wet residues of brewing process – comprehensive characterization of produced beer, spent grain and valorized residue	Mateusz Jackowski, Lukasz Niedzwiecki, Magdalena Lech, Mateusz Wnukowski, Amit Arora, Monika Tkaczuk-Serafin, Marcin Baranowski, Krystian Krochmalny, Vivek K. Veetil, PrzemysławSeruga, Anna Trusek, Halina Pawlak-Kruczek	Energies	2020	____	SBSSTC, Ferozepur	____
Biocoal - Quality control and assurance	Halina Pawlak-Kruczek , Amit Arora , Ashish Gupta, Muhammad Azam Saeed , Lukasz Niedzwiecki , Gordon Andrews, HerodotosPhylaktou, Bernard Gibbs, Anna Newlaczyl, Penelope M. Livesey	Biomass and Bioenergy	2020	____	SBSSTC, Ferozepur	____
Hydrates of Binary Guest Mixtures: Fugacity Model Development and Experimental Validation	AnupamaKumari, Shadman Hasan Khan, A. K. Misra, C. B. Majumder, and Amit Arora	Journal of Non-Equilibrium Thermodynamics	2019	____	SBSSTC, Ferozepur	____
A transition of a	Halina Pawlak-	Fuel	2020	____	SBSSTC,	____

domestic boiler from coal to biomass – Emissions from combustion of raw and torrefied Palm Kernel shells (PKS)	Kruczek, Amit Arora, Krzysztof Mościcki, KrystianKroch malny, ShalvinSharmae , Lukasz Niedzwiecki				Ferozepur	
Optical and structural properties of drop-cast PVA/PEG polyblends	Jitender Paul sharma; Praveen Kumar; Kiran Sharma; Manoj Kumar; Amit Arora; Pramod Kumar Singh	Materials Today: Proceedings	2020	⎯⎯	SBSSTC, Ferozepur	⎯⎯
Performance of Nano-Particles In Stabilization Of Soil: A Comprehensive	Amit Arora, Birpal Singh, Parampreet Kaur	Materials Today : Proceeding	2019	⎯⎯	SBSSTC, Ferozepur	⎯⎯
Novel Material i.e. Magnesium Phosphate Cement (Mpc) As Repairing Material In Roads And Buildings	Amit Arora, Birpal Singh, Parampreet Kaur	Materials today Proceeding	2019	⎯⎯	SBSSTC, Ferozepur	⎯⎯
Applications of microbially indulge calcium perception (MICP)	parampreetkaur, varinder singh2 and Amit Arora	Pollution Research	2019	⎯⎯	SBSSTC, Ferozepur	⎯⎯
Role of waste material in the construction concrete	parampreetkaur, varindersinghan d amitarora	Pollution Research	2019	⎯⎯	SBSSTC, Ferozepur	⎯⎯
Treatment of Waste Water Through Electro Coagulation	amitarora, rajwantkaur, amandeepkaur, narendrasinghan d sangeetasharma	Pollution Research	2018	⎯⎯	SBSSTC, Ferozepur	3
Aspects of green-sustainable tribology and its impacts on future product development:	Amit Arora, Shivangand Vinay Saini3	Ecology. Environment & Conservation	2019	⎯⎯	SBSSTC, Ferozepur	⎯⎯

A Review							
Effect of crumb rubber on compressive strength of Concrete	Amit Arora, Parampreet Kaur, Munish Kumarand Sidhant Chopra	Ecology. Environment & Conservation	2019	____		SBSSTC, Ferozepur	____
Various aspects of Biolubricants	amitarora, sukhjindersingh sandhuand narendrasingh	Pollution Research	2019	____		SBSSTC, Ferozepur	____
Removal Of Pollutants Of Textile Industry By Electrocoagulation	amitarora, rajeshkumarkam bojand ashishgupta	Pollution Research	2019	____		SBSSTC, Ferozepur	____
Effect Of Waste Glass Powder On Various Properties Of Concrete	amitarora, parampreetkaur and varindersingh	Pollution Research	2019	____		SBSSTC, Ferozepur	____
Examination Of Combustion Process Of Hard Coal And Predried Lignite Blends	Amit Arora, halinapawlak-kruczek, marcinbaranows ki, marcindebowski , krystiankrochm alny, lukaszniedzwiec kiand jakubmularski	Pollution Research	2019	____		SBSSTC, Ferozepur	____
Assessment Of Annual Effective Dose Due To The Concentration Of Indoor Radon In Bathinda District Of Punjab In India	Amit Arora, RohitMehra, Rajeev Kumar Garg and Anand K. Tyagi	Nature Environment and Pollution Technology	2019	____		SBSSTC, Ferozepur	____
Parametric study of esterification of high free fatty acid rice bran oil using Aluminum doped sulfated zirconia	Rajiv Arora, A P Toor, R K wanchoo	J. Indian Chem. Soc.	2020	____		SBSSTC, Ferozepur	____

