

AQAR 2019

ANNUAL REPORT

Approved by NAAC



Compiled by -

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On behalf of IQAC

St. Edmund's College

Shillong



ACKNOWLEDGEMENT

The IQAC, St. Edmund's College gratefully acknowledges the efforts of all the contributors who are responsible for the successful publication of AQAR 2019.

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ST. EDMUND'S COLLEGE

stedmundscollege@gmail.com

AISHE Id: C-16330

Higher Education Institution

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Manage DVV

Manage Assessment

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SI NO	HEI Name	AISHE ID	Academic Year	Submitted Date	Status	Cycle No	Action
1	ST. EDMUND'S COLLEGE	C-16330	2019-2020	26-12-2020	Accepted	3	<div>AQAR Review Details</div> <div>HTML Report</div> <div>PDF Report</div>
2	ST. EDMUND'S COLLEGE	C-16330	2018-2019	30-10-2020	Accepted	3	<div>AQAR Review Details</div> <div>HTML Report</div> <div>PDF Report</div>

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Yearly Status Report - 2019-2020

Part A	
Data of the Institution	
1. Name of the Institution	ST. EDMUND'S COLLEGE
Name of the head of the Institution	SYLVANUS LAMARE
Designation	Principal
Does the Institution function from own campus	Yes
Phone no/Alternate Phone no.	0364-2224533
Mobile no.	9862432280
Registered Email	stedmundscollege@gmail.com
Alternate Email	slamare@rediffmail.com
Address	Old Jowai Road, P. O Laitumkhrah
City/Town	SHILLONG
State/UT	Meghalaya
Pincode	793003
2. Institutional Status	

Affiliated / Constituent	Affiliated																														
Type of Institution	Co-education																														
Location	Urban																														
Financial Status	Self financed and grant-in-aid																														
Name of the IQAC co-ordinator/Director	Dr (Br) Simon Coelho																														
Phone no/Alternate Phone no.	03642507373																														
Mobile no.	9748211664																														
Registered Email	stedmundscollege@gmail.com																														
Alternate Email	sec20iqac@gmail.com																														
3. Website Address																															
Web-link of the AQAR: (Previous Academic Year)	https://sec.edu.in/iqacagar/AQAR_2018-19%20(Submitted).pdf																														
4. Whether Academic Calendar prepared during the year	Yes																														
if yes,whether it is uploaded in the institutional website: Weblink :	https://sec.edu.in/iqacdocs/Planner_2019.pdf																														
5. Accrediation Details																															
<table border="1"> <thead> <tr> <th rowspan="2">Cycle</th> <th rowspan="2">Grade</th> <th rowspan="2">CGPA</th> <th rowspan="2">Year of Accrediation</th> <th colspan="2">Validity</th> </tr> <tr> <th>Period From</th> <th>Period To</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>A</td> <td>87.5</td> <td>2004</td> <td>08-Jan-2004</td> <td>07-Jan-2009</td> </tr> <tr> <td>2</td> <td>A</td> <td>3.08</td> <td>2009</td> <td>31-Dec-2009</td> <td>30-Dec-2014</td> </tr> <tr> <td>3</td> <td>B++</td> <td>2.9</td> <td>2019</td> <td>28-Mar-2019</td> <td>27-Mar-2024</td> </tr> </tbody> </table>						Cycle	Grade	CGPA	Year of Accrediation	Validity		Period From	Period To	1	A	87.5	2004	08-Jan-2004	07-Jan-2009	2	A	3.08	2009	31-Dec-2009	30-Dec-2014	3	B++	2.9	2019	28-Mar-2019	27-Mar-2024
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3	B++	2.9	2019	28-Mar-2019	27-Mar-2024																										
6. Date of Establishment of IQAC	10-Jun-2004																														
7. Internal Quality Assurance System																															
<table border="1"> <thead> <tr> <th colspan="3">Quality initiatives by IQAC during the year for promoting quality culture</th> </tr> <tr> <th>Item /Title of the quality initiative by IQAC</th> <th>Date & Duration</th> <th>Number of participants/ beneficiaries</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>						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																				
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Participation in Institutional Swachhta Initiatives	05-Jun-2019 1	215
Science Mela	08-Mar-2019 2	1366
Regular Seminars, Workshops, Certificate & Value added courses.	12-Jun-2019 27	1350
Bioskill & Entrepreneurship programme	26-Mar-2019 2	64
Capacity Building programmes for Science Schools/Teachers (In-house/Outreach)	08-Aug-2019 14	260
View File		

8. Provide the list of funds 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
Ten Science Departments	STAR College	DBT	2009 4380	16800000
Biotechnology Department	BTISNet	DBT	2008 4745	9100000
Biotechnology Department	Advanced Level Biotech Hub	DBT	2011 3650	7800000
Dr E Kharshiing (Botany)	R & D	DST	2017 730	5100000
Dr E Kharshiing (Botany)	R & D	NECBH-IITG	2018 365	1590000
Dr H Medhi (Electronics)	R & D	NEC	2018 365	1560000
Dr E Kharshiing (Botany)	R & D	DST	2019 1095	4391120
Dr James Wahlang (Biochemistry)	R & D	DST	2018 1825	3000000
View File				

9. Whether composition of IQAC as per latest NAAC guidelines:	Yes
Upload latest notification of formation of IQAC	View File
10. Number of IQAC meetings held during the year :	3

The minutes of IQAC meeting and compliances to the decisions have been uploaded on the institutional website	Yes
Upload the minutes of meeting and action taken report	View File
11. Whether IQAC received funding from any of the funding agency to support its activities during the year?	No
12. Significant contributions made by IQAC during the current year(maximum five bullets)	
<p>1. Introduction of E management service for payment gateways, online admission, accounting, attendance, results using a common platform. 2. Establishment of INCUBATION CENTRE at Mawjrong, East Khasi Hills, Meghalaya for Skill based Initiatives. 3. Mentorship role in Waste Management, Water harvesting, energy conservation and vermi compost pit within the campus and outside. 4. Students initiated research activities using the central Sponsored funding that led to Publications in Peer reviewed Journals. 5. Submission of Draft Genome sequence of Cyanobacteria Anabaena YBS001 culture isolated from Coal mining areas of Jaintia Hills, Meghalaya using NGS to the Gene Bank (National Centre of Biotechnology, NCBI) and accordingly received the IMG MER ID 2883409860. The major findings of the research have been communicated in Peer reviewed journal. 6. Participated in DBT STAR Status/College Scheme at Pondicherry University as Invitee Presented the overall progress report of 10 science departments, awarded A Grade.</p>	
No Files Uploaded !!!	
13. Plan of action chalked out by the IQAC in the beginning of the academic year towards Quality Enhancement and outcome achieved by the end of the academic year	
Plan of Action	Achievements/Outcomes
Setting of Grievance cell, Discipline Committee, Eco Club, Science Club through well coordinated student - teacher interactions and ideas.	Students are involved in different committees and their suggestions are taken for effective coordination between all the stakeholders.
Designated site for Bio waste disposal and a SOP for e-waste management	A suitable site has been identified for proper disposal of Biowaste taking all necessary safety norms as per prescribed regulation of NGT, New Delhi. Similarly adequate steps are in place to handle e-waste as per Local Pollution Control Board directives.
Appointment of Vice Principal for the College	Appointed by the Governing Body of the College as part of decentralisation of Administrative powers.
Appointment of Dean Self Finance Courses	Appointed by the Governing Body of the College, as a part of Administrative reforms.
Shifting of Commerce, Social Work (UG), and BCA departments to new location.	The following has been complied with and redistribution of

	classrooms/lecture rooms for Humanities & Science Courses are carried out.				
Establishment of new AV room and Board room.	A new AV room at the ground floor of the main building is being renovated having all ICT enabled tools. Similarly, a Board room of sitting capacity of around ten persons are in place having all modern facilities.				
Establishment of Team to operationalise the Swachhata Initiatives and water management in the campus.	The initiatives taken such as waste management, water harvesting, facility of potable drinking water, cleanliness and adopt a TREE concept has been appreciated by MGNCRE of Ministry of Education, Govt. of India. The college is being recognised as EXEMPLARY PERFORMERS and designated as MENTOR Institution.				
No Files Uploaded !!!					
14. Whether AQAR was placed before statutory body ?	Yes				
<table border="1"> <tr> <td>Name of Statutory Body</td><td>Meeting Date</td></tr> <tr> <td>Governing Body</td><td>05-Dec-2020</td></tr> </table>	Name of Statutory Body	Meeting Date	Governing Body	05-Dec-2020	
Name of Statutory Body	Meeting Date				
Governing Body	05-Dec-2020				
15. Whether NAAC/or any other accredited body(s) visited IQAC or interacted with it to assess the functioning ?	No				
16. Whether institutional data submitted to AISHE:	Yes				
Year of Submission	2020				
Date of Submission	05-Mar-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)	St. Edmund's College uses a Management Information System (MIS) that is designed and supported by Linways Technologies Pvt. Ltd, with its Head Office in Kochi, Kerala. It is designed precisely for Higher Educational Institutions. It is a MIS that is very user friendly and has a support team that is quick to respond to modifications as and when needed as to be tailor made for requirements of the College. Some of the Modules that are currently operational are: 1)				

Scheduling of Timetable that is flexible, with a provision for having parallel sessions. 2) Uploading of relevant documents pertaining to Staff. 3) Staff Attendance, their Working Hours and Leave Management. 4) Staff Appraisal in a systematic and timely manner. 5) Staff Activity Report and Online Class Report can be easily accessed. 6) Assessments of students can be scheduled and appropriately evaluated. 7) It has a Message Box, wherein the Students can communicate with the College. 8) Students leave can be managed and better monitored. 9) Students can post their Grievances, if any. 10) Facility can send SMS and Emails to each other, to Students and Parents. Along with the above mentioned Modules, the MIS is being redesigned to include the NAAC requirements as well as moving towards Outcome Based Education (OBE) in a scientific manner. The OBE helps the College to set the Institutional Educational Objective (IEO), as well as the Program Outcomes (PO) for the different Streams, Program Specific Outcomes (PSO) for the different Subjects, and Course Outcomes (CO) for the various Papers. All of these can be very well mapped with linkages to the University Examinations and the Internal Assessments by way of Tests, Assignments, Projects, etc. This helps to quantify the learning attainments of the individual students, as well as the batch as a whole, feeding the Teachers with valuable insights of what needs to be doctored. We are still in the early stages of utilizing the learning platform towards this end, but it holds a lot of promise for the future.

Part B

CRITERION I – CURRICULAR ASPECTS**1.1 – Curriculum Planning and Implementation**

1.1.1 – Institution has the mechanism for well planned curriculum delivery and documentation. Explain in 500 words

In consistence pursuance of the Vision and Mission, the College strives to offer quality education through optimum curriculum delivery. Ours being an Affiliated College, Curriculum Design and Approval happens at the University, NEHU. However, planned curriculum delivery and documentation is obtained through the following initiatives like: participation of the staff in different BOS (Board of Studies) and attending syllabus revision meetings at the

University. The Academic Time Table for different streams are finalised following deliberations with the Heads of the Departments. The classes are organised in a manner so as to provide time to conduct extra tutorials and practicals beyond the syllabi. The time table is posted on the College website, placed on the Notice Boards and is also digitally communicated to the students. Thus Time Tables are maintained to serve as necessary documentation. The college organises lectures by inviting eminent persons from respective domain to share their knowledge with the students as well as the faculty. Further the college has got the provision of Remedial teaching for low achievers to assist them to comprehend the concepts of their courses. Academic Time Table is prepared centrally at the beginning of the Semester to help the faculty to covering the syllabus on time. Regular departmental meetings are held for sharing the feedback regarding course completion. The college encourages the departments to introduce short term/value added courses which can run simultaneously along with the regular course. Every Department conducts classes that far exceed the UGC norms, to ensure that the curriculum delivery is holistic and effective. Especially for the Science stream subjects, emphasis is given for hands-on-training, through the implementation of projects guided by the faculty. All the classrooms offer facilities for ICT to enable the faculty and students to deliver their presentations in an inter-active manner. Field trips, Educational Tours, Industrial visits and Internships/projects/field trips are encouraged to make learning real and relevant to real life situations.

1.1.2 – Certificate/ Diploma Courses introduced during the academic year

Certificate	Diploma Courses	Dates of Introduction	Duration	Focus on employ ability/entrepreneurship	Skill Development
Advanced Analytical Chemistry	NA	01/07/2019	30	Extraction of Essential Oils, Test for Adulterants in Foods, Candle making etc.	Technical knowledge on handling equipments, laboratory safety SOP, chemicals use storage.
Mushroom Cultivation	NA	05/09/2019	30	The participants were given practical knowledge on the process involved in the cultivation of edible mushroom, its storage and processing for sale in the market.	The course enables the participants to start self help group using limited resources and generate employment strategy.
Vermicomposting technology for waste management.	NA	12/06/2019	30	Students are trained on the need for organic farming and	Enhance skills for production of vermicompost

				also trained for scientific scaling the production of the compost. Certificates are distributed for completion of the course with emphasis on Self Employment	
Clinical Biochemistry	NA	10/06/2019	180	The Course focus on Technical Skill in Clinical Lab Instrumentations and hence help the students to obtain technical skill and prefer by Clinical Lab for employment.	Hence help the students to obtain technical skill and prefer by Clinical Lab for employment.
Basic Electricity	NA	29/03/2019	16	The learners were trained on basic power supply mechanism and rectification of failure in supply of power	Helped the learners to acquire Hands on training on managing, repairing the fault in domestic situation.

1.2 – Academic Flexibility		
1.2.1 – New programmes/courses introduced during the academic year		
Programme/Course	Programme Specialization	Dates of Introduction
BA	NA	01/06/2020
No file uploaded.		
1.2.2 – Programmes in which Choice Based Credit System (CBCS)/Elective course system implemented at the affiliated Colleges (if applicable) during the academic year.		
Name of programmes adopting CBCS	Programme Specialization	Date of implementation of CBCS/Elective Course System

BA	NA	01/06/2019
1.2.3 – Students enrolled in Certificate/ Diploma Courses introduced during the year		
	Certificate	Diploma Course
Number of Students	88	Nil
1.3 – Curriculum Enrichment		
1.3.1 – Value-added courses imparting transferable and life skills offered during the year		
Value Added Courses	Date of Introduction	Number of Students Enrolled
Faculty Development Programmes (FMMNMTT) on Latex [BCA Department]	01/07/2019	42
Faculty Development Programmes (FMMNMTT) on Xfig [BCA Department]	01/07/2019	35
Mathematical Logic Proofs (Bridge Course) [Mathematics Department]	15/07/2019	36
Training on Soft Skills and Professional Development [MSW Department]	30/08/2019	13
Estimation of Vitamin C from locally available fruits [Chemistry Department]	18/08/2019	16
Skill Development program on value addition to bioresources and entrepreneurship in Biotechnology [Biotechnology Department]	13/09/2019	22
Effective Communication Skills	26/08/2020	58
Training on Decoration of Wedding Venues	14/10/2019	17
Training on Making of Artificial Flowers	15/10/2019	13
Training on First Aid	13/06/2019	32
No file uploaded.		
1.3.2 – Field Projects / Internships under taken during the year		
Project/Programme Title	Programme Specialization	No. of students enrolled for Field Projects / Internships
BSc	Chemistry	33
MSW	Social Work	6
BCA	Computer Application	14
BSc	Electronics	24

BA	Geography (Field Trip)	63
BSc	Biotechnology	21
BSc	Botany (Field Trip)	172
BA	Sociology (Field Trip)	36
BA	Khasi (Field Trip)	22
BSc	Environmental Science	43
No file uploaded.		