Performance of Nano-Paricles In Stabilization Of Soil: A Comprehensive	AmitArora, Birpal Singh, ParampreetKaur	Materials Today : Proceeding	2019	___	SBSSTC, Ferozepur	0.694
Novel Material i.e. Magnesium Phosphate Cement (Mpc) As Repairing Material In Roads And Buildings	AmitArora, Birpal Singh, ParampreetKaur	Materials today Proceeding	2019	___	SBSSTC, Ferozepur	0.694
Applications of microbially indulge calcium perception (MICP)	Parampreet kaur, varinder singh and amit arora	Pollution Research	2019	___	SBSSTC, Ferozepur	___
Role of waste material in the construction concrete	parampreet kaur, varinder singh and amit arora	Pollution Research	2019	___	SBSSTC, Ferozepur	___
Effect Of Waste Glass Powder On Various Properties Of Concrete	Amit arora, parampreet kaur and Varinder singh	Pollution Research	2019	___	SBSSTC, Ferozepur	___

3.4.6 h-index of the Institutional Publications during the year. (based on Scopus/ Web of science)

Title of Paper	Name of the Author	Title of the journal	Year of Publicati on	h-index	Number of citations excluding self citations	Institutional affiliation as mentioned in the publication
E-Had: A Distributed and Collaborative Detection Framework for Early Detection of DDoSattacks	NileshPatil, C. Rama Krishna, Krishan Kumar, Sunny Behal	Elsevier Journal of King Saud University-Computer and Information Sciences	2019	___	3	SBSSTC, Ferozepur
Distributed Denial of Service Attacks: A Threat or Challenge	Jasmeen Kaur Chahal, Abhinav Bhandari, Sunny Behal	Journal of New Review of Information Networking	2019	___	1	SBSSTC, Ferozepur
Novel Approach to Detect DDoS Intrusion from Vehicular Ad hoc Networks	Anil Behal, Sunny Behal	International Journal of Research in Electronics and	2019	___	0	SBSSTC, Ferozepur

		Computer Engineering (IJRECE)				
ACO optimized self-organized tree-based energy balance algorithm for wireless sensor network	Vishal Kumar Arora, Vishal Sharma, Monika Sachdeva	Journal of Ambient Intelligence and Humanized Computing	2019	____	11	SBSSTC, Ferozepur
A distributive,multi-hop,adaptive,tree-based energy-balanced routing approach	Vishal Kumar Arora, Vishal Sharma, Monika Sachdeva	International Journal of Communication Systems	2019	____	3	SBSSTC, Ferozepur
A multiple pheromone ant colony optimization scheme for energy-efficient wireless sensor networks	Vishal Kumar Arora, Vishal Sharma, Monika Sachdeva	Soft computing	2020	____	3	SBSSTC, Ferozepur
A-STBC incorporated Power-efficient Radio over Fibre System	Jaswinder Kaur, Vishal Sharma	Optics Communications	2019-20	2 (Scopus)	**1**	IKGPTU Kapurthala SBSSTC Ferozepur
Regulating Thermal Comfort Using Fenestrationn Design Techniques - Impact of solar Heat Gain	Ar. Sandeep Singh	International Journal of Scientific & Technology	2019	____	_____	SBSSTC, Ferozepur
Traditional Construction Techniques in Himachal Pardesh	Ar. Sandeep Singh	International Journal of Scientific & Technology	2019	____	_____	SBSSTC, Ferozepur
Wear Chracterstics of thermally sprayed nickel coatings	Ar. Sandeep Singh	International Journal of Scientific & Technology	2019	____	_____	SBSSTC, Ferozepur

3.4.7 Faculty participation in Seminars/Conferences and Symposia during the year :

No. of Faculty	International level	National Level	Sate Level	Local Level
Attended Seminars/Workshops	----	54	03	01
Presented Papers	25	11	03	----
Resource Persons	----	12	----	----
3.5 Consultancy				

3.5.1 Revenue generated from consultancy during the year			
Name of the consultant(s) department	Name of the consultancy Project	Consulting/Sponsoring Agency	Revenue generated (in Rs.)
Department of Civil Engineering	Geotechnical Investigations, Material Testing and Structural Design	Various Government, Semi-Government and Private Organizations	Rs. 76,68,061

3.5.2 Revenue generated from Corporate Training by the institution during the year				
Name of the consultant(s) department	Title of Programme	Agency Seeking Training	Revenue generated (in Rs.)	No. of Trainees
ECE	AICTE sponsored National level one week STTP on Virtual Instrumentation in Academia, Research and Industry(VIARI-2019) (8th July-13th July 2019)	State Technical institutes and administration office	51000/- (Approx)	40

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 co-ordinated in such activities	Number of students participate in such activities
Blood Donation Camp	Red Cross Club	02	05
Swachhta Pakhwada	NSS, RRC, EFG	2	50
Tree plantation Camp	NSS, EFG, RRC	4	50
Punjab State Youth Festival	NSS, SECA, RRC, Youth Services Department	4	65
Drawing , Poster making & Declamation competition & advocacy meeting	NSS, RRC, Youth Services Department	6	80
Vigilance Awareness Day	NSS, Vigilance bureau, SECA	6	150
Moral Education Test &	NSS, RRC, Youth Services	6	100

Seminar on Sri Guru Nanak Dev ji	Department, GGS Study circle		
National voter Day (Declamation & Debate Contest	NSS, RRC, Youth Services Department, SVEEP	4	30
Blood Donation Camp	NSS, RRC, Youth Services Department	6	90
Hiking & Tracking camp	NSS, RRC, Youth Services Department	2	18
Blood Donation Camp	Red Cross Club	02	05
Blood Donation Camp	Red Cross Club	02	05
RUN FOR FUN National Integration Day (Sardar Patel Birthday) (2019)	13 Pb Bn. NCC Ferozepur	9 ANO of Battallion	150
Chemospark	CHESS	2	100
Industrial tour at NFL, Nangal	CHESS	2	18

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
Punjab state youth festival at Chandigarh University, Gharuan (30-31 January, 2020)	Appreciation certificate	Chandigarh University Gharuan	03
Cultural Activities, Blood Donation and Drug de addiction campaign for the year 2019-20	Appreciation certificate on Republic Day 26th January 2020	Minister of Technical Education and Industrial Training, Government of Punjab (District Administration, Ferozepur)	----
Technical Event	ISCE NIRMAAN 2K19	SBSSTC,FEROZEPUR	36
Cultural Activities, Blood Donation and Drug de addiction campaign for the year	Appreciation certificate	Minister of Technical Education and Industrial Training, Government of Punjab	----

2019-20 on Republic Day 26th Jan. 2020.			
International Conference on Advanced Materials, Energy & Environmental Sustainability (ICAMEES -2018), University of Petroleum and Energy Studies (UPES), Dehradun, India-14th – 15th December- 2018.	Certificate of Appreciation	International Conference on Advanced Materials, Energy & Environmental Sustainability (ICAMEES - 2018), University of Petroleum and Energy Studies (UPES), Dehradun, India	----
Cultural Activities, Blood Donation and Drug de addiction campaign for the year 2019-20	Dr. Amit Arora, Associate Professor	Minister of Technical Education and Industrial Training, Government of Punjab	Appreciation certificate in the field of Cultural Activities, Blood Donation and Drug de addiction campaign for the year 2019-20 on Republic Day 26th Jan. 2020.

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 co-ordinated such activities	Number of students participated in such Activities
Swachh Bharat Abhiyan	SBSSTC, Ferozepur	Cleanliness of Institute	02	32
Swachh Bharat abhiyaan rally 2017	5 PB Girls BN NCC Moga	Swachh Bharat abhiyaan rally 2017	1 ANOs	35

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
ECE Post Doctoral	Dr Vishal Sharma	European Union	2 years

Fellowship		sponsored fellowship	
Joint M.S. thesis with Poland	4 participants with Dr. Amit Arora	Self	365
Research Publication with Poland, UK, China etc.	15participants with Dr. Amit Arora	Self	365

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 Linkage	Name of the partnering institution/ industry/research lab with contact details	Duration (From-to)	Participant
Use of laboratory facilities for Post Doctorate research facility	Post doctoral fellowship	Aston university, UK	18.9.2019 (two years)	Dr Vishal Sharma
Use of laboratory OPTISYS software for thesis work	Ph.D. thesis work	Punjabi University, Patiala	2019-20	Aruna Rani
Institution Linkage	Research Paper	Aston institute of Photonics technologies (AiPT), Aston University, Birmingham, UK	28/01/2020	Dr Vishal Sharma Jaswinder Kaur
Institution Linkage	Research Paper	Division of Computational Physics, Institute for Computational Science, Ton Duc Thang University, Ho Chi Minh City, Vietnam	11/02/2020	Amit Grover
Institution Linkage	Research Paper	Division of Computational Physics, Institute for Computational Science, Ton Duc Thang University, Ho Chi Minh City, Vietnam	25/02/2020	Amit Grover
Institution Linkage	Research Paper	Division of Computational Physics, Institute for Computational Science, Ton Duc Thang University, Ho Chi Minh City, Vietnam	24/01/2020	Amit Grover

3.7.3 MoUs signed with institutions of national, international importance, other institutions, industries, corporate houses etc. during the year

Organization	Date of MoU signed	Purpose and Activates	Number of students/teachers participated under MoUs

| Infosys | 03/06/2016 to 02/06/2020 | Campus Connect Program to impart Industry oriented subjects in the curriculum | Teachers - 08 |
| SBSSTC AND IIT ROPAR | 21/07/2020 | To upgrade this institute to an institute of national importance | 02 |