1.4 – Feedback System**1.4.1 – Whether structured feedback received from all the stakeholders.**

Students	Yes
Teachers	Yes
Employers	Nil
Alumni	Yes
Parents	Yes

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

To get to know how the students are dealing with the curriculum, especially in areas of concerns, a student's feedback is critical. These student feedbacks are formally and informally collected, studied and acted upon by the different Departments. During the Mentoring process, the Feedback from the students is carried to their respective departmental meetings and after considering the merits of the proposals, it is forwarded to the Management. The Management in turn, tries to address the various concerns of the students, along with the inputs from the Staff. The Course Teachers share their feedback on the curriculum that they have been dealing with, and offer their suggestions for better deliver of the syllabi. At the University Level, members of the faculty are involved on Board of Studies (BOS) in framing/designing curricula following the guidelines of the Statutory bodies like: UGC, MST, etc. Simultaneously, Add-On Courses in a Flexible time frame, suggested by the various stakeholders namely: Alumni, Community, Parents, and the Industry, are offered to the students to bring them on par with the Academic Standards at the National Level. Every effort is made to identify and integrate NAAC core values with the Institutional goals and objectives and bring out a comprehensive mechanism in developing Add-On Courses, value system among students with optimum use of technology. In order that the feedback mechanism remains honest, objective and transparent, various methods are adopted by the IQAC. STUDENT FEEDBACK: Some of these methods could be identified as: a) Anonymous sharing of responses in case of student-feedback, to ensure the elimination of any kind of fear of reprisal or backlash; b) Time bound and on the spot, mostly inside a given class hour, to avoid procrastination on the part of the respondents; c) Comprehensive questionnaire to encourage objective responses; d) External, digital analysis of the data obtained from the feedback forms; e) Actionable Inputs - based on the collected and analyzed forms, individual feedback is provided to teachers by the respective Head of Department. Any points about the infrastructure and aspects beyond the purview of the HODs are communicated to the Management through the Principal/Vice Principal for redress in consultation with other members of the Management. IQAC has developed a parent feedback Performa. The printed Performa is available at the IQAC office. The filled Performa is collected in two ways Parent-Teacher Meetings - permits greater interaction

between teachers and parents. By parents at home - ensures that parents who live far away from the city or are unable to attend parent-teacher meeting due to other engagements can voice their views. The filled Performa is provided to the digital cell for unbiased objective analysis. **FEEDBACK FROM TEACHERS:** Teacher's feedback is collected through individual discussion, carefully listening to teacher's issues raised in the meeting of teachers at the department level and by close interaction with the elected representatives of teachers. Teachers constitute a significant group of stakeholders in the overall growth and development of the College. Thus the feedbacks obtained from them are always taken

CRITERION II – TEACHING- LEARNING AND EVALUATION

2.1 – Student Enrolment and Profile

2.1.1 – Demand Ratio during the year

Name of the Programme	Programme Specialization	Number of seats available	Number of Application received	Students Enrolled
MSW	Professional	25	48	25
BCA	Professional	40	121	40
BSW	Professional	60	219	60
BSc	Honours	450	2156	450
BCom	Honours	200	625	200
BA	Honours	420	2256	420
No file uploaded.				

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 fulltime teachers available in the institution teaching only UG courses	Number of fulltime teachers available in the institution teaching only PG courses	Number of teachers teaching both UG and PG courses
2019	3180	41	109	5	5

2.3 – Teaching - Learning Process

2.3.1 – Percentage of teachers using ICT for effective teaching with Learning Management Systems (LMS), E-learning resources etc. (current year data)

Number of Teachers on Roll	Number of teachers using ICT (LMS, e-Resources)	ICT Tools and resources available	Number of ICT enabled Classrooms	Number of smart classrooms	E-resources and techniques used
109	109	6	52	3	4

[View File of ICT Tools and resources](#)

[View File of E-resources and techniques used](#)

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

The practice of mentoring students and their progress along with the difficulties and problems has been in place since 2001. This has been identified as one of the best practices of the college by NAAC. This practice aims to get the students to interact, deliberate and discuss with the teachers as Mentors regarding their study habits, career options, difficulties faced in the classroom/laboratories and or at home. This interaction bridges the gap between the teachers and the active learners, i.e. the Mentor/Mentee, thereby creating a healthy bond between

the two most important stakeholders. Special classes are arranged for low achievers in the form of tutorials/remedial coaching. Specially designed programs for the advanced learners are also offered. Through Placement and Career guidance Cell, the students are guided to identify their competence level in deciding their future career options. Economically weaker students are provided with subsidized fees and their progress is constantly monitored by the faculty. All differently-abled students are given extra care by providing Wheelchair and provision for Ramps access to the classroom/library. Such students are provided with Learning materials through various Audio-Visual aids. Braille tools are made available to the students through the Bethany Society, one of the reputed NGOs in Shillong, catering especially to the welfare of the differently-abled students. Peer mentoring, mainly through the Class Representatives is an initiative that is welcomed by the students, especially on issues related to discipline for learning. At the start of the academic year, all newly admitted students are offered a specific Orientation Program, which serves as Induction Counselling, making them aware of the areas required to help them grow by effective time management, relating to self and others, as well as some of the challenges they will face. The parents/guardians too are involved in these programs, to make them active partners in the mentoring process. In a special way the Principal, the Heads of Departments and the Staff are always available to the students. The Mentoring process is chiefly aimed at nurturing a healthy Tutor-Ward relationship and plays a significant role in harnessing the overall growth of a student which is part of the vision and mission statement of the College. The Management is aware that the youths of today are beset with uncountable problems and hitherto unknown challenges, challenges that are thrown up by a rapidly changing value system and misplaced priorities. As the students spend a considerable amount of time in the College, it is imperative that they are given the right kind of attention by the teachers, not only inside the classroom, but also outside it. So, the importance of this Mentoring Process can never be over estimated. The success of the process, obviously, depends upon the willingness of the mentee to open up in front of a mentor who is not really a stranger of any sort. The teacher/mentor is well equipped to elicit honest responses from the student/mentee as they are confident that the former is the repository of answers to their problems, personal or otherwise.

Number of students enrolled in the institution	Number of fulltime teachers	Mentor : Mentee Ratio
3221	109	1:29

2.4 – Teacher Profile and Quality

2.4.1 – Number of full time teachers appointed during the year

No. of sanctioned positions	No. of filled positions	Vacant positions	Positions filled during the current year	No. of faculty with Ph.D
109	107	2	2	34

2.4.2 – Honours and recognition received by teachers (received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the year)

Year of Award	Name of full time teachers receiving awards from state level, national level, international level	Designation	Name of the award, fellowship, received from Government or recognized bodies
2019	Dr Sylvanus Lamare,	Principal	Independent Director, Numaligarh Refinery Limited (Ltd), Ministry of Gas and Petroleum, Govt. of India
No file uploaded.			

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	Semester/ year	Last date of the last semester-end/ year- end examination	Date of declaration of results of semester-end/ year- end
----------------	----------------	----------------	---	---

				examination
MSW	MSW	2/4	20/06/2019	09/08/2019
MSW	MSW	1/3	19/10/2019	18/02/2020
BA	BA	1/3/5	27/09/2019	30/04/2020
BCA	BCA	1/3/5	23/09/2019	27/04/2020
BSW	BSW	1/3/5	23/09/2019	27/04/2020
BCom	BCom	1/3/5	24/09/2019	28/04/2020
BSc	Bsc	1/3/5	25/09/2019	29/04/2020
View File				
2.5.2 – Reforms initiated on Continuous Internal Evaluation(CIE) system at the institutional level (250 words)				
<p>The details of Internal Examination are communicated to the students at the beginning of the session through the academic calendar. The students are encouraged to approach the members of the faculty with regards to their doubts, confusion etc., regarding the course material, pattern of exam and evaluation. Internal test and assignments are conducted with immediate feedback of the results with the students. The students are given the evaluated answer script and their grievances, if any, are heard and promptly taken care of. For low achievers, remedial coaching and tutorials are arranged for well before the student appears in the final/end semester examination conducted by the University. The college maintains and monitors the attendance record of each student centrally as well as in their respective departments. The progress made or lack of attendance is communicated to the students and their parents through Parent-Teacher Meetings and during the mentoring process. In keeping with the nature in which young learners acquire knowledge and skills, the Departments assess the student's attainment levels through various means like: Open Book examinations, Online Multiple-Choice-Questions, Presentations using different tools and techniques, etc. Most importantly, the Faculty offers the students ample opportunities to improve their performance, so as to compete with themselves in order to draw out the best in themselves and their capabilities.</p>				
2.5.3 – Academic calendar prepared and adhered for conduct of Examination and other related matters (250 words)				
<p>The College mandatorily follows the academic calendar for Undergraduate and Postgraduate programmes issued by the North-Eastern Hill University (NEHU), Shillong. At the beginning of the academic session, meeting between Heads of Departments and the Management are scheduled to chalk out the timetable for the respective courses. Departmental meetings are also held to finalize the distribution of syllabi among the members of the staff. These are then communicated to the students. The Academic Calendar having the details of class and examination schedules along with the tentative date for other co-curricular activities, etc., are forwarded to the respective departments for implementation. All processes such as teaching-learning schedule, Examination Schedule for the conduct of both theory and practical examinations and evaluation are strictly guided by the affiliating University. Within this broad framework each Department, in consultation with other Departments, draws up its own schedule for the conduct of internal assessment, practical examination, etc. The same is uploaded on the college website for wider publicity. The College effectively uses technology to automate processes such as: online examination forms, generating admit cards, submission of internal marks, printing of mark-sheets, etc.</p>				
2.6 – Student Performance and Learning Outcomes				
2.6.1 – Program outcomes, program specific outcomes and course outcomes for all programs offered by the				

institution are stated and displayed in website of the institution (to provide the weblink)

https://sec.edu.in/igacdocs/Learning_Outcomes_2019-20_.pdf

2.6.2 – Pass percentage of students

Programme Code	Programme Name	Programme Specialization	Number of students appeared in the final year examination	Number of students passed in final year examination	Pass Percentage
BA	BA	UG Honours	286	265	92
BCom	BCom	UG Honours	163	114	70
BSc	BSc	UG Honours	332	271	82
BCA	BCA	UG Professional	44	38	86
BSW	BSW	UG Professional	55	53	96
MSW	MSW	PG	18	18	100
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2.7 – Student Satisfaction Survey

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

https://sec.edu.in/igacdocs/Student_Feedback_2019-20_.pdf

CRITERION III – RESEARCH, INNOVATIONS AND EXTENSION

3.1 – Resource Mobilization for Research

3.1.1 – Research funds sanctioned and received from various agencies, industry and other organisations

Nature of the Project	Duration	Name of the funding agency	Total grant sanctioned	Amount received during the year
Major Projects	1825	ICMR	30	10
Major Projects	365	NEC	15.6	0
Major Projects	365	NECBH-IIT	15.9	0
Major Projects	730	DST	51	0
Major Projects	3650	DBT	78	0
Major Projects	4745	DBT	91	0
Interdisciplinary Projects	4380	DBT	168	0
No file uploaded.				

3.2 – Innovation Ecosystem

3.2.1 – Workshops/Seminars Conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices during the year

Title of workshop/seminar	Name of the Dept.	Date
Seminar on Scope of Biotechnological Research	Botany	18/10/2019
5 Days National Workshop on Skill Development in North East India - The Next Level	Biotechnology	12/03/2019
7 Days National Workshop on Bioinformatics Tools Techniques	Biotechnology and Chemistry	28/06/2019
Seminar on Career Prospects in Clinical Biotechnology- an Industrial Perspective	Biotechnology	16/10/2019
Seminar on Recent Trends in Bioinformatics and Computational Biology	Biotechnology	28/07/2019
Seminar on Tools and application of Proteomics to solve Biological Problems	Biotechnology	04/07/2019
Workshop on Soft Skills -Decision Making	Chemistry	16/03/2019
Seminar on Copper significant nano particles	Chemistry	17/04/2019
Workshop on Basic Electronics	Electronics	12/08/2019
Workshop on Networking, Web Designing Embedded system	Electronics	14/03/2019
Seminar on Embedded System Microcontroller Its Applications	Electronics	23/09/2019
Growth Study of Optoelectronics of Si-H based Supper Lattice Structure	Electronics	23/03/2019
Seminar on Beat Plastic Pollution	Environmental Science	26/07/2019
Seminar on Counting in Mathematics	Mathematics	17/02/2020
Seminar on Mathematics Mars Mission - Lets Feel Proud to be Indians	Mathematics	27/09/2019
Seminar on Keplars Law of Planetary Motions	Mathematics	14/09/2019
Seminar on Pi and Primes	Mathematics	14/03/2020
Seminar on My Journey: St.Edmund's College to	Physics	22/08/2019

IIT Bombay				
Seminar on Sharing Experience and Motivating Students for Future Prospect	Physics	16/10/2019		
Seminar on Sustainable Root (U THIED KA LAWEI)	Social Work (BSW) and Meghalaya AIDS Control Society (MACS)	14/10/2019		
Seminar on Substance Abuse and HIV/AIDS	Social Work (BSW) , and Voluntary Health Association of Meghalaya (VHAM)	28/08/2019		
Workshop on Research Methodology	Sociology	30/09/2019		
Seminar on Cult	Sociology	25/04/2019		
Seminar on Indigenous Tribe	Sociology	01/04/2019		
Seminar on Lets Do It in collaboration with Spread North East	Sociology	13/09/2019		
Seminar on Life after Class	Sociology	15/07/2019		
Seminar on Significance of Field Research	Sociology	19/03/2019		
Seminar on Travel Society	Sociology	01/03/2019		
Seminar on Public Policy, Social exclusion, unemployment and sustainable developmen	Social Work (BSW)	11/09/2019		
Seminar on Horticulture in Meghalaya	Botany	23/03/2019		
Workshop on Bamboo for Employment Generation	Social Work (MSW)	19/11/2019		
Seminar on Space Technology in India: setting bridge between space and common people	Physics	29/03/2019		
Seminar on Colossus Memorial Lecture	English	19/11/2019		
Workshop Cum Play on Breakfast with Tiffany	English	17/09/2019		
Seminar on International Year of Periodic Table	Chemistry	08/08/2019		
Seminar on Foreign Trade Policy	Commerce	29/03/2019		
3.2.2 – Awards for Innovation won by Institution/Teachers/Research scholars/Students during the year				
Title of the innovation	Name of Awardee	Awarding Agency	Date of award	Category
NIL	NIL	NIL	01/01/2020	NIL

No file uploaded.					
3.2.3 – No. of Incubation centre created, start-ups incubated on campus during the year					
Incubation Center	Name	Sponsered By	Name of the Start-up	Nature of Start-up	Date of Commencement
Yes	Mawjrong	CCBI	SEC Incubation Centre	Pisciculture, Mushroom Cultivation, Gardening etc	10/04/2019
No file uploaded.					
3.3 – Research Publications and Awards					
3.3.1 – Incentive to the teachers who receive recognition/awards					
State		National		International	
0		0		0	
3.3.2 – Ph. Ds awarded during the year (applicable for PG College, Research Center)					
Name of the Department			Number of PhD's Awarded		
0			Nil		
3.3.3 – Research Publications in the Journals notified on UGC website during the year					
Type	Department	Number of Publication	Average Impact Factor (if any)		
International	Biotechnology	3	9.21		
International	Botany	1	6.42		
International	Chemistry	2	5.24		
International	Physics	2	4		
National	Biotechnology	1	0.5		
National	Zoology	2	0.96		
National	Sociology	2	0.3		
National	Botany	1	0.07		
International	Biochemistry	2	17		
National	Biochemistry	1	0		
No file uploaded.					
3.3.4 – Books and Chapters in edited Volumes / Books published, and papers in National/International Conference Proceedings per Teacher during the year					
Department		Number of Publication			
Biochemistry		1			
Social Work (MSW)		1			
Social Work (BSW)		1			
Mathematics		1			
BCA		1			
Biotechnology		1			
Botany		1			

View File						
3.3.5 – Bibliometrics of the publications during the last Academic year based on average citation index in Scopus/ Web of Science or PubMed/ Indian Citation Index						
Title of the Paper	Name of Author	Title of journal	Year of publication	Citation Index	Institutional affiliation as mentioned in the publication	Number of citations excluding self citation
Synthesis, crystal structures, magnetic properties and antimicrobial screening of octahedral nickel (II) complexes with substituted quinolin-8-olates and pyridine ligands	Tushar S. Basu Baul, Khra wborlang Nongsie, Augustine Lamin Ka-Ot, Santa Ram Joshi, Bruno G.M., Rochac M., Fátima C. Guedes da Silica	Journal of Molecular Structure	2019	0	Department of Chemistry, St. Edmunds Shillong	Nil
Tweaking the affinity of aryl substituted diazosalicylate and pyridine ligands towards Zn (II) and its neighbors in the periodic system of the elements, Cu (II) and Cd (II), and their antimicrobial activity	Tushar S. Basu Baul, Khra wborlang Nongsie, Augustine Lamin Ka-Ot, Santa Ram Joshi, Irán Rojas León, Herbert Höpfl	Application of Organometal Chemistry	2019	0	Department of Chemistry, St. Edmunds Shillong	Nil
De-etiolation enhances photosynthesis by modulating	Sullivan S, Kharshiing E, Laird J, Sakai T and	Plant Physiology	2019	0	Department of Botany, St. Edmunds Shillong	9

Non Phototrophic Hypocotyl 3 Phosphorylation status	Christie J					
A bioinformatics-based investigation to screen and analyze the bioactivity of Piper longum Linn. compounds as a ground-breaking hostile to antidiabetic activity	Thakuria B, Laskar S, Adhikari S	Phcog Mag	2020	0	Department of Biotechnology, St. Edmunds Shillong	Nil
A study of the effect of Paclitaxel, Docetaxel and Tamoxifen citrate compounds found in Taxus wallichiana on the Beta-tubulin and Estrogen Receptor (ESR) proteins in humans using a bioinformatics approach	B Thakuria, D Purkayastha, S Adhikari	As Pac J. Mol. Biol. Biotechnol	2019	0	Department of Biotechnology, St. Edmunds Shillong	Nil
Differentiation of Filamentous Cyanobacterial Isolates Using DNA	Negi Y, Sharma S, Sutradhar N, Adhikari S	Indian Journal of Biotechnology	2019	0	Department of Biotechnology, St. Edmunds Shillong	Nil

Fingerprin ting Approach						
The Worlds largest known subt erranean fish a discovery in Meghalaya (NE India) of a cave adapted fish related to the Golden Mahseer, Tor putitora (Hamilton 1822)	Dan Harries, Thomas Arbenz, Neelesh Dahanukar, Rajeev Raghavan, Mark Tringham, Duwaki Rangad and Graham Proudlove	Cave and Karst Science	2019	0	Department of Zoology, St. Edmunds Shillong	Nill
Unique Breeding activity and ovipos ition in Annandales Tree Frog, Kurixalus nano (Annadale, 1912) in Meghalaya, India	P Wankitlang Shangplian g, Rupa Nylla K Hooroo, Sushil K Dutta	Current Science	2020	0	Department of Zoology, St. Edmunds Shillong	Nill
Antimicr obial Potential of Actinob acteria from a Limestone Mining site in Meghalaya, India	Debulman Syiemiong, Dhruva Kumar Jha	Journal of Pure Applied Mi crobiology	2019	0	Department of Botany, St. Edmunds Shillong	Nill
Comparat ive Raman Study of Two laterally flourinate d LC compounds having	M. Lyndem, R Dabrowski and A Bhat tacharjee	Liquid Crystal	2019	0	Department of Physics, St. Edmunds Shillong	Nill

different terminal chains						
View File						
3.3.6 – h-Index of the Institutional Publications during the year. (based on Scopus/ Web of science)						
Title of the Paper	Name of Author	Title of journal	Year of publication	h-index	Number of citations excluding self citation	Institutional affiliation as mentioned in the publication
Effect of mercury on the growth and biochemical behaviour of <i>Nostoc muscorum</i> and <i>Anabaena variabilis</i> .	Negi Y, Sharma S, Thyrniang B, Laloo FJ, Adhikari S	International Journal of Pharma and Bio Sciences	2019	14	Nill	Department of Biotechnology, St. Edmunds Shillong
Antimicrobial Potential of Actinobacteria from a Limestone Mining site in Meghalaya, India	Debulman Syiemiong, Dhruva Kumar Jha	Journal of Pure Applied Microbiology	2019	13	Nill	Department of Botany, St. Edmunds Shillong
The Worlds largest known subterranean fish a discovery in Meghalaya (NE India) of a cave adapted fish related to the Golden Mahseer, <i>Tor putitora</i> (Hamilton 1822)	Dan Harries, Thomas Arbenz, Neelesh Dahanukar, Rajeev Raghavan, Mark Tringham, Duwaki Rangad and Graham Proudlove	Cave and Karst Science	2019	14	Nill	Department of Zoology, St. Edmunds Shillong
A bioinformatics-based inve	Thakuria B, Laskar S,	Phcog Mag	2020	17	Nill	Department of Biotech

stigation to screen and analyze the bioactivity of Piper longum Linn. compounds as a ground-breaking hostile to antidiabetic activity	Adhikari S					nology, St. Edmunds Shillong
A study of the effect of Paclitaxel, Docetaxel and Tamoxifen citrate compounds found in Taxus wallichiana on the Beta-tubulin and Estrogen Receptor (ESR) proteins in humans using a bioinformatics approach	B Thakuria, D Purkayastha, S Adhikari	As Pac J. Mol. Biol. Biotechnol	2020	19	Nill	Department of Biotechnology, St. Edmunds Shillong
Differentiation of Filamentous Cyanobacterial Isolates Using DNA Fingerprinting Approach	Negi Y, Sharma S, Sutradhar N, Adhikari S	Indian Journal of Biotechnology	2019	27	1	Department of Biotechnology, St. Edmunds Shillong
Raman FTIR study of 23-difluorouoro-4-isothiocyanato-4-propyl	M. Lyndem, R Dabrowski and A Bhat tacharjee	Molecular Crystal and Liquid Crystal	2019	49	1	Department of Physics, St. Edmunds

1,141-tetr aphenyl Compound or c3P(3F) P(3F)P-NCS						Shillong
Comparat ive Raman Study of Two laterally fluorinate d LC compounds having different terminal chains	M. Lyndem, R Dabrowski and A Bhat tacharjee	Liquid Crystal	2019	71	Nill	Department of Physics, St. Edmunds Shillong
Unique Breeding activity and ovipos ition in Annandales Tree Frog, Kurixalus nano (Annadale, 1912) in Meghalaya, India	P Wankitlang Shangplian g, Rupa Nylla K Hooroo, Sushil K Dutta	Current Science	2020	104	Nill	Department of Zoology, St. Edmunds Shillong
De-etiol ation enhances p hototrophi sm by modulating Non Photot rophic Hypocotyl 3 Phosphor ylation status	Sullivan S, Kharshiimg E, Laird J, Sakai T and Christie J	Plant Physiology	2019	85	9	Department of Botany, St. Edmunds Shillong
View File						

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

Number of Faculty	International	National	State	Local
Attended/Semi nars/Workshops	6	18	Nill	Nill
Presented papers	5	11	Nill	Nill
Resource persons	Nill	8	Nill	Nill
View File				

3.4 – Extension Activities			
3.4.1 – 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 participated in such activities	Number of students participated in such activities
Work for Freedom - the movement India with Faith Foundation (19th September, 2019)	NSS Department of Social Work, St. Edmunds College	2	60
Plastic Festival (21st February, 2020)	Grassroot Organization, Shillong Chapter and NSS Department of Social Work, St. Edmunds College	1	30
Basic Digital Electronics at Umpohwin Village, Meghalaya (12th August, 2019)	Department of Electronics, St. Edmunds College	1	90
Programme on "Basic Sciences: Popularization through Interaction, Practical Demonstrations and Laboratory Exposure for Rural Secondary School Students of East Khasi Hills District of Meghalaya" (7th September, 2019)	Department of Biotechnology Chemistry, St. Edmund's College, Shillong	2	29
Programme on "Basic Sciences: Popularization through Interaction, Practical Demonstrations and Laboratory Exposure for Rural Secondary School Students of East Khasi Hills District of Meghalaya" (12th October, 2019)	Department of Biotechnology Chemistry, St. Edmund's College, Shillong	2	27
Outreach Programme - Mairang Presbyterian School (9th August, 2019)	Department of Botany Chemistry, St. Edmund's College, Shillong	7	60

Outreach Programme Mangkathinang, Makdoh Memorial School (12th -13th September, 2019)	Department of Botany BSW, St. Edmund's College, Shillong	3	80
Fun With Chemistry - Mairiang Presbyterian School (9th August, 2019)	Department of Chemistry, St. Edmund's College, Shillong	5	40
Sensitization Programme on Psychosocial care Disaster Risk Reduction (18th July, 2019)	Department of Social Work NSS, St. Edmunds College in collaboration with USAID, UNDP, NIMHANS.	3	45
Capacity Building, Sensitization and Awareness in Basic Science for Higher Secondary Schools of Shillong" (14th September, 2019)	Department of Biotechnology Chemistry, St. Edmund's College, Shillong	3	26
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3.4.2 – Awards and recognition received for extension activities from Government and other recognized bodies during the year			
Name of the activity	Award/Recognition	Awarding Bodies	Number of students Benefited
Swachhta Action Plan (SAP) and Jal Shakti Abhiyan (JSA)	MENTOR INSTITUTION	MGNCRE of Ministry of Education, Govt. of India, New Delhi	550
No file uploaded.			

3.4.3 – 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 participated in such activities	Number of students participated in such activities
Basic Arithmetic	Department of Mathematics, IIT, Guwahati	Mathematics Training Programme for UG students	Nil	3
Health Camp	Department of Social Work (MSW), St. Edmunds College Palliative Care Unit, NEIGRIHMS, Shillong	wareness Programme cum Health Camp at Lamjingshai Village, East Khasi Hills	5	23

Job Skills	British Deputy High Commission, Kolkata Asian Confluence Centre, Shillong	Conference on India Its Neighbourhood: Next generation concerns ideas-Jobs Skills and Education	Nil	2
NCC Initiative	NCC Unit, St. Edmunds College, Shillong, NCC Directorate, NER, Shillong	Annual NCC Republic Day Camp Prime Ministers Rally	Nil	1
Swachhata Bharat Initiatives	Jharna Foundation SDO Civil, Mairang	Tree Plantation (Markhan Point)	4	41
Swachhata Initiatives	NSS Unit Department of Social Work, St. Edmunds College, Shillong	Distributions of Dust bins at Laitmysaw Village under Institutional Social Responsibility.	5	12
Swachhata Initiatives	NSS Unit, St. Edmunds College, NSS Unit, Synod College, NSS Unit, Regional centre	Observance of Swachhata Pakhwada	2	6
United Nations Club	Economics Delegate Affiars, Majitar, Sikkim	North East India United International Model United Nations	2	6
Walk for Freedom	NSS Unit Department of Social Work, St. Edmunds College, Shillong Faith Foundation, Shillong	Walk for Freedom the movement India	2	60
Swachhata Initiatives	NSS Unit Department of Social Work, St. Edmunds College, Shillong	Plastic Festival	1	30
View File				
3.5 – Collaborations				
3.5.1 – Number of Collaborative activities for research, faculty exchange, student exchange during the year				
Nature of activity	Participant	Source of financial support	Duration	

Internship for Training	Ms Debolina Das, VIT, Tamil Naidu	DBT, Govt. of India	33
Internship for Training	Ms Mahima Gurung, Sikkim Central University, Sikkim	Self Financed	34
Internship for Training	Ms Nidhi Paswan, Sikkim Central University, Sikkim	Self Financed	34
Research and Development	Mr Fahim Bashir, University of Kashmir	DBT, Govt. of India	180
Research and Development	Ms Swastika Gurung, Sikkim State Council of Science & Technology, Sikkim	Self Financed	195
Internship for Training	Ms Monisha Bhattacharjee, IBAB, Bangalore	DBT, Govt. of India	60
Internship for Training	Ms Fenella D Sawian, Lovely Professional University, Punjab	DBT, Govt. of India	60
Internship for training	Ms Bidisha Sikdhar, Amity Institute of Biotechnology, Noida	Self Financed	30
Study tour Cum Student Cultural Exchange Programme	Sophia Girls College, Rajasthan	Self Financed	3
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3.5.2 – Linkages with institutions/industries for internship, on-the- job training, project work, sharing of research facilities etc. during the year

Nature of linkage	Title of the linkage	Name of the partnering institution/ industry /research lab with contact details	Duration From	Duration To	Participant
Internship	Summer Training	Department of Microbiology, NEIGRIHMS, Shillong	20/06/2019	05/07/2019	03
Internship	Summer Training	Advanced Biotech Hub, Department of Botany, NEHU, Shillong	17/06/2019	30/06/2019	05

Internship	Summer Training	Department of Microbiology, Animal Health Veterinary Parasitology, ICAR-NEH, Barapani, Shillong	01/06/2019	15/06/2019	06
Internship	Summer Training	MD Genomics, Kolkata	01/06/2019	15/06/2019	02
Training	Student Training	Pastuer Institute, Shillong	01/09/2019	30/09/2019	12
Research	Collaboration	Ram Lal Anand College, New Delhi	01/01/2019	30/12/2020	2
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3.5.3 – MoUs signed with institutions of national, international importance, other universities, industries, corporate houses etc. during the year

Organisation	Date of MoU signed	Purpose/Activities	Number of students/teachers participated under MoUs
Sophia College(SC), Ajmer, Rajasthan	15/04/2019	Exchange of students, faculty exchange, participation in cultural programme	30
North East Institute of Social Science Research (NEISSR), Kohima, Nagaland	01/05/2019	Resourcing of students and teachers, initiation of Peace Clubs, faculty-student exchange	165
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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
92	91.65

4.1.2 – Details of augmentation in infrastructure facilities during the year

Facilities	Existing or Newly Added
Number of important equipments purchased (Greater than 1-0 lakh) during the current year	Newly Added
Seminar halls with ICT facilities	Newly Added

Campus Area	Existing				
Class rooms	Newly Added				
Laboratories	Existing				
Classrooms with LCD facilities	Newly Added				
Value of the equipment purchased during the year (rs. in lakhs)	Newly Added				
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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 patially)	Version	Year of automation
KOHA	Fully	19.11	2020
e-shodh Sindhu	Partially	0.0	2018

4.2.2 – Library Services

Library Service Type	Existing		Newly Added		Total	
Journals	76	236000	6	42000	82	278000
Text Books	42846	15801000	1360	872450	44206	16673450
Reference Books	16000	12352000	670	425816	16670	12777816
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4.2.3 – E-content developed by teachers such as: e-PG- Pathshala, CEC (under e-PG- Pathshala CEC (Under Graduate) SWAYAM other MOOCs platform NPTEL/NMEICT/any other Government initiatives & institutional (Learning Management System (LMS) etc

Name of the Teacher	Name of the Module	Platform on which module is developed	Date of launching e-content
NIL	NIL	NIL	01/01/2019
No file uploaded.			