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. 70.00 Lacs	Rs. 13.43 Lacs (boys hostel)

4.1.2 Details of augmentation in infrastructure facilities during the year

Facilities	Existing	Newly added
Campus area	98.4 Acre	---
Classrooms	77	---
Laboratories	94	---
Seminar Halls	05	---
Classrooms with LCD facilities	40	18
Classrooms with Wi-Fi/ LAN	77	---
Seminar halls with ICT facilities	01	01
Video Centre	01	---
No. of important equipments purchased ($\geq$ 1-0 lakh) during the	59	02
current year.	51947621/-	465894/-
Value of the equipment purchased during the year (Rs. InLakhs)	98.4 Acre	---
Others	---	---

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
KOHA	Fully	18.05.05.000	2019-20

4.2.1 Library Services:

	Existing		Newly added		Total	
	No.	Value	No.	Value	No.	Value
Text Books	30800	3240642	1200	745	32000	3241387
Reference Books	3490	___	___	___	___	___
e-Books	EBSCO16000	257900	___	___	___	___
Journals	54	___	___	___	___	___
e-Journals	1600	150260	___	___	___	___
Digital Database	02	___	___	___	___	___
CD & Video	448	___	___	___	___	___
Library automation	Yes					
Weeding (Hard & Soft)	___	___	___	___	___	___
Others (specify)	___	___	___	___	___	___

4.2.2 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 Syystem (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 Up gradation (overall)

	Total Computers	Computer Labs	Internet	Browsing Centres	Computer Centres	Office	Depart ments	Available band width (MBPS)	Oth ers

Existing	100	04	02	100	1	3	9	1024 MBPS	
Added	—	——	——	——	——	——	-——	——	——
Total	100	04	02	100	1	3	09	1024 MBPS	

4.3.2 B*andwidth available of internet connection in the Institution (Leased line)*

1 GBPS (1024 MBPS)

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
——	——

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
Rs.14.00 Lacs	Rs.1.77 Lacs	Rs.30.00 Lacs	Rs.28.45 Lacs

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)

Maintaining and utilizing physical, academic and support facilities -laboratory, library, sports complex, computers, classrooms carried out by the following committees/Offices:

- Grievance Committee
- Anti Ragging Committee
- Discipline Committee
- Institutional Development Committee
- Student Affairs/Welfare Committee
- Library Committee
- Anti Sexual Harassment Committee
- Public Relation Department
- Public Information Cell
- Legal Cell 11) Estate Office

CRITERION V - STUDENT SUPPORT AND PROGRESSION

5.1 Student Support

	5.1.1 Scholarships and Financial Support		
	Name/Title of the scheme	Number of Student	Amount of Rupee
Financial support from institution	Student Exigency Fund(SEF)	6	1,75,188
	Student Aid Fund(SAF)	7	18,000
Financial support from other sources			
National	PMSS Scholarship	225	1,62,76750
	J&K Scholarship	6	4,89,000
	E-Kalyan Welfare Deptt., Govt. of Jharkhand	13	780000(Appx.)
	UP Govt. Scholarship	68	4080000(Appx.)
	Bihar Govt.Scholarship	----	----
International	----	----	----

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
Yoga Practice	01/08/2019 to 14/08/2019	50	Bharti Yoga Sansthan, Ferozepur
English	15/07/2019	105	SBSSTC Ferozepur
English Lab	15/07/2019	105	SBSSTC Ferozepur

Mentoring & Professional Development	15/07/2019	105	SBSSTC Ferozepur
Philosophy	01/01/2020	105	SBSSTC Ferozepur
Human Values	15/07/2019	105	SBSSTC Ferozepur
Environmental Science	15/07/2019	105	SBSSTC Ferozepur
English	15/07/2019	16	SBSSTC Ferozepur
English Lab	15/07/2019	16	SBSSTC Ferozepur
Mentoring & Professional Development	15/07/2019	28	SBSSTC Ferozepur
Professional Skills-III	01/01/2020	39	SBSSTC Ferozepur
Professional Skills-IV	15/07/2019	39	SBSSTC Ferozepur
Soft Skill development	15/07/2019	90	Central agency at institute level(Abhishek)

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 examination	Number of benefited students by Career Counselling activities	Number of students who have passed in the competitive exam	Number of students placed
2019-20	Career Counselling	___	23	____	12
2019-20	GATE COACHING	43	-	4	6