4.3 – IT Infrastructure

4.3.1 – Technology Upgradation (overall)

Type	Total Co mputers	Computer Lab	Internet	Browsing centers	Computer Centers	Office	Departme nts	Available Bandwidt h (MBPS/ GBPS)	Others
Existin g	245	3	25	2	2	3	20	10	0
Added	30	1	4	0	0	0	1	0	0
Total	275	4	29	2	2	3	21	10	0

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

10 MBPS/ GBPS

4.3.3 – Facility for e-content

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

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
57	56.8	92	91.65

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

<p>- The institution ensures that all the physical facilities which includes classrooms, laboratories, library etc., are maintained by qualified and dedicated associate staffs. -A dedicated policy is in place, whereby budget allocation for each department on expendables, maintenance is fixed. - Different committees namely: the Building and Maintenance Committee, Canteen Committee, Purchase Committee are in place that ensures the proper utilization of funds. - The Purchase Committee follows the GF rules for the choice of vendors/contractors for the allotment of work which is done on the basis of COMPETITIVE PRICE INDEX (CPI) and Quality Assurance (QA). The same is employed during the procurement of equipment/instruments. - Procurement and maintenance of Books/Journals of the Library (Central/Departmental) are done through the Library Committee, which is approved by the Management. - Waste management and cleanliness is carried out by qualified cleaners in association with Local Municipal Board during Garbage disposal. - Laboratories' safety protocols, SOPs are documented and forwarded to the respective laboratories for compliance. - Safety audit of the campus is ensured with the installation of fire fighting equipment, ample storage of water in the form of underground reservoir, following the directive issued by the Local administrations. - Dedicated solar panels are installed on the campus. For adequate lighting in all the classrooms, SFL/LED lights are fitted to reduce power consumption without compromising on the brightness required. Two, 25 KVA generators are in place for uninterrupted power supply during college hours. - The sports facilities, indoor and outdoor, are well maintained by dedicated staff along with proper lighting facility that can be used at night as well. - All the physical infrastructure, including the college greenery, is adequately maintained by dedicated personnel with the active supervision of a group of faculty members.</p> <p>https://sec.edu.in/iqacdocs/4.4.2_Infrastructure_.pdf</p>

CRITERION V – STUDENT SUPPORT AND PROGRESSION

5.1 – Student Support

5.1.1 – Scholarships and Financial Support

	Name/Title of the scheme	Number of students	Amount in Rupees
Financial Support from institution	Special Category Fee Waiver	27	344063.5
Financial Support from Other Sources			
a) National	State/Central	907	12200000

b) International	NIL	Nill	0		
No file uploaded.					
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 implemetation	Number of students enrolled	Agencies involved		
Yoga	13/06/2019	200	Aurobindo Yoga Centre, Shillong		
Mentoring	02/08/2019	530	College		
Counselling	18/10/2019	22	Psychologist		
Remedial Coaching	22/07/2019	170	College		
Civil Services Coaching	29/08/2019	70	College		
Bio-Entrepreneurship	20/09/2019	22	Biotech Park, Lucknow		
No file uploaded.					
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 for competitive examination	Number of benefited students by career counseling activities	Number of students who have passed in the comp. exam	Number of students placed
2019	Career Counselling - An Interaction on Foreign Policy, Organised by Ministry of Commerce Industry, Govt. of India	Nill	136	Nill	Nill
2019	Career Counselling in Fashion Designing, Organised by Wazir Advisors & AIESEC	Nill	21	Nill	Nill
2019	Seminar on Career Counselling, Organised by Tata Institute of Social	Nill	33	Nill	Nill

	Sciences				
2019	Career Counselling - Shaping Young Minds, Organised by Guwahati Management Association	Nill	35	Nill	Nill
2019	Career Counselling programme for higher studies, Organised by PIBM	Nill	38	Nill	Nill
2019	Career Counselling - Opportunities of Higher Studies in the UK, Organised by British Council	Nill	106	Nill	Nill
2019	Career Counselling - Admission Advice to pursue further studies within India & Abroad, Organised by BOLD MOVE	Nill	26	Nill	Nill
2019	Career Counselling - Young India Fellowship, Organised by Ashoka University	Nill	18	Nill	Nill
2019	Career Counselling - Naropa Fellowship: An Introduction, Organised by Neropa Fellowship	Nill	14	Nill	Nill
2019	Career	Nill	161	Nill	Nill

	Counselling - Career Prospects in SBI, Organised by State Bank of India				
No file uploaded.					
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		Number of grievances redressed		Avg. number of days for grievance redressal	
175		170		15	
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	Name of organizations visited	Number of students participated	Number of students placed
Fusion BPO Services, WIPRO, SUTHERLAND	138	35	NIL	Nil	Nil
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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	1	UG Honours	Sociology	Tata Institute of Social Sciences, Mumbai	MA (Social Work)
2019	1	UG Honours	Environmental Science	Tezpur University, Assam	MSc (Environmental Science)
2019	1	UG Honours	Physics	St. Xavier's College, Mumbai	MSc (Astro Physics)
2019	1	UG Honours	Mathematics	IIT, Madras	MSc (Mathematics)
2019	1	UG Honours	Economics	IIM Lucknow	MBA
2019	1	UG Honours	Biotechnology	Jamia Islamia, New Delhi	MSc (Biotechnology)
2019	1	UG Honours	Biotechnology	IISER,	Integrated

			ogy	Pune	MSc-PhD	
2019	1	UG Honours	Biochemistry	NDRI, Karnal	MSc (Animal Bioc hemistry)	
2019	1	UG Professional	BCA	VIT, Tamil Naidu	MCA	
2019	5	UG Honours	Chemistry	CIPET, Ahmedabad	MSc (Polymer Science)	
View File						
5.2.3 – Students qualifying in state/ national/ international level examinations during the year (eg:NET/SET/SLET/GATE/GMAT/CAT/GRE/TOFEL/Civil Services/State Government Services)						
Items			Number of students selected/ qualifying			
NET			1			
No file uploaded.						
5.2.4 – Sports and cultural activities / competitions organised at the institution level during the year						
Activity		Level		Number of Participants		
Cricket (Boys/Girls) 1		Intra College		136		
Creative Writing 1		Intra College		15		
Creative Arts 1		Intra College		22		
Counter Strike 1		Intra College		16		
Chess (Boys/Girls) 1		Intra College		22		
Carom Board 1		Intra College		19		
Basketball (Boys/Girls) 1		Intra College		18		
Badminton (Boys/Girls) 1		Intra College		18		
Athletics (Boys/Girls) 1		Intra College		16		
Antakshari 1		Intra College		78		
View File						
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/ Internaional	Number of awards for Sports	Number of awards for Cultural	Student ID number	Name of the student
2019	Bronze Medal (4th International Kick Boxing European Cup)	Internat ional	1	Nill	18/ELEC/ 145	Hame Shaniah Suiam
2019	Bronze	National	1	Nill	18/ELEC/	Hame

	Medal (All India Tournament on Kick Boxing, Andra University)				145	Shaniah Suiam
2019	3rd Prize (Debate Competition at International Youth Festival)	International	Nill	1	18/POLSC/245	Chingneihlam Zou
2020	Outstanding Contribution towards NCC activities during Republic Day Celebrations, New Delhi	National	3	Nill	17/COMP/175 18/SOCI/426 18/GEOG/081	Swaraj Choudhary, Abhishek Chetri, Vividly Pathaw
2020	Best Stick Orderly - Republic Day Celebration, New Delhi 2020	National	1	Nill	18/GEOG/081	Vividly Pathaw
2019	Best Master of Ceremony (RDC)	National	1	Nill	18/SOCI/426	Abhishek Chetri
2019	Best Cadet Award	National	1	Nill	18/MATS/525	Piklu Datta
2019	Best Drill in CATC (42 MEGH SIG COY)	National	1	Nill	18/BCOM/143	Nabin Gurung
2019	Best MC Award in CATC (61 MEGH GIRLS BTN)	National	1	Nill	18/ELEC/147	Debopriya Choudhury
2019	DG Assam Rifle Recognition Award	National	1	Nill	18/SOCI/426	Abhishek Chetri

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5.3.2 – Activity of Student Council & representation of students on academic & administrative bodies/committees of the institution (maximum 500 words)
<p>As a policy the college, does not have a Student Council. In its place, there is an elaborate mechanism of providing opportunities and facilities to the students for different activities. The students are given ample opportunities to have their views placed at various committees formed with senior teacher as Convener. Each class nominates two Class Representatives. Animators for different activities (Cultural, Sports etc) are selected by the management to take full responsibility for the College Month Activities. Students are asked to participate, deliberate and express their views on matters related to Library, Canteen, Games Sports affairs etc., In the IQAC Committee, two senior students are selected to be the part of the group that looks into the overall smooth functioning of the college. The college encourages the departments to published departmental magazines wherein students are called upon to incorporate their ideas to design, collect articles from their classmates for the publication of the same. The college magazine is being fully taken care of by a group of final year students that act as Student-Editors. During the celebration of National Science Day in the form of SCIENCE MELA, students volunteers take full responsibilities to organize a successful programme where in science models, posters etc are displayed and school students are invited to visit and interact with the participants. A group of dedicated NSS/NCC volunteers undertake the full responsibilities for any Outreach P such as community service, visit to villages as Extension activities, etc. As has been mentioned earlier, St. Edmund's College does not have a full fledged Students' Union or Council. However, a Student Body is constituted annually to organize various programmes in the College. The process starts with the selection of Class Representatives (CR) and Assistant Class Representatives (ACR) from each Honours Department. Being a co educational College, equal number of boys and girls get a chance of representing their respective departments. Thus four students from each of the twenty departments are elected through secret ballots on an appointed day in presence of a teacher, the role of the teacher being strictly supervisory. Subsequently, just before the commencement of the College Fest, namely, Edblazon, a larger student body comprising senior-most students is constituted that looks after the student related activities, both inside and outside the College. The students, thus selected, on the strength of certain defined parameters, by the Principal and a group of teachers, are responsible for the success of any activity that they are assigned to carry out. The selected members of the student body thus formed are called ANIMATORS who are being led by 1 GENERAL ANIMATOR, 4 JOINT GENERAL ANIMATORS, 2 SECURITY COORDINATORS and a host of volunteers. They are entrusted with the responsibility of leading the College throughout the academic year for which they are selected. These students are also part of the various committees that look after the calendar of events fixed by the College. Apart from these, the student volunteers from NCC, NSS, RRC etc. are in constant touch with the main body.</p>
5.4 – Alumni Engagement
5.4.1 – Whether the institution has registered Alumni Association?
No
5.4.2 – No. of enrolled Alumni:
2200

5.4.3 – Alumni contribution during the year (in Rupees) :
50000
5.4.4 – Meetings/activities organized by Alumni Association :
<p>The College invites the active members of the Alumni at the start of the College Month activities and Graduating Ceremony of the Academic year. Their critical suggestions are taken into consideration while finalising the scheduled programme. The members of the association are invited on the final day of the College Month (EDBLAZON) and also for the Graduating Ceremony. Cash awards for the Toppers in different subjects at the University Examination are sponsored by the Alumni through a corpus fund created and maintained by the college. Eminent persons in their respective fields are invited using the linkages of the Alumni and asked to deliver lectures/training/motivational talks to the students and teachers for the overall development of the College, thus ensuring an effective delivery mechanism. The Alumni, being scattered throughout India and the rest of the World, try to stay connected through regular meetings in an through various informal Chapters. They can always be counted upon, be it helping with Medical Camps, or with relief efforts, etc., organized by the College to address various needs and situations. In the true spirit of the College, they are not ones for publicity but live out the College motto: "DEEDS NOT WORDS". The very fact that so many of the teaching faculty are also a part of the alumni, speaks for itself.</p>
CRITERION VI – GOVERNANCE, LEADERSHIP AND MANAGEMENT
6.1 – Institutional Vision and Leadership
6.1.1 – Mention two practices of decentralization and participative management during the last year (maximum 500 words)
<p>1. Decentralization and participative management is clearly seen in the manner in which the entire Admission Process is carried out. To begin with a very open and frank discussion is held by the Management with all the Head of Departments. This helps to draw on the lessons learnt from previous experiences regarding the admission process. Changes if required are made to the admission policies, through wide consensus. These policies are documented and then circulated to the rest of the Staff through the respective Heads of Departments. Each Head then constitutes its own core team. This team looks after the entire admission process from the distribution of admission forms, collection, and the instructions to the admitted candidates. The faculty also takes it upon themselves to counsel probable students on the best subject combinations. The short-listed candidates for admission are personally informed while the ones in the 'wait-list' are also informed of their chances. This transparent admission process through individual departments based on criteria set by them is graciously accepted. The Management participates in the total process only as a supervisory entity, very rarely having to intervene. 2. Celebration of College Festivities: The Annual College Fest (EDBLAZON) is completely decentralised and mainly managed by the students through the Class Representatives, who vote the Animators for the various events. The organisation, planning and execution of all the events is done by the students in consultation with the Teacher-in-Charge. The students oversee every detail including the scouting for judges for the various events, seeing to the security and safety of all concerned, etc. The level of interest generated by the students, for their peers to participate is amazing, thus giving the Fest a very distinctive flavour. The competition is healthy and the emphasis is on participation, especially for the senior most students. The role of the Management is minimum except in matters of finances. In the evaluation of the Fest, the greatest achievement, is to see individual students grow in responsibility and confidence.</p>

6.1.2 – Does the institution have a Management Information System (MIS)?	
Yes	
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):	
Strategy Type	Details
Industry Interaction / Collaboration	<p>1. Science departments have established a link with Institutions, Industries for internship/summer training/winter school of the students during UG programme. Study tour field trips are organised to help the students aware with the latest teaching learning methodologies adopted in premier institutions. 2. The placement cell of the college arranges motivational lectures session, career guidance talks for the students to make them employable in a preferred job market. Students are also advised accordingly by the respective departments during choice of institutions while progressing for PG courses on completion of their graduation. 3. The institution has established linkages with NGO like MANBHA Foundation, KRIPA Foundation etc to extend its facilities for the weaker sections of the society. The Social Work department along with NSS volunteers visited various Old Age homes/Orphanages as a part of Institutional Social Responsibility (ISR). The NCC volunteers take active participation in different social awareness programmes arranged by the Home department, social welfare department etc. 4. The College has established linkages with Biotech Park, Lucknow/Institute of Bioresources Sustainable Development (ISBD), Imphal/DBT, govt of India to organise Skill Development Programmes for the students to developed Entrepreneurial skills and Self employment opportunities 5. The department of Biotechnology has established collaboration with Epygen Biotech Ltd, Dubai Mumbai, for imparting hands on training on specialised field for the student. 6. Various institutions like ACTREC, Nagaland University, Biotech Park, Guwahati, Pasteur Institute, TOCKLAI, IASST, Tripura University, NEHU, ICAR Research Complex for NEH region, Sikkim State council of Science</p>

	Technology etc. have agreed to train and impart skills to the students of the college for better employability.
Research and Development	<p>As a Policy the management of the college encourages research and research related activities involving students to imbibe in them the idea of analysis and creative thinking. To that end seminars/workshops on Research Methodologies Tools are attempted with funding from DBT, DST, ICMR etc. The following details in this direction are in place 1. The college has received financial assistance from Department of Biotechnology, under Ministry of Science Technology, Govt of India for upgrading its resources in teaching learning process and to inculcate research activity involving the teachers and the students. Ten science departments have augmented its capability for effective Hands on Training, managing practicals and projects beyond syllabi. 2. The Central Instrumentation Facility (CIF) created under the DST-FIST programme, helped the science faculties and their respective students in performing practicals, projects, dry wet labs with respect to any research problems/ programme initiated beyond the prescribed syllabi. 3. The Bioinformatics facility having scientific databases, advanced institutional biotech hub with instrumentation facilities caters to the need of the students and teachers. This is reflected in the number of research publications in peer reviewed journals wherein the students are co authors. The teachers are encouraged to avail the facilities available to actively undertake Research initiatives involving students. Eminent researchers from across the country are contacted to receive valuable inputs on the specialised area of research through Video Conferencing tools. 4. The facility augmented by DBT/DST/UGC/NEC/IITG funding provides an environment to undertake projects by the UG students beyond their prescribed syllabi thereby refreshing the teaching learning capability of the teachers. The hands on training imparted prepares the Science Graduating Batch with the requisite skill as they progress in PG courses. 5. The sponsorship by the</p>

	<p>different agencies has helped to start with Inter Departmental activities in the college involving more than 3 departments participation. 6. The initiation of Skill based programmes like Mushroom cultivation, floriculture, Advanced Analytical Chemistry etc has augmented the research culture among the interested students. Interdepartmental research projects designed by the faculty as a part of STAR College initiative of DBT, Govt of India for the final semester students have developed the quest for learning among the interested students. Few papers in peer reviewed journal initiated by the students are communicated for publication. 7. Institution encourages the faculty to avail leave under FDP programme of UGC. Study leave with Pay are extended to the faculty members for completion of PhD Course Work, during writing and submission of the PhD thesis. The Institution encourages the Faculty to interact/deliberate with the faculties of other Institutions for any collaborative work. 8. The college propose to establish an Incubation centre in the campus to encourage the students in designing a viable project which are self sustainable and expected to generate Revenue. In this regard the college has already identified Mawjrong, East Khasi Hills to train the locals in various skills such as pisciculture, tailoring, gardening etc. 9. The Institution ensures that any Publications/Book Chapter which are to be communicated to Peer reviewed journals are subjected to Test on Plagiarism via DUPLICHECKER, COPYLEAKS, PAPER RATER, PLAGIARISMA etc (freeware).</p>
Admission of Students	<p>1. The college follows transparent admission policy based on merit, state reservation policy. 2. Special preferences are given to economically weaker section, first generation learners, and differently abled learners. A Corpus fund has been set aside to sponsor special category students with their annual fee following fulfilment of laid down norms. The college takes all measures so that the students can avail state and central scholarships by spreading notifications through college website,</p>

	<p>email etc. 3. The prospectus of the college is made available to the students wherein the details of the subject combination, courses offered, fees structure are mentioned. The details of admission criteria, subject combination, fee etc. are made available in the college website. Similarly all relevant informations regarding admission from UGC and affiliating university are posted in the website. 4. Students from outside the state are welcomed and all necessary guidance extended to them during their initial period of stay. The college has informal tie up for PG accommodations with the private parties since there is limited number of seats available in the college hostels (Boys and Girls). 5. For any specific query related to the course, the students are encouraged to contact with the concerned department to clear their doubts. 6. Admission committee supported by administrative and associate staff conducts the new admission for each academic year. 7. The college website reflects the academic and physical infrastructure of the institution along with faculty details and informations related to other activities. 8. The institution has adopted online method of admission from the present academic session using Management Information System (MIS) linked with the college website. The application forms were made available in the college website and same was received at the college office. All shortlisted candidates were informed via email and payment of fee was through online payment gateways.</p>
Human Resource Management	<p>1. All Academic Administrative decision are approved by the Governing Body of the College. The Policy decisions taken at the level of sponsoring body are implemented at the departmental level through discussions/deliberations among all the stakeholders. 2. The college provides the students to express their ideas views in cultural, sports, co-curricular activities by selecting/electing Class Representatives, Animators, Volunteers in various committees. The students are given ample opportunity to formulate a plan in bringing out departmental</p>

	<p>magazines, Newsletter, College Magazines also during finalisation of study tours/field trips. 3. All the members of the staff are covered under (i) Group Insurance Scheme, (ii) EPF/NPS benefits, (iii) Registered Cooperative Society and (iv) Faculty Club. The Faculty Club arranges Annual get together cum picnic for thr staff, the Cooperative Society extends soft/emergency loans to the members of the staff. 4. All the stakeholders (staff students) can use the GYM and Indoor facility for recreational purposes. The Infirmary with qualified nurse attends to any emergency exigencies. 5. The college celebrates Inter Faith and Cross cultural activities by organising significant religious cultural festivals for overall development of Character, Personality and Social responsibility among young boys girls. 6. The achievement of the students and the teachers are recognised during Grand Finale of the College month activities by awarding a certificate of appreciation. 7. The Institution encourages the staff to monitor/advice and share responsibilities in different extra curricular activities with the students based on their interest passion. Peer support, mentoring and consultations are valued to resolve any issues between different stakeholders. 8. The Institution has qualified counsellors to refer students for addressing the queries, possible prospects and suggest easy method to minimise the stress level among the young learners. 9. The spread of awareness on Gender Equality among all the stakeholders by organising programmes on topic such as vulnerable adults, safeguarding children, substance abuse, etc. 10. While the Principal is the academic head of the college the students are well represented through each class representative, who are both responsible and accountable for student related activities. Decisions taken at the highest level has a focus on decentralisation. A well thought out feedback mechanism is in place with the availability of grievance redressal mechanism and anti ragging policies.</p>
Library, ICT and Physical	1. Library equipped with sufficient

Infrastructure / Instrumentation

number of books provides a learning platform for the students and teachers. The study materials are supplemented by Journals, Newsletter, Periodicals etc.

The Library is automated and e-resources are availed through KOHA, UGC-INFLIBNET, British Library (Kolkata) and various others online platforms. 2.

All Classrooms are equipped with ICT enabled tools in addition to Chalk duster methodology. 3. All Science departments has well maintained

Laboratories equipped with sufficient number of Instruments/Equipments/Glasswares/Consumables through Grant received

from Central funding agencies in addition to annual Budget allocation by the Institution. 4. The Bioinformatics

Centre provides ample opportunities to the students teachers to disseminate information from the available

databases. The Laboratory manuals, SOPs, are digitalised for the benefit of the students which can be accessed from the department repository. 5. The

physical Infrastructure of the college are well maintained by group of

dedicated Associated Staff under the able supervision of the management. The views/suggestions of the students and the teachers are taken into

consideration during formulating policies and administrative decision for proper implementation. The Swacch

initiatives plays a central role in keeping the campus clean-green-litter free along with optimum management of waste water resources. The college has

put in place SOLAR panels for lighting at different vantage points as a part of Energy Conservation Concept. All the

stakeholders are provided with safe potable drinking water, hygienic food stuffs at the Canteen which are closely monitored by a designated committee.

CCTVs are installed along with deployment of Security personnel to prevent any trespassing in the campus and to cater to the Security of all

stakeholders. The college website is the go to place for acquiring general information on various provision

facilities available in the college. 6.

The high end Instruments procured through Central funding in the different departments helps to augment

teaching learning activities in addition to research projects. The

	Central Instrumentation Centre facilitates the departments to conduct Practical/Projects beyond the Syllabi.
Curriculum Development	<p>Introduction of new add on/value added courses offer students choices. Choice based credit system is available only for PG courses, and in St. Edmund's College, it is only meant for the lone PG course, Master of Social Work (MSW). As a process of Curriculum Development, seminars, panel discussions, workshops, field visits/educational tours et al are always given priority. Workload for the teachers is allotted on the basis of their specialization and aptitude. The Academic Calendar helps focus periodic monitoring of the progress of the syllabus. Attendance of students is an indicator of the performance of the teacher with regard to the curriculum dissemination. Contribution of the faculty in curriculum development and syllabus preparation/revision through membership in academic and statutory bodies such as NEHU Academic Council, Board of Studies, and School Board etc is very significant. In St. Edmund's College we consciously try to link curriculum to National Social values through active engagement in outreach/hands-on approach.</p>
Teaching and Learning	<p>Teaching-learning practiced in St. Edmund's College is one of its highlights. It functions smoothly with efficient adherence to timetable/routine a proactive management ever ready to address student- concerns and innovative teaching-learning (LCD, PPT, Online, group activities, project based studies, emphasis on focusing on learning outcome) methodology. Teachers are encouraged to pursue PhD and handle major/minor research projects. Further, the following steps are taken to ensure a healthy teaching learning environment in the campus: ? All new appointees are UGC NET qualified ? Paper publications are encouraged ? easy access to Informatics Hub ? Wi-Fi enabled vantage locations and Internet facilities in every Dept ? remedial/ tutorial classes for select groups of students ? group discussions, peer learning, seminars ? extension and outreach programmes for sharing of knowledge with all</p>

	<p>stakeholders ? Summer Schools, Science Melas ? capacity building for Science Teachers, training in soft skills- outcome based education to measure progress. ? use of Dept Central library encouraged - industrial visits supplement - internships arranged ? timely tests, assignments, projects and exams for periodical/continuous evaluation</p>
Examination and Evaluation	<p>Evaluation happens through various methods both oral and written. Opportunity to improve is provided through counselling teacher-student meetings and transparent marking system. The college maintains a very efficient Examination Cell led by a teacher in-charge and a group of staff from the faculty, administration and support personnel. The cell takes care of entire process from registration to results. 1. Performance of a student are monitored and evaluated through Continuous Internal Assessment (CIA) at the departmental level. The Feedback on their performance are shared with the Parents. 2. Regular assignments, test. tutorials, seminar presentations, group discussion, viva voce are part of assessment to help the students to check their abilities during teaching learning process. 3. The college has very limited role in fixing the dates for the end semester examination, setting of question papers and evaluation of the same, However, senior faculty members of the college are directly involved in examination related activities entrusted by the affiliating university. The members of the staff by virtue of being a member of Board of Studies (BOS), School Board, Chief Examiner in different subjects takes active role in preparing question papers and evaluating the same in a time bound manner. Involvement of the faculty in such confidential activities helps the university to conduct the examination on time and publish the results within the stipulated time. 4. The college as a whole takes initiatives to address any examination and evaluation related grievances of the students by directly approaching the appropriate authority of the university. 5. The toppers at the University level examination in different courses are honoured during</p>

	<p>Felicitation Award ceremony for the graduating batch besides, the number of Awards, sponsored by various Alumni and families/organisations are given out to students for Academic as well as overall excellence. The college felicitate the Best passing graduate by bestowing the EDMUNDIAN OF THE YEAR AWARD.</p>
6.2.2 – Implementation of e-governance in areas of operations:	
E-governance area	Details
Administration	<p>1. Regular meetings between the heads of the department and the Principal/management are conducted, the minutes of such meeting are transmitted electronically. 2. The minutes of the departmental meeting are sent to the Principal/management via electronic mode. 3. The minutes of the Executive Committee (EC) and Governing Body (GB) of the college are circulated among the esteemed members through electronically. 3. The leave applications, communications to from the staff(s) are done electronically to minimise paper work. 4. The college having dedicated internet service from BSNL, NELINE desires to implement GO GREEN-SAVE TREES in all its future administrative deliberations. 5. Online admission process is encouraged to maintain transparencies. The college has current data inputs through AISHE portal, Ministry of Education, Govt. of India. The college maintains an MIS through the Linways Management System (Vendor).</p>
Finance and Accounts	<p>1. The college uses Tally ERP (Multi User) for bookkeeping, PFMS for central funds accounting, SBI Collect for collection of students fee to minimise paper work and maintain a CASHLESS campus. 2. The Internal Audit at the end of each financial year is undertaken by M/s Kiron Joshi Associates, Shillong whereas for State government funds, the Directorate of Local Fund Audit, Govt of Meghalaya does the Audit and place before the college its observations regarding usage of the funds. Majority of the account details are transferred digitally. 3. The college being sponsored by CCBI, New Delhi sends all the accounts statement electronically to its headquarter for subsequent audit</p>

	<p>by Mr S K Mahajan, New Delhi. 4. The salary for all the staff of the college are sent through direct bank transfer from designated bank accounts of the college to the individual account holders. 5. The fund received under Central Sponsored schemes are audited separately and the audited balance statements are uploaded to PFMS. Any interest accrued on the Central Govt. funding are to be transferred electronically to NTR Portal of Govt. of India. 6. The college propose to reduce the paper work in the accounts section and convert most of the balance sheet in digital format.</p>
Examination	<p>1. The internal assessment for the students are carried using LMS services whereby questions for sessional test, assignments, group seminars, feedback are posted which are easily accessible by the students. The students in return send the inputs via the LMS which are then subsequently evaluated. 2. The question papers for the internal examination for all semester are typed and send to the office of examination in-charge of the college via e-mode. 3. The evaluated marks are sent from the respected departments to the office of the principal on a standard format, electronically. 4. The results are published in the college website, students and their parents are informed accordingly via MIS/Linways. 5. There is a provision for submission of online assignment, projects, mock test as well as chat boxes.</p>
Student Admission and Support	<p>1. The college follows an open admission process whereby details of admission criteria, number of seats available are published in the college website. Admission are given on merit. 2. Presently the admission process is partially digitalised and the fee is collected via SBI Collect Online. 3. Using MIS/Linways the departments delivers notes and course materials to the learners for easy accessibility. 4. The monthly planner that mentions the no of academic days, holidays, events etc are uploaded in the college website. 5. Placement and career guidance is managed through the college Placement Cell, internal networks and social media. Student mentoring and counselling is done both internally</p>

	(department level) and externally through skill professionals.
Planning and Development	<p>1. Information from the administration to the various department are sent via emails, text message and LMS services in order to reduce paper work in the office. 2. The minutes of the meeting held between various stake holders are circulated in soft copies for further compliance. 3. The progression of the student with respect to attendance, marks, fees, etc are communicated using LMS services. 4. All important information of the college, College Prospectus, Service Rules are made available in the college website which is updated regularly. 5. E- initiatives have resulted in establishing a better communication network and a faster delivery module for all the stakeholders.</p>

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
2020	Binoyargha Dam	4th International Caparica Symposium on Nanoparticles and Applications, 21st - 23rd January, 2020	NA	31580
2019	Samrat Adhikari	STAR COLLEGE Annual Progress Meeting Organized by Department of Biotechnology, Govt. of India, New Delhi at Pondicherry University, Pondicherry, April - 18-20, 2020	NA	19800
2019	Sumit Deb	STAR COLLEGE Annual Progress Meeting Organized by Department of	NA	19800

		Biotechnology, Govt. of India, New Delhi at Pondicherry University, Pondicherry, April - 18-20, 2020				
No file uploaded.						
6.3.2 – Number of professional development / administrative training programmes organized by the College for teaching and non teaching staff during the year						
Year	Title of the professional development programme organised for teaching staff	Title of the administrative training programme organised for non-teaching staff	From date	To Date	Number of participants (Teaching staff)	Number of participants (non-teaching staff)
2019	NIL	Workshop on Waste management, Cleanliness hygiene	11/10/2019	12/10/2019	Nil	23
2019	STAR College Advisory Meeting	NIL	20/11/2019	20/11/2019	12	Nil
2019	National Workshop on Skill Development in North East India- The Next Level	NIL	12/03/2019	16/03/2019	22	Nil
2019	National Workshop on Bioinformatics Tools Techniques	NIL	28/06/2019	05/07/2019	21	Nil
2019	Workshop on Substance Abuse and HIV-AIDS	NIL	28/08/2019	30/08/2019	18	5
2019	Demonstration on Disaster Management and Emergency	NIL	06/09/2019	06/09/2019	14	10
No file uploaded.						