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
1	1	11

5.2 Student Progression			
5.2.1 Details of campus placement during the year			
On campus			Off Campus
Name of Organizations Visited	Number of Students participated	Number of Students Placed	
Aditya Birla Capital, Faridkot	15	1	____
Baba Autos	5	1	____
Bharti Axa Life Insurance	8	2	____
Byju's	3	1	____
Ceasefire	13	1	____
Cognixia	72	11	____
Cognizant	49	19	____
Devi Techno Solutions, Ferozepur	35	14	____
HCL Technologies	3	2	____
Infosys Ltd.	62	18	____
Lido Learning	61	1	____
Mechlin Software Technology Pvt. Ltd.	29	5	____
NIIT Technologies	20	3	____
Scope Telecom	5	1	____
TCS	36	9	____
Tele performance	7	1	____
Ubxty Unboxing Technology	33	13	____
Wipro Elite	57	10	____
Centrient Pharmaceuticals Ltd., Ropar	43	4	____
Total	556	117	____
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
2019-20	01	B.Tech.	EE	Kurukshetra Univ-1	M.Tech
2019-20	03	B.Tech.	CE	NIT,Jalandhar	M.Tech.
2019-20	02	BCA	BCA	SBSSTC, Ferozepur	MCA
2019-20	01	B.Tech.	CHE	NIT Jalandhar	M.Tech

5.2.3Students 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	___	___
SET	___	___
SLET	___	___
GATE	02	CS20S68018316 CS20S68018122
GMAT	___	___
CAT	___	___
GRE	___	___
TOFEL	___	___
Civil Services	___	___
State Government Services	01	___-
Any Other	___	___

5.2.4 Sports and cultural activities / competitions organised at the institution level during the year

Activity	Level	Participants
Smart Hack Programming Quiz in collaboration with	Institutional	256

EICT Academy & IIT Kanpur(11/02/2020)			
Compuware Departmental function(19/2/2020, 20/2/2020)	Institutional		100
Aagman 2019	Institutional		300
Dance Competition (EBSB)	Institutional		10
Zonal Youth Festival	University		50
Inter Zonal Youth Festival	University		25
Annual Athletic Meet /Inter Year College Tournament Cricket Football Table Tennis Basket Boll Volley Boll Chess Lawn Tennis Hockey	Institutional		332

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
2019-20	IstPosition at PTU, Jalandhar Inter zonal	University Level	____	Essay Writing	170280141 BTECH CSE	Raghav Watts

	Youth Festival					
2019-20	2ⁿᵈ Position at PTU, Jalandhar Inter zonal Youth Festival	University Level	____	Folk Song	1809209 BTECH CSE	Ribka
2019-20	2ⁿᵈ Position at PTU, Jalandhar Inter zonal Youth Festival	University Level	____	Cartooning	170280116 BTECH CSE	KartikPal
2019-20	Bronze Medal	University Level	Triple Jump	____	170280117 BTECH CSE	Lakhvir Kaur
2019-20	Bronze Medal	University Level	Long Jump	____	170280117 BTECH CSE	LakhvirKaur

5.3.2 Activity of Student Council & representation of students on academic & administrative bodies/committees of the institution (maximum 500 words)

Students are actively participating in the committee of equal opportunity cell to take care the day-to-day needs of differently abled persons. Further, students are also part of anti-ragging committee for the prevention of ragging in the campus. Students Grievance redressal committee is also functioning properly the campus for addressing and effectively resolving grievances of students and in this committee also, one the member is from student committee. Every year College annual athlete meet is held in the month of February / March for B.tech, Diploma, BCA, MBA Students including Events namely : 100m, 200m, 400m, 800m, 1500m, 5000m, race, Long jump, High jump, Discuss through, Javelin through, Shot put and tug of war etc..

5.4 Alumni Engagement

5.4.1 Whether the institution has registered Alumni Association? Yes/No, if yes give details (maximum 500 words): Yes, The Alumni Association was registered under Registration No. FZR3585 on dated 08/10/20019

- The college holds Alumni Meet of the passed out students annually.
- Department-wise Online Alumni Surveys are conducted for the passed out batches.
- A number of Groups on the Social Websites like Facebook [sbscet alumni page] etc. are used to disseminate the information to the Alumni.
- Alumni Registration is done through one online form published on college website www.sbsstc.ac.inand one LinkedIn account

5.4.2 No. of registered Alumni:

550 till date on web portal, 700 on LinkedIn

5.4.3 Alumni contribution during the year (in Rupees)**:**

‒‒‒‒

5.4.4 Meetings/activities organized by Alumni Association**:**

Sr No	Name of Alumni	Branch	Batch	Topic	Date
1	Ms. Disha Kohli	CSE	2004-2008	How to prepare yourself for the IT Industry	06/03/2019
2	Mr. Chandan Prashar	CSE	2002-2006	Entrepreneurship Skills and Recent Trends in IT	20/03/2019
3	Mr. Sudeep Saxena	CSE	2011-2015	Opportunities in IT	19/08/2019