6.3.3 – No. of teachers attending professional development programmes, viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programmes during the year

Title of the professional development programme	Number of teachers who attended	From Date	To date	Duration
46th Orientation Programme UGC-HRDC, NEHU, Shillong	2	24/06/2019	14/07/2019	21
Short Term Course on MOOCS, UGC HRDC, NEHU, Shillong	1	02/12/2020	07/12/2020	6
ARPIT Course for Career Advancement Scheme (CAS) Promotion - Online Refresher Courses in Chemistry for Higher Education, Vide SWAYAM Portals	1	01/09/2019	31/12/2019	92
Refresher Course on Machine Learning, Academic Staff College, Gauhati University, Guwahati	1	29/01/2020	11/02/2020	13
TEQIP Short Term Course on Deep Learning for National Language Processing, IIT Guwahati	1	18/11/2019	22/11/2019	4
UGC Sponsored Refresher Course, UGC-HRDC, NEHU, Shillong	2	11/11/2019	24/11/2019	15
View File				

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

Teaching		Non-teaching	
Permanent	Full Time	Permanent	Full Time

Nill	Nill	Nill	Nill
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6.3.5 – Welfare schemes for

Teaching	Non-teaching	Students
1. SEC Staff Cooperative Scheme. 2. Group Insurance Scheme. 3. Faculty Club. 4. Infirmary with qualified nurse. 5. Indoor Games Gym Facility. 6. Life/Accident Coverage yearly	1. SEC Staff Cooperative Scheme. 2. Group Insurance Scheme. 3. Faculty Club. 4. Infirmary with qualified nurse. 5. Indoor Games Gym Facility. 6. Provision of Staff Quarters. 7. Life/Accident Coverage yearly 8. Financial support for emergency support	1. Gym facility, Indoor, Outdoor, Games facility. 2. Scholarship (State/Central) sponsored. 3. Provision of Ramp facility Differently abled 4. Infirmary with qualified nurse, wheel chair facility.

6.4 – Financial Management and Resource Mobilization

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

1. The college uses Tally ERP (Multi User) for bookkeeping, PFMS for central funds accounting, SBI Collect for collection of students fee. 2. The Internal Audit at the end of each financial year is undertaken by M/s Kiron Joshi Associates, Shillong whereas for State government funds, the Directorate of Local Fund Audit, Govt of Meghalaya does the Audit and place before the college its observations regarding usage of the funds. 3. The college being sponsored by CCBI, New Delhi sends all the accounts statement to its headquarter for subsequent audit by Mr S. K Mahajan, New Delhi. 4. The salary for all the staff of the college are sent through direct bank transfer from designated bank accounts of the college to the individual account holders. 5. The fund received under Central Sponsored schemes are audited separately and the audited balance statements are uploaded to PFMS.

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/ Grnats received in Rs.	Purpose
Management	400000	Maintenance of Cyanobacteria Repository Facility
No file uploaded.		

6.4.3 – Total corpus fund generated

223650170.00

6.5 – Internal Quality Assurance System

6.5.1 – Whether Academic and Administrative Audit (AAA) has been done?

Audit Type	External		Internal	
	Yes/No	Agency	Yes/No	Authority
Academic	No	Nill	Yes	IQAC
Administrative	No	Nill	Yes	CCBI

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

1. The College does not have a formalise Parent-Teacher Association. However, the administration allows for the Parents to express their views, grievances, suggestions observations on both Academic and Administrative functioning of the college from time to time 2. A system of Counselling is done for the Parents at the time of their Wards admission through the designated Orientation Programme. 3. Parents are taken on board by each department in case of any Feedback required from their end with regard to progress of their Wards in Academic Co-curricular activities. 4. Department space is always available for the Parents to interact with the Teachers and teachers in turn always facilitates the inputs provided from such meetings for enhanced importance in overall Teaching-Learning process.

6.5.3 – Development programmes for support staff (at least three)

1. Workshop on waste management, Cleanliness. 2. May Day celebrations felicitations of senior staff 3. Annual get together cum picnic.

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

1. Creation of Computer Application department. 2. Bifurcation of Social work department into UG and PG. 3. Automation of Library for easy access 4. Online student satisfaction survey- analysis and measures. 5. Decentralisation of Academic work load for evolving a better delivery mechanism 6. Mentorship role in Swachhta initiatives

6.5.5 – Internal Quality Assurance System Details

a) Submission of Data for AISHE portal	Yes
b) Participation in NIRF	No
c) ISO certification	No
d) NBA or any other quality audit	No

6.5.6 – Number of Quality Initiatives undertaken during the year

Year	Name of quality initiative by IQAC	Date of conducting IQAC	Duration From	Duration To	Number of participants
2019	Swachhta Initiatives, Water Management and Cleanliness	08/05/2019	08/05/2019	30/11/2019	300
2019	Whole Genome Sequence submission at Gene Bank, NCBI	25/04/2019	19/09/2019	20/11/2019	6
2019	Skill Development Programmes	12/03/2019	12/03/2019	24/09/2019	28
2019	Popularisation of Basic Sciences courses through	02/09/2019	07/09/2019	11/11/2019	111

	interaction, demonstration and exposure.				
2019	Workshop on Research Methodology	09/09/2019	30/09/2019	30/09/2019	11
2019	Submission of Proposal for permanent status to Bioinformatics Centre	29/11/2019	12/12/2019	30/03/2020	4
2019	Automation of College Library for easy access of books.	07/06/2019	03/07/2019	12/03/2020	10
2019	Shifting of College Canteen to a new site	19/07/2019	02/08/2019	04/09/2019	6
No file uploaded.					
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	Period To	Number of Participants		
			Female	Male	
Seminar on Indigenous Tribe	01/04/2019	01/04/2019	32	12	
Seminar on Public Policy & Social Exclusion	11/09/2019	11/09/2019	28	16	
Workshop on Leadership & Team Building	19/08/2019	21/08/2019	16	11	
7.1.2 – Environmental Consciousness and Sustainability/Alternate Energy initiatives such as:					
Percentage of power requirement of the University met by the renewable energy sources					
The Institution has made SWACHHTA as an integral part of its functioning and formulated a plan to set a standard on the following themes: 1. Higher benchmark in cleanliness and hygiene. 2. Effective use of water resources with rain water harvesting. 3. Path to Green Campus with ban on single use plastics and planting of tree samplings for carbon reduction. 4. The college has formalised a policy to felicitate/welcome any guest with a plant sampling during any formal deliberations in place of souvenir, following the adoption of the theme					

ADOPT A TREE. Similar initiative are taken by the group of dedicated students to plant trees sampling at different locations in East Khasi Hills district and the students are encouraged to look after these sampling by visiting such places. 5. The college appreciates the suggestion forwarded by the enthusiastic environmentally conscious members and allotted a parking space for bicycle to reduce carbon footprint. Few members of the faculty and students attend college using bicycle. 6. Energy conservation following installation of Solar Panels for lighting the campus. Separate Solar Panels are installed for managing power supply to department of Electronics Zoology. A lot of positive initiatives are in place at the campus such as Vermi compost pit, proper collection, separation disposal of waste through tie up with Local Municipal Board. For water management within the campus Rain water harvesting shall play an important role in preservation of water resources. Solar lightings (10 nos) are installed at designated locations within the campus to minimise the conventional power sources. The Boys hostel is equipped with Solar Geysers for supply of hot water to the residents thereby reducing the usage of electric power and natural gas.

The NSS/NCC volunteers along with students of Social Work/EVS department organises Cleaning drive within the campus and sensitise the community as a whole regarding environmental related issues. The Institution has extended its Social Responsibility towards the society by adopting a village Dewlieh, EKH, Meghalaya that yielded a visible outcome wherein the district administration declared the said village as ODF. The college in its commitment targets to make the said village as ODF-plus and ODF-plus plus in the near future. The Institution has participated in Institutional Swachh Campus ranking since 2017, an initiative of MHRD, SPOC, Govt of India. The MGNCRE of Ministry of Education Govt. of India recognised the college as one of the EXEMPLARY PERFORMERS in Campus water and sanitation management and designate institution as MENTOR INSTITUTION for mainstreaming Swachhta action plan in rural areas through community participation.

7.1.3 – Differently abled (Divyangjan) friendliness

Item facilities	Yes/No	Number of beneficiaries
Ramp/Rails	Yes	7
Braille Software/facilities	Yes	3
Scribes for examination	Yes	7
Rest Rooms	Yes	7
Any other similar facility	Yes	7

7.1.4 – Inclusion and Situatedness

Year	Number of initiatives to address locational advantages and disadvantages	Number of initiatives taken to engage with and contribute to local community	Date	Duration	Name of initiative	Issues addressed	Number of participating students and staff
2019	Nil	1	10/11/2019	12	Providing college space during Annual	Parking Facility for Vehicles carrying Pilgrims,	25

					Catholic Eucharistic Communion	providing rest rooms, safe drinking water.	
2019	Nil	1	05/01/2020	6	Engineering Service Examination (UPSC)	Providing classrooms, restrooms, parking facility, office space, canteen, safe drinking water.	12
2019	Nil	1	02/06/2019	12	Civil Service (P) Examination (UPSC)	Providing classrooms, restrooms, parking facility, office space, canteen, safe drinking water.	40
2019	Nil	1	22/09/2019	3	Providing Sports Infrastructure and Canteen facility	Football ground with flood light, safe drinking water, restroom, first aid facility and parking	8
2019	Nil	1	11/04/2019	1	Providing space for 3 Electoral Booths for Lok Shaba Election	Infrastructure Facility, Night Stay for Officials involved in Election process,	4

						Food and Security provided.
No file uploaded.						
7.1.5 – Human Values and Professional Ethics Code of conduct (handbooks) for various stakeholders						
Title		Date of publication		Follow up(max 100 words)		
College Prospectus		10/04/2019		The college prospectus elaborates on the Education goals and objective of the college as well as Codes of Conduct to be followed by each student. Such Codes includes expectations of the pupil, Management, the larger College Community, Teachers and the fellow students. Being a Catholic Institution established under the Vision of Blessed Edmund Rice, the Code of Conduct to be followed by the students also includes expectation of GOD.		
Service Rules for Sponsoring Body Sanctioned Post		01/01/2019		The Professional Ethics, Code of Conduct, work load and admissible leave rules are documented as per UGC guidelines and incorporated by the Sponsoring Body (CCBI) to maintain transparency and accountability in the Institution. The Service Rules are uploaded on the website.		
Service Rules for Govt Sanctioned Teachers - 2015		01/01/2019		The Professional Ethics, Code of Conduct, work load and admissible leave rules are documented as recommended by Directorate of Higher Technical Education, Government of Meghalaya to maintain transparency and accountability in the Institution. The Service Rules are uploaded on the website.		
7.1.6 – Activities conducted for promotion of universal Values and Ethics						
Activity		Duration From		Duration To		Number of participants

Seminar on Public Policy, social exclusion and sustainable development	11/09/2019	11/09/2019	21
Seminar on Sustainable Root (Family tradition Values)	14/10/2019	14/10/2019	13
No file uploaded.			
7.1.7 – Initiatives taken by the institution to make the campus eco-friendly (at least five)			
<p>1. Solar lighting with installation of Solar geysers at the hostel. Ten extra Solar Panels installed for backup power supply to department of Electronics and Zoology. 2. Proper waste management, separation into Biodegradable Non Biodegradable items and disposal through Local Municipal Board. 3. Water resource management and filtration using improvised method followed by rain water harvesting. 3. Proper handling and disposal of e-waste and chemical waste (BIOHAZARD). Setting up of a designated Pit for dumping of chemical waste as per protocol. 4. Vermi compost pit and manufacture of organic manures. 5. Adopt a Tree, celebration of World Environment Day, Earth Day followed by creating awareness among all stake holders. Identification of Medicinal Plants in the campus and proper care. 6. Minimise use of paper works, ban on single use plastics to make the campus as Litter free. 7. Sowing of plant samplings, watering nurturing of plants/trees to make Pristine Green Campus.</p>			
7.2 – Best Practices			
7.2.1 – Describe at least two institutional best practices			
<p>BEST PRACTICES IN ST. EDMUND'S COLLEGE, SHILLONG 1.. Title of the practice: Financial Empowerment of Individual Departments: a Decentralised Exercise/Practice. The context that required the initiation of the practice An institution thrives when all the stake holders work diligently and with full commitment towards one common goal of attaining the vision of the institution. As far as St. Edmund's College is concerned it is noteworthy that right from the President of the Governing Body to the staff and students, all the stakeholders have played their role well in building of the college. The academic programmes, other than classroom activities, undertaken by various departments, often require financial support by the Management. If the departments are allowed to organize programmes with the knowledge that there is a very supportive Management behind them taking care of the financial implications, it becomes very easy for them to plan and organise any such activity. Objectives of the practice Financial Empowerment of individual departments: The Departments feel confident that the Management is behind them in support. Flexibility in organizing student oriented programmes: To ensure this happens, the Management of the College allows the individual departments take initiative to organise programmes that benefit the students at departmental/inter departmental level. Minimum interference from the Management: Certain amount of autonomy at the departmental level The Practice The Management gives sufficient freedom to the Principal, who is the academic head of the institution to function in order to fulfil the vision and mission of the institution. Academic responsibilities are fairly divided among all the Heads of Departments, who in turn, delegate responsibilities to their departmental colleagues. Committees are appointed for the various academic and co-curricular activities to be conducted in the course of the academic year. The list of committees is displayed at the beginning of the year on the staff notice-board. This ensures transparency in policy execution. The</p>			

responsibilities are communicated to the faculty members through staff meetings. Various co-curricular and extra-curricular activities are conducted through student committees having a teacher(s)-in-charge. The Principal of the College holds regular meetings with the teaching and nonteaching staff. In these meetings, various issues are taken up for discussion before arriving at a final decision. The Heads of Departments monitor the functioning of the various activities' committees. The students are given enough freedom to work without any pressure and they enjoy their freedom with restraint and responsibility.

The departments are given the financial freedom to spend the small-time expenses through simple requisition or through elaborate budgeting. The participative decision-making ensures total participation of all the people concerned. The office administration of the College is headed by the Secretary of the Governing Body under whom there are Office Administrator, Head Assistant, Senior Office Assistants, Assistants and a host of other Support Staffs and Associates. Besides, the IQAC Coordinator is responsible for the overall quality sustenance of the initiatives taken by the Management in consultation with the Principal who co-ordinates the day-to-day activities along with the Vice Principal. For the Self-Financed Courses, the designated Academic Dean along with the Vice Principal takes care of the academic part.

Thus, the decentralization of department activities and identifying the engagement of personnel of the institution for carrying out all such activities, in addition to financial empowerment, helps in improving the quality of its educational provisions. Obstacles faced, if any and strategies adopted to overcome them Notable among the obstacles was the initial confusion over the individual responsibilities assigned to different administrators.

Students had been unsure for some time about the fresh administrative arrangement. However, right kind of information dissemination system (through Website, Notice Boards, Class Representatives, department Meetings et al) had ensured that such difficulties never created any alarms. With the introduction of GST, procuring small time bills/vouchers with GST registration number had been difficult for the departments engaged in various activities. This, however, was a temporary phenomenon and got sorted out in quick time. There had been no other obstacles faced worth mentioning. Impact of the practice The practice has impacted the day to day functioning of the college in a very positive way. It has made planning and execution of extracurricular and co-curricular activities hassle free, with hassle-free financial support and support provided by the Management. The practice has also allowed the departments to organise research activities involving students without being unduly constrained by financial requirements to set the ball rolling. Further, financial empowerment has also added a newfound zeal to the faculty and students to plan/organise programmes involving students/faculty of other institutions as well. The biggest impact, however, has been the mutual trust and respect shared between the Management and the staff. Resources required ? Dedicated office assistant to assist the departments ? Requisition slips for small time financial requirements 2..Title of the practice: Student Empowerment: A Holistic Approach The context that required the initiation of the practice:

St Edmund's College is well known for transforming and empowering students who come from diverse ethnic, socio cultural and linguistic backgrounds representing the under-privileged as well as the affluent section of the society. We feel, as educators, it is our responsibility to nurture the untapped potential lurking inside the students. One of the best practices is of our college is thus the empowerment of students and their all-round growth. This practice helps to facilitate self-growth, self-esteem and actualization of potential of the students through various ways of empowerment and competence building. Further, it's also recognized by the Management that a significant contribution is made through this practice to the national cause in the form of good human capital. Objectives of the practice ? To create individuals rather than dishing out directionless graduates ? To equip students with a sense of

responsibility, accountability ? To create creative minds ? Encourage independence of thought and action ? Facilitate decision making process ? Contribute to National cause of building a significant and performing human capital ? Flexibility in organising student oriented programmes: To ensure this happens, the Management of the College allows the individual departments take initiative to organise programmes that benefit the students at departmental/inter departmental level. ? Minimum interference from the Management: Certain amount of autonomy at the departmental level The Practice The students are given the right kind of opportunity to provide feedback on teaching-learning and evaluation process. Influence of Social Media in our lives in recent times has made it almost mandatory that every institution is open to address the grievances of all the stake holders, the students being the most important ones. The College allows space for students to imbibe in them decision-making power in various aspects of functioning of College affairs, particularly in extra and co-curricular areas. This might seem like an unrealistic idea in an age of common core standards and high-stakes tests - what if students veer drastically off the roadmap chosen by the College? However, this is actually entirely possible in an atmosphere of trust and openness and a healthy teacher-student bonding. The teachers in St. Edmund's are always ready to Jump in to work with students. In the process, the students get the required impetus to express their individual ideas in a more casual environment often outside the confines of a rather formal looking classroom. Some of the areas that the students are allowed to work on independently are the Annual College Magazine (THE EDMUNDIAN), departmental journals/magazines/newsletters, formation and management of various clubs, staging of annual plays/musicals, organization of college Fests and other significant calendar events of the College. The practice ensures that the idea of all-round development of a student, as enshrined in the vision and mission of the College, is given a concrete shape. Obstacles faced, if any No real obstacle was noticed or detected with the students showing great enthusiasm in absorbing the idea of independent work. Some students, however, had been slow in responding to the invitations made by various clubs or even departments. Also, some ethnic groups seemed to be comfortable only in their chosen company. But, as the college encouraged a cultural blending in organising various programmes, the students understood the value of participation cutting across ethnic, linguistic and cultural backgrounds, thus ensuring the success of the various projects/programmes. Impact of the practice ? Instant impact on the students' participation: almost 100 change ? Increased motivational level of the students ? Emergence of student clubs ? Renewed interest shown by students in identifying areas of action ? Tutor-ward relationship has hit an all-time high with the students taking lead roles ? Academic performance of the students showed signs of all-round improvement ? The entire practice was aimed at reinforcement of quality practices already in place in St. Edmund's College, and the all-round impact has been extremely positive Resources required ? Infra structure support: rooms with audio visual facility ? Budgetary provision ? Refreshment for participants ? Resource persons

Upload details of two best practices successfully implemented by the institution as per NAAC format in your institution website, provide the link

https://sec.edu.in/igacdocs/Best_Practices_2019-20_.pdf

7.3 – Institutional Distinctiveness

7.3.1 – Provide the details of the performance of the institution in one area distinctive to its vision, priority and thrust in not more than 500 words

VISION MISSION: St. Edmund's College, Shillong has a vision that is enshrined in the motto of the College: "Facta Non Verba" which translates "Deeds Not Words". It aims at imparting equitable quality education grounded on the core

values of excellence, competition and ideals. The College also stands on the principles advocated by Edmund Ignatius Rice, the Founder of the Institution.

The College endeavours to create a stimulating environment in the Campus through various academic programmes and co-curricular activities in order to develop character, shape personality and build in a sense of social responsibility among our young men and women. As the college prioritises learning, teaching and sharing of knowledge, education is therefore perceived as a potent vehicle that works towards transforming attitudes and mind-sets for the good of one and all in the society in particular and the world at large. In

St. Edmund's College, we believe that education is critical to building inclusive societies that are resilient to fear and hate. Equipping learners to engage positively with difference is an urgent global challenge. The first step towards achieving this inclusiveness and plurality is to admit students from diverse cultural, ethnic, religious, social and linguistic background and the college does that on a regular basis. Even a cursory glance at the overall student profile of the college will confirm that ours has never been an exclusive institution. Despite the fact that the College is being managed by the Congregation of Christian Brothers in India (CCBI), a catholic organization, St. Edmund's has always maintained this identity, without ever

compromising on its quest for excellence. How do we foster a positive understanding of and engagement with diversity? Through our education programme we:

- Equip teachers with the knowledge, skills and confidence to address issues related to diversity in and out of the classroom.
- Empower education leaders to develop strategies to strengthen inclusion in colleges.
- Collaborate on projects and resources that support the integration of pluralism across different contexts.
- Celebrate inter faith and cross cultural activities through celebration of significant religious and cultural festivals.
- Enthuse students and teachers to attend programmes that celebrate pluralism and inclusiveness. Our Learning Framework responds to the opportunities and challenges of a changing, diverse and connected world. The framework supports learners by identifying the knowledge, skills and attitudes that enable them to:
- Reflect on and think critically about how historical narratives and interpretations of current events impact views of identity and ideas about who belongs.
- Recognize and analyze how "hardware" (policies and institutions) and "software" (norms and attitudes) can reinforce systems of power and privilege or challenge group-based inequalities.
- Engage in dialogue which includes multiple perspectives, marginalized viewpoints and different forms of expression to widen practices of belonging.
- Apply a pluralism lens to social and political issues in order to collaborate on and advance inclusion, recognition and respect for diversity, locally and globally.

Provide the weblink of the institution

https://sec.edu.in/igacdocs/vision_mission.pdf

8.Future Plans of Actions for Next Academic Year

1) Initiate to start the UG Course in Education: In preparation for the National Education Policy – 2020, the College would like to be proactive and introduce the course on Education, so that it will be natural to opt for the integrated Bachelor of Education (B.Ed – 4 year course). 2) Design the UG Course in Psychology: Since the North Eastern Hill University (NEHU), doesn't as yet offer Psychology, we will approach it to introduce the course. The Course of Psychology, has a lot of potential to offer lateral courses in Management as well. 3) Initiate to start the PG Course in Bio-Informatics: Currently our College offers a very good course in Bio-Informatics, with abundant scope for research. To help the Dept grow, we'd like to introduce the PG course to enable students reach greater heights. 4) Relocate and revamp the Central Instrumentation Centre: In order to encourage the spirit of research in the College, and make the expensive instruments procured, more accessible for Inter-

Departmental activities, including students from other Institutions. 5) Adoption of Wahrinong Village: This is a village that is approximately 200 kms out of the city, and as part of our Institutional Social Responsibility (ISR) in West Khasi Hills District, Meghalaya, we'd like to adopt this village which has a very rich hinterland, with no other College near by. 6) Fully equip a centre for the Visually Impaired Students: With the College being more conscious of being offering greater service to these students, we'd like to give them access not just Academic information, but Add-On courses and their other requirements as well. 7) Initiate the process of having an Innovation Centre in the campus: The need of the hour is to have young learners that can tap into their creative talent, of which we have an abundance of. With this in mind, we propose to have an Innovation Centre that will possibly tie-up with Industry. 8) Apply for funding from DBT, Govt. of India: We hope to approach the Govt for research funds through State Council of Science and Technology, Meghalaya to start Skill Based Courses and training for the Staff and Students. This will go a long way to encouraging a culture of research not just for the Teachers but the Students as well. 9) Explore the possibility of having a Media Centre: It's not just the Pandemic that has thrown up the need for ICT to be tapped into to deliver learning to a larger clientele. The Media Centre will be used for recording of lessons and hosting Webinars, not just in English but in other Regional languages as well. 10) Getting greater utility of the current Learning Platform: We are fortunate to have the Linways System as a learning platform. The service provider is very cooperative and has helped to deliver content and learning in a more accountable way. They are open to ideas generated by the College, which helps us dream new possibilities. Moving towards a 'paper-less office' is already in the process.

ANNEXURE- I [Academic Calendar]**St. Edmund's College**

(Affiliated to North Eastern Hill University, Shillong)

Recognized by the University Grant Commission under 2 (f) and 12 (B) of UGC act 1956)

Laitumkhrah, Shillong – 793003, Meghalaya, India

E-mail: stedmundscollege@gmail.comWebsite: <http://sec.edu.in>**ACADEMIC PLANNER - 2019****JANUARY 2019**

DATE	DAY	
01	TUESDAY	New Year
02	WEDNESDAY	
03	THURSDAY	
04	FRIDAY	
05	SATURDAY	
06	SUNDAY	
07	MONDAY	
08	TUESDAY	
09	WEDNESDAY	
10	THURSDAY	
11	FRIDAY	
12	SATURDAY	
13	SUNDAY	
14	MONDAY	
15	TUESDAY	
16	WEDNESDAY	
17	THURSDAY	
18	FRIDAY	
19	SATURDAY	
20	SUNDAY	
21	MONDAY	Office Re-opens
22	TUESDAY	
23	WEDNESDAY	
24	THURSDAY	
25	FRIDAY	
26	SATURDAY	Republic Day Celebration at Campus
27	SUNDAY	
28	MONDAY	
29	TUESDAY	
30	WEDNESDAY	
31	THURSDAY	

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E-mail: stedmundscollege@gmail.comWebsite: <http://sec.edu.in>**ACADEMIC PLANNER - 2019****FEBRUARY 2019**

DATE	DAY	
01	FRIDAY	Staff programme
02	SATURDAY	
03	SUNDAY	
04	MONDAY	Classes for 2 nd /4 th /6 th Semester begins
05	TUESDAY	
06	WEDNESDAY	Sophia Girls' College visit to St. Edmund's College
07	THURSDAY	
08	FRIDAY	
09	SATURDAY	
10	SUNDAY	
11	MONDAY	
12	TUESDAY	
13	WEDNESDAY	
14	THURSDAY	Seminar on Pi and Primes
15	FRIDAY	
16	SATURDAY	Workshop on Assembly & Use of Foldscope and Twinning programme
17	SUNDAY	
18	MONDAY	
19	TUESDAY	
20	WEDNESDAY	
21	THURSDAY	
22	FRIDAY	
23	SATURDAY	<ul style="list-style-type: none"> Lecture- Mathematics Lecture on Horticulture in Meghalaya- Botany
24	SUNDAY	
25	MONDAY	
26	TUESDAY	
27	WEDNESDAY	
28	THURSDAY	Farewell for two Professor's

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Laitumkhrah, Shillong – 793003, Meghalaya, India

E-mail: stedmundscollege@gmail.com

Website: <http://sec.edu.in>

ACADEMIC PLANNER - 2019

MARCH 2019

DATE	DAY	
01	FRIDAY	Seminar on "Travel and Society"
02	SATURDAY	
03	SUNDAY	
04	MONDAY	NAAC Visit
05	TUESDAY	NAAC Visit
06	WEDNESDAY	Ash Wednesday
07	THURSDAY	
08	FRIDAY	<ul style="list-style-type: none"> Interaction on Foreign Trade Policy Interaction with Dr. Bisht on Bamboo Workshop International Women's Day: "Think equal – build smart- innovate for change"
09	SATURDAY	
10	SUNDAY	
11	MONDAY	
12	TUESDAY	Skill Development Programme
13	WEDNESDAY	Skill Development Programme
14	THURSDAY	<ul style="list-style-type: none"> Skill Development Programme <ul style="list-style-type: none"> Workshop on IOT Plant Tissue Culture
15	FRIDAY	<ul style="list-style-type: none"> Skill Development Programme <ul style="list-style-type: none"> Workshop on IOT
16	SATURDAY	<ul style="list-style-type: none"> Invited Lecture by Eboton Kharkongor/ Life Skills <ul style="list-style-type: none"> Food Fest Lecture on Microcontroller
17	SUNDAY	
18	MONDAY	
19	TUESDAY	Significance of Field Research - Workshop
20	WEDNESDAY	Quiz (Computer Sc.)
21	THURSDAY	Holi
22	FRIDAY	Science Mela – World Water Day "Save Water- Save Nature"
23	SATURDAY	<ul style="list-style-type: none"> Science Mela Talk on Si-H based super lattice structure
24	SUNDAY	
25	MONDAY	Commerce Quiz
26	TUESDAY	One day interactive Program
27	WEDNESDAY	One day interactive Program
28	THURSDAY	
29	FRIDAY	Space technology (Physics)
30	SATURDAY	
31	SUNDAY	

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E-mail: stedmundscollege@gmail.comWebsite: <http://sec.edu.in>**ACADEMIC PLANNER - 2019****APRIL 2019**