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)
The college believes in decentralized governance and Participative management. Teaching and nonteaching staff members share the administrative responsibility of the college and contribute in smooth working of administrative machinery. 1) All of the class rooms are under CCTV. 2) Associate Director monitor the engagement of classes through CCTV
6.1.2 Does the institution have a Management Information System (MIS)?
Partial
6.2 Strategy Development and Deployment
6.2.1 Quality improvement strategies adopted by the institution for each of the following (with in 100 words each):
• Curriculum Development:- 1) The syllabi of each department have been updated to meet the requirements of the industry and under consultation with the stakeholders. **2)** The curriculum is strengthened through workshops and brainstorming sessions on developing research embedded syllabi to make students globally mobile and socially useful. 3) An emphasis has been laid on providing the students flexibility in their learning by including a host of elective options to ensure that the student develops as a better professional, having wider exposure. 4) Certain aptitude development courses have been introduced particularly for final year student.
• Teaching and Learning:- 1) Modular course structure with provisions to address the problems of slow learners by arranging remedial classes. 2) Online Courseware, Webinars, Video lectures and intensive laboratory training. 3) Wide choice of elective courses Inclusion of e-books, courseware, tutorial modules for each course. 4) Modernization of labs to accommodate the latest trends in technical education. 5) The institute is organizing an orientation programmes for the freshers in the institution and department level. 6) Provisions of Mentoring, tutoring, counselling and remedial classes to address the problems of slow learners 7) The faculty members are guided to use presentations and videos for better learning experience of students.
• Examination and Evaluation :- 1) Comprehensive continuous mode of internal Assessment Monitoring is done through DQAC and IQAC. 2) The question papers are in accordance with the Course outcomes defined in curriculum of each course which in turn are mapped with Programme outcomes. 3) The question papers for end-semester examinations will be in accordance with the Course outcomes defined in curriculum of each course which in turn are mapped with Programme outcomes. 4) The question papers are in accordance with the Course outcomes defined in curriculum of each course which in turn are mapped with Programme outcomes. 5) Research and Development:

1) In its efforts to train, motivate and reward faculty, the institution encourages members to attend courses/conferences/workshops/seminars/training programmes, etc, by providing a research grant of Rs. 50,000/- per year for each faculty member for such activities.
2) Research oriented books, journals and e-journals have been available in the Central and deprtmenatl libraries.
3) The regular faculty members of the institute have been provided with the laptop and PC in their office for enhancement of research related activities.
4) Each department has its own computer laboratory equipped with software for the research purpose apart from other laboratories.

- Library, ICT and Physical Infrastructure / Instrumentation:
1) The Central library is amultimedia Enabled Digital Library with large number of ebooks, ejournals and other online course material equipped with 10 computers, two laser printers and soul software. .
2) The Central library has ICT and Physical Infrastructure / Instrumentation, Barcode / RF Enabled Circulation and Surveillance in its premises.
3) Institute has ICT Enabled classrooms
4) The Computer centre has a number of working environments & Packages; Windows, Matlab, Statistica, Mathematica etc
5) Campus wide networking through Optical Fibre Backbone Reading Rooms in Central Library and various hostels.

- Human Resource Management:-
1) Separate Establishment Branch for maintaining record, performance appraisal etc of available human resource Grievance redressal mechanism in place for faculty, staff, students,
2) Transportation facility for faculty staffs and students.
3) Reimbursement of TA/DA for official travel, attending conference , seminar, or any special training.
4) On campus health centre with ambulance.

- Industry Interaction / Collaboration :
1) The Cell involves Guest Lectures, Interactive Workshops, Conferences, Seminars, Brain Storming Sessions and Technical Discussions etc. with members of the Industry, outside experts, eminent personalities at regular interval are organised at regular intervals.
2) This Cell facilitates closer interaction between the academic and Industrial fields and also provides closer links with industries.
3) Institute has signed Memorandum of Understanding (MoU) with following industries for the purpose of enriching the technical education process:
   Infosys Ltd
   Metro Tyres Ltd., Ludhaiana
   CETPA Infotech Pvt Ltd., Noida
   P.P. Industries Pvt Ltd., Bathinda
   Itenic Technology Pvt Ltd., Noida.

- Admission of Students :-

The admission process is highly transparent. Rules and regulations of the affiliated University IKGPTU, Kapurthala are strictly adhered to. Admissions are through Centralized counselling conducted by the University. The vacant seats are then advertised and filled purely on merit basis. Candidates are required to fill the online Registration form. Each application is processed and verified. The college strictly follows the reservation policies of IKG PTU and Punjab State for admissions.

6.2.2 : Implementation of e-governance in areas of operations:

- Planning and Development:-Student data management, Timetable, attendance modules are working.
- Administration:- Employee data management, Biometric attendance, Leave Management, and Payroll Modules are working
- Finance and Accounts:- Fee Management, Receipt and Payments modules are working.
- Student Admission and Support :- Student admission is through centralized Online counselling conducted by the affiliating University
- Examination:- Examination department is completely computerized. Results are displayed Online individually in the Login of student. Exam form filling, Conduct of exam, Declaration of Result modules are working.