DATE	DAY	
01	MONDAY	Seminar on Indigenous Tribe
02	TUESDAY	
03	WEDNESDAY	Internal exams for 2 nd /4 th /6 th Semester students
04	THURSDAY	Internal exams for 2 nd /4 th /6 th Semester students
05	FRIDAY	Internal exams for 2 nd /4 th /6 th Semester students
06	SATURDAY	Internal exams for 2 nd /4 th /6 th Semester students
07	SUNDAY	
08	MONDAY	Internal exams for 2 nd /4 th /6 th Semester students
09	TUESDAY	Internal exams for 2 nd /4 th /6 th Semester students
10	WEDNESDAY	
11	THURSDAY	
12	FRIDAY	
13	SATURDAY	
14	SUNDAY	
15	MONDAY	
16	TUESDAY	
17	WEDNESDAY	Head's meeting with The Principal, Secretary & GB
18	THURSDAY	Star College Status presentation at Pondicherry University
19	FRIDAY	Good Friday
20	SATURDAY	
21	SUNDAY	
22	MONDAY	Easter Monday / World Earth Day – Protect the Planet
23	TUESDAY	
24	WEDNESDAY	
25	THURSDAY	Seminar on "Cult"
26	FRIDAY	
27	SATURDAY	
28	SUNDAY	
29	MONDAY	2 nd /4 th /6 th Semester Practical University exam begins
30	TUESDAY	

Contact Details: Office Phone: (0364) 2224533 (M) +91-9862432280. Fax: (0364) 2223234

ANNEXURE- I [Academic Calendar]**St. Edmund's College**

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Recognized by the University Grant Commission under 2 (f) and 12 (B) of UGC act 1956)

Laitumkhrach, Shillong – 793003, Meghalaya, India

E-mail: stedmundscollege@gmail.comWebsite: <http://sec.edu.in>**ACADEMIC PLANNER - 2019****MAY 2019**

DATE	DAY	
01	WEDNESDAY	
02	THURSDAY	
03	FRIDAY	
04	SATURDAY	
05	SUNDAY	
06	MONDAY	
07	TUESDAY	
08	WEDNESDAY	
09	THURSDAY	
10	FRIDAY	
11	SATURDAY	
12	SUNDAY	
13	MONDAY	
14	TUESDAY	
15	WEDNESDAY	
16	THURSDAY	
17	FRIDAY	
18	SATURDAY	Buddha Purnima
19	SUNDAY	
20	MONDAY	
21	TUESDAY	2 nd /4 th /6 th Semester Practical University exam begins
22	WEDNESDAY	
23	THURSDAY	
24	FRIDAY	
25	SATURDAY	
26	SUNDAY	
27	MONDAY	
28	TUESDAY	
29	WEDNESDAY	
30	THURSDAY	
31	FRIDAY	

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DATE	DAY	
01	SATURDAY	
02	SUNDAY	
03	MONDAY	
04	TUESDAY	
05	WEDNESDAY	Id-UI-Fitre
06	THURSDAY	
07	FRIDAY	
08	SATURDAY	
09	SUNDAY	
10	MONDAY	
11	TUESDAY	
12	WEDNESDAY	
13	THURSDAY	2 nd /4 th /6 th Semester Practical University exam ends
14	FRIDAY	
15	SATURDAY	Thomas Jones Day
16	SUNDAY	
17	MONDAY	
18	TUESDAY	
19	WEDNESDAY	
20	THURSDAY	
21	FRIDAY	International Yoga Day
22	SATURDAY	
23	SUNDAY	
24	MONDAY	
25	TUESDAY	
26	WEDNESDAY	World Environment Day Celebration – "Beat Air Pollution"
27	THURSDAY	
28	FRIDAY	<ul style="list-style-type: none"> Workshop on Bioinformatics – "Tools & Techniques" <ul style="list-style-type: none"> Orientation Prog for BSW, BCA & BCOM
29	SATURDAY	<ul style="list-style-type: none"> Workshop on Bioinformatics – "Tools & Techniques" <ul style="list-style-type: none"> Orientation Prog for BA Orientation Prog for BSc
30	SUNDAY	

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DATE	DAY	
01	MONDAY	Workshop on Bioinformatics – “Tools & Techniques”
02	TUESDAY	<ul style="list-style-type: none"> Workshop on Bioinformatics – “Tools & Techniques” 1st/3rd/5th Semester classes starts
03	WEDNESDAY	Workshop on Bioinformatics – “Tools & Techniques”
04	THURSDAY	Workshop on Bioinformatics – “Tools & Techniques”
05	FRIDAY	Workshop on Bioinformatics – “Tools & Techniques”
06	SATURDAY	
07	SUNDAY	
08	MONDAY	
09	TUESDAY	
10	WEDNESDAY	
11	THURSDAY	
12	FRIDAY	
13	SATURDAY	
14	SUNDAY	
15	MONDAY	Seminar on “Life after class”
16	TUESDAY	
17	WEDNESDAY	U Tirot Singh Day
18	THURSDAY	Sensitization Programme on Psychosocial Care & Disaster Risk Reduction
19	FRIDAY	
20	SATURDAY	
21	SUNDAY	
22	MONDAY	
23	TUESDAY	<ul style="list-style-type: none"> Institutional Swachhta Ranking – 2019 Participation at AISHE Portal
24	WEDNESDAY	
25	THURSDAY	
26	FRIDAY	Seminar on “Beat Plastic Pollution”
27	SATURDAY	
28	SUNDAY	
29	MONDAY	
30	TUESDAY	
31	WEDNESDAY	<ul style="list-style-type: none"> Social Media Champion (SMC) participation at AISHE portal Orientation programme for NSS Volunteers

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E-mail: stedmundscollege@gmail.comWebsite: <http://sec.edu.in>**ACADEMIC PLANNER - 2019****AUGUST 2019**

DATE	DAY	
01	THURSDAY	Workshop on Swachhta Pakhwada – NSS unit
02	FRIDAY	
03	SATURDAY	
04	SUNDAY	
05	MONDAY	
06	TUESDAY	
07	WEDNESDAY	
08	THURSDAY	
09	FRIDAY	
10	SATURDAY	
11	SUNDAY	
12	MONDAY	Id-Ui-Zuha
13	TUESDAY	Workshop on Basic Electronics
14	WEDNESDAY	
15	THURSDAY	Independence Day Celebration
16	FRIDAY	
17	SATURDAY	
18	SUNDAY	
19	MONDAY	
20	TUESDAY	Annual Staff Cooperative and Faculty Hub meeting
21	WEDNESDAY	
22	THURSDAY	Motivational Talk : Journey from St. Edmund's to IIT Bombay
23	FRIDAY	
24	SATURDAY	Janmashtami
25	SUNDAY	
26	MONDAY	
27	TUESDAY	
28	WEDNESDAY	Seminar on "Substance Abuse and HIV/AIDS"
29	THURSDAY	Founder's Day Celebration
30	FRIDAY	One Day Workshop for Headman
31	SATURDAY	My passion – My Shillong – A call to Act now _ Social Responsibility Drive – NSS unit

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Website: <http://sec.edu.in>**ACADEMIC PLANNER - 2019****SEPTEMBER 2019**

DATE	DAY	
01	SUNDAY	
02	MONDAY	
03	TUESDAY	
04	WEDNESDAY	
05	THURSDAY	Teachers' Day Celebration
06	FRIDAY	
07	SATURDAY	One Day Basic Science Program
08	SUNDAY	
09	MONDAY	
10	TUESDAY	Muharram
11	WEDNESDAY	Seminar on "Public Policy – Social Exclusion – Unemployment"
12	THURSDAY	
13	FRIDAY	Skill Development Program
14	SATURDAY	<ul style="list-style-type: none"> Skill Development Program Capacity Building, Sensitization and Awareness in Biotechnology for Higher Secondary Schools
15	SUNDAY	
16	MONDAY	Skill Development Program
17	TUESDAY	Workshop & Play "Breakfast at Tiffany's"
18	WEDNESDAY	Unitarian Day
19	THURSDAY	
20	FRIDAY	Faculty Development Programme for science teachers of School's
21	SATURDAY	Faculty Development Programme for science teachers of School's
22	SUNDAY	
23	MONDAY	Embedded system & Microcontroller Applications Seminar
24	TUESDAY	NSS Foundation Day celebration
25	WEDNESDAY	
26	THURSDAY	
27	FRIDAY	
28	SATURDAY	1 st /2 nd /3 rd Semester Internal Exam concluded
29	SUNDAY	
30	MONDAY	Workshop on Research Methodology

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DATE	DAY	
01	TUESDAY	150 th Birth Anniversary of Mahatma Gandhi celebration
02	WEDNESDAY	Gandhi Jayanti
03	THURSDAY	Durga Puja
04	FRIDAY	Durga Puja
05	SATURDAY	Durga Puja
06	SUNDAY	Durga Puja
07	MONDAY	Durga Puja
08	TUESDAY	Durga Puja
09	WEDNESDAY	Durga Puja
10	THURSDAY	
11	FRIDAY	
12	SATURDAY	One Day Basic Science Program
13	SUNDAY	
14	MONDAY	Seminar on "Sustainable Root"
15	TUESDAY	
16	WEDNESDAY	Invited Lecture – Career prospects – Industrial Perspective
17	THURSDAY	
18	FRIDAY	Seminar on Scope of Biotechnological Research's
19	SATURDAY	Colossus Memorial Lecture
20	SUNDAY	
21	MONDAY	
22	TUESDAY	
23	WEDNESDAY	
24	THURSDAY	
25	FRIDAY	
26	SATURDAY	
27	SUNDAY	
28	MONDAY	
29	TUESDAY	Visit to Indian Meteorological Department, Laimer, Shillong (EVS 6 th Semester Students)
30	WEDNESDAY	
31	THURSDAY	

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DATE	DAY	
01	FRIDAY	1 st /3 rd /5 th Semester theory classes completed
02	SATURDAY	All Souls' Day
03	SUNDAY	
04	MONDAY	1 st /3 rd /5 th Semester practical University exam begins
05	TUESDAY	
06	WEDNESDAY	
07	THURSDAY	
08	FRIDAY	Wangala Festival
09	SATURDAY	Seminar on "Bamboo and Employment Generation"
10	SUNDAY	
11	MONDAY	
12	TUESDAY	Guru Nanak's Birthday
13	WEDNESDAY	
14	THURSDAY	
15	FRIDAY	
16	SATURDAY	Hackathon - NSS
17	SUNDAY	
18	MONDAY	
19	TUESDAY	
20	WEDNESDAY	
21	THURSDAY	
22	FRIDAY	
23	SATURDAY	Seng Kut Snem
24	SUNDAY	
25	MONDAY	
26	TUESDAY	Constitution Day Celebration
27	WEDNESDAY	1 st /3 rd /5 th Semester theory University exam begins
28	THURSDAY	
29	FRIDAY	
30	SATURDAY	

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DATE	DAY	
01	SUNDAY	
02	MONDAY	1 st /3 rd /5 th Semester University Practical Exam concluded
03	TUESDAY	
04	WEDNESDAY	
05	THURSDAY	
06	FRIDAY	
07	SATURDAY	
08	SUNDAY	
09	MONDAY	
10	TUESDAY	
11	WEDNESDAY	1 st /3 rd /5 th Semester Theory University exam concluded
12	THURSDAY	Pa Togan Nengminza Sangma's Death Anniversary
13	FRIDAY	Classes closes for Vacation
14	SATURDAY	Christmas Celebrations
15	SUNDAY	
16	MONDAY	
17	TUESDAY	
18	WEDNESDAY	U Soso Tham's Death Anniversary
19	THURSDAY	
20	FRIDAY	
21	SATURDAY	Office Closes
22	SUNDAY	
23	MONDAY	
24	TUESDAY	
25	WEDNESDAY	Christmas Day
26	THURSDAY	
27	FRIDAY	
28	SATURDAY	
29	SUNDAY	
30	MONDAY	U Kiang Nangbah Death Anniversary
31	TUESDAY	

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ANNEXURE II

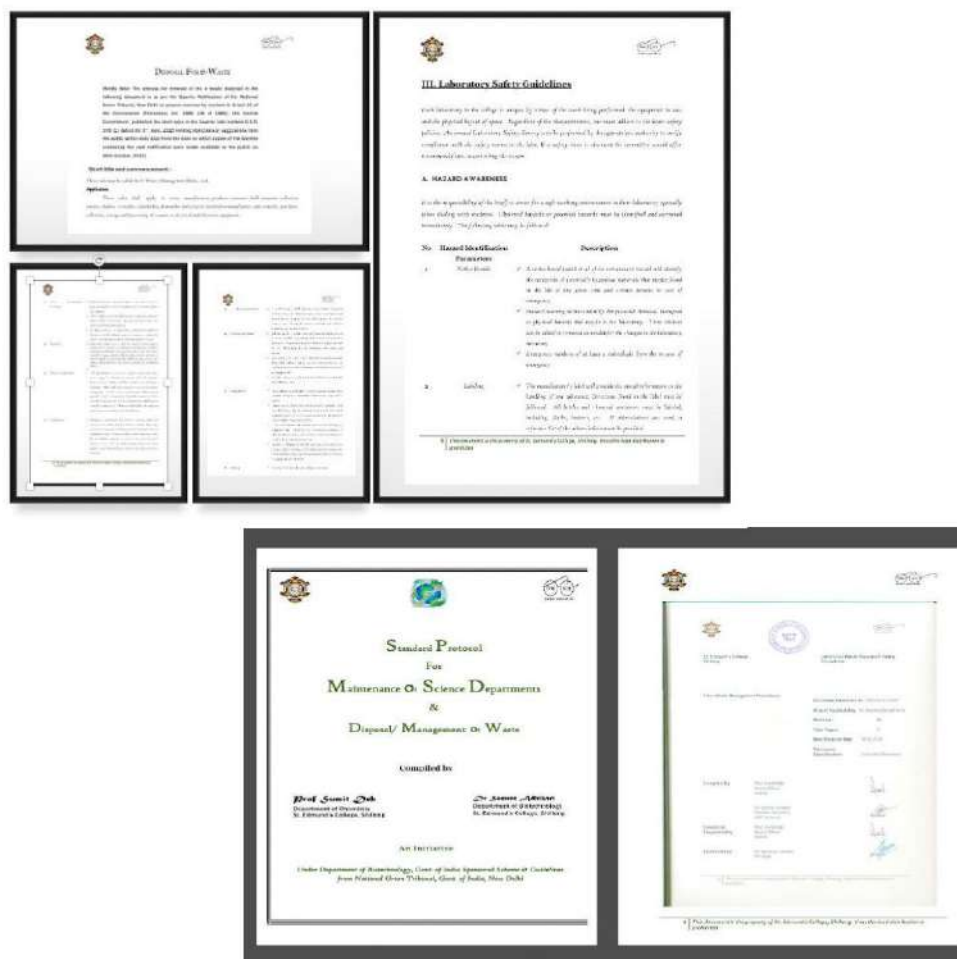


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Quality Initiatives by IQAC, during the year for promoting quality culture

1. SOP for Waste Management/Laboratory Safety Protocols



Contact Details: Office Phone: (0364) 2224533 (M) +91-9862432280. Fax: (0364) 2223234

ANNEXURE II



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2. Participation in Institutional Swacch Initiatives



International Yoga Day
at College Campus



swacch Initiatives
Litter Free Campus

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The Founder's Day
Celebration



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Constitutional Day
Celebration



Swachh Initiatives
Cleaning Drive

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E-mail: stedmundscollege@gmail.comWebsite: <http://sec.edu.in>**3. Science Mela**

**science mela
as a part of
National Science Day Celebration**

Contact Details: Office Phone: (0364) 2224533 (M) +91-9862432280. Fax: (0364) 2223234

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Science mela as a part of National Science Day Celebration

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4. Skill Development & Bioentrepreneurship Programme