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
____	____	____	____	____

6.3.2 Number of professional development / administrative training programmes organized by the Colleges 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	Dates (from-to)	No. of participants (Teaching staff)	No. of participants (Non-teaching staff)
2019-20	Big data Analytics using machine Learning Techniques	____	09/12/2019 to 20/12/2019	105	____
2019-20	AICTE sponsored one week STTP on Virtual Instrumentation in Academia, Research and Industry(VIARI-	____	08/07/2019 to 13/07/2019	105	____

2019-20	AICTE Sponsored STTP on "Mathematical Methods and Computations in Engineering (MMCE-2019)",	____	01/07/2019 to 06/07/2019	106	____
2019-20	Workshop On Energy Conservation	____	18/12/2019	50	____
2019-20	FDP on "Emerging Materials : Characterization and Applications	____	17/02/2020 to 21/02/2020	07	____
2019-20	Virtual Instrumentation in Academics, Research and Industry	____	08/07/2019 13/07 2019	02	____

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	Date and Duration (from – to)
Mathematical methods and computations in Engineering (MMCE-2019)	26	01/7/2019 to 06/07/2019
Virtual Instrumentation in Academics, Research and Industry	23	08/07/2019 to 13/07/19
AICTE Sponsored FDP on " Big Data Analytics using AI Machine Learning techniques	36	09/12/2019 to 20/12/2019
AICTE sponsored one week STTP on Emerging Materials: Characterization and Applications organized at SBSSTC	17	17/02/2020 to 21/02/2020
STC ON Design Challenges in Low Power VLSI Design	01	16/12/2019 to 20/12/2019
One day District level Workshop on "Energy Efficient Building Materials" organized by	02	17/01/2019

School of Architecture, SBSSTC, Ferozepur		
AICTE sponsored 1 week STTP on "Virtual Instrumentation in Academics, Research and Industry" organized by Dept. of Electronics Engg., SBSSTC, Ferozepur	02	08/07/2019 to 06/07/2019

6.3.4   Faculty and Staff recruitment (no. for permanent recruitment):

Teaching		Non-teaching	
Permanent	Fulltime	Permanent	Fulltime
64	64	119	119

6.3.5 Welfare schemes for

Teaching	2
Non teaching	2
Students	6

6.4 Financial Management and Resource Mobilization

6.4.1 Institution conducts internal and external financial audits regularly (with in 100 words each)

The institute external financial audit is done by Punjab Government Accountant General office and internal audit is done by internal Audit Committee

6.4.2 Funds / Grants received from management, non-government bodies, individuals, philanthropies during the year(not covered in Criterion III)

Name of the non government funding agencies/ individuals	Funds/ Grants received in Rs.	Purpose
___	___	___

6.4.2 Total corpus fund generated   05 Crore

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	Yes	PTU Jalandhar	Yes	IQAC
Administrative	Yes	Punjab Govt./External CA	Yes	Internal Various Committee

6.5.2 Activities and support from the Parent – Teacher Association (at least three)

The PTA also aims at enhancing the interaction among the various stakeholders. Providing valuable suggestion for development of the institution Pointing out the weaknesses of the college & related Departments and suggesting rectification. Communicating views which the students feel shy to communicate directly to the teachers about the college and the department.	

6.5.3 Development programmes for support staff (at least three)

1.Computer Training
2.Yoga training & stress management
3.Soft skill training

6.5.4 Post Accreditation initiative(s) (mention at least three)

1. Various batches of alumni have been contacted for strengthening the alumni contribution.
2. Up gradation of present syllabus to suit the need of employability through board of studies is sought.
3. Planning is underway to adopt nearby villages to enhance water conservation, social upliftment etc.

6.5.5

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)   Yes

6.5.6 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
2019-20	Promote Paperless Communication	24/01/2020	One day	150
2019-20	Modified Students Feedback performa	24/01/2020	One day	1223
2019-20	Regular Meeting of IQAC	24/01/2020	One day	1200

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
Celebration of International Women's Day	8 March 2020	33	48

7.1.2 Environmental Consciousness and Sustainability/Alternate Energy initiatives such as:
Percentage of power requirement of the College met by the renewable energy sources

A meeting related to installation of solar power panels was held on 15/02/2019 with the officials of Punjab energy development authority, Chandigarh. The proposal was to install the solar panels in all the state. Further communication is this process is awaited

7.1.3 Differently abled (Divyangjan) friendliness

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

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	4	4	06/12/2019	Blood Donation ,	Blood Donation,	80
2020	4	4	25/01/2020,	SVEEP Voter Education	Voter awareness	55

2019	4	4	18/11/2019	Entrepreneurship,	Training on Java Technologies,	50
2020	4	4	03/03/2020	Cultural Exchange Programme	Quiz on Andhra Pardesh under EBSB	20

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)
–––	–––	–––

7.1.6 Activities conducted for promotion of universal Values and Ethics

Activity	Duration (from-------to-------)	Number of participants
Seminar on Vigilance Awareness by Vigilance Department, Government of Punjab.	30/10/2019	150
Organized essay writing competition for 550th birth anniversary of Guru Nanak Devji	06/11/2019	92
Organized Camp under Swachh Bharat Abhyian	02/10/2019	35
Punajab State Youth Festival	29/01/2020 to 31/01/2020	65
Inter State Tour	01/06/2019 to 12/01/2020	50
Seminar on Teachings of Shri Guru Nanak Devji.	18/10/2019	100
Drawing, Painting and Slogan Writing Competition on Blood Donation and Drug Deaadiction	22/10/2019 & 22/01/2020	80
Seminar on Drug deaadiction and AIDS Awareness	18/02/2020	54
Hiking and Trekking camp at Manali	25/02/2019 to 06/03/2020	20
Workshop on Energy Conservation	18/12/2019	84

7.1.7 Initiatives taken by the institution to make the campus eco-friendly (at least five)

1	Tree Plantation on Regular Basis.
2	Swatch Bharat Abhiyan is going on .
3.	Painting Competition on environment conservation on regular basis.
4.	Seminar on Environmental Conservation on regular Basis.
5.	SwachhataPakhwadato clean campus for 15 days is going on regular basis.

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

1. The institute is using computerized modules for managing activities related to Academics, Finance And Accounts and Grievances of students
   https://forms.eduqfix.com/sbsstconlineform/add
   https://sbsstc.edugrievance.com/

2. The institute has automated Exam And Grading module for Exam form filling, Conduct of exam and Declaration of Result
   http://10.11.11.11 (MySBSExam intranet website)
3. Institute has fully computerized Library through Koha Library Module

7.3 Institutional Distinctiveness

Provide the details of the performance of the institution in one area distinctive to its vision, priority and thrust:-

- Education Quality Improvement through Propagation of Outcome Based Education (OBE) as advocated by NBA

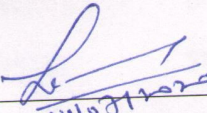Provide the weblink :- http://10.11.11.11 (MySBSExam intranet website)

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

The following are the future plans for the forthcoming Academic year 2020-21:
- To carry out examination & evaluation reform initiated by IKGPTU.
- Exploration of opportunities for collaborative research with leading institutions/organizations like IIT Ropar.
- Plagiarism check for Project & Assignment submissions.
- Computer Training of the office staff sothat they are able to efficiently handle the automation of the online administrative work.
- To initiate Career Guidance and Counselling programme for students.
- Infuse social compatibility and inculcate civic sense and core values of life through various activities to be initiated by the clubs& departmental societies.
- GATE Coaching classes for students.
- Providing quality based higher education to rural and backward students.
- To use the educational and physical resources available within the institution for the creation of the skilled,disciplined, educated and rational society of high moral standards.
- To inculcate social, national and human values in young generation through education and thereby contribute to the nation.
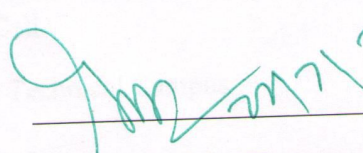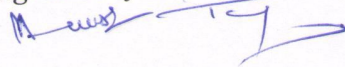
Name Dr. Lalit Sharma

14/03/2020

Signature of the Coordinator, IQAC

Name Dr. T. S. Sidhu

Signature of the Chairperson, IQAC

***

Abbreviations:

IQAC	-	Internal Quality Assurance Cell
SBSSTC	-	Shaheed Bhagat Singh State Technical Campus
CBCS	-	Choice Based Credit System
OBE	-	Outcome Based Education
NBA	-	National Board of Accreditation
ERP	-	Enterprise Resource planning
UG	-	Under Graduate
PG	-	Post Graduate
B.Tech	-	Bachelor of Technology
M.Tech	-	Master of Technology
B.Arch	-	Bachelor of Architecture
CSE	-	Computer Science and Engineering
ECE	-	Electronics and Communication Engineering
CE	-	Civil Engineering
EE	-	Electrical Engineering
CHE	-	Chemical Engineering
ME	-	Mechanical Engineering
CA	-	Computer Application
MBA	-	Master of Business Administration
MCA	-	Master of Computer Application
PGDCA	-	Post Graduate Diploma in Computer Application
B.Sc (IT)	-	Bachelor of Science in Information Technology
MHRD	-	Ministry Human Resource Development

TEQIP	-	Technical Education Quality Improvement Programme
ANO	-	Associate NCC officer
MoU	-	Memorandum of Understanding
GATE	-	Graduate Aptitude Test
CCTV	-	Closed-circuit television
FDP	-	Faculty Development Programme
DASH	-	Department of Applied Sciences

_____***_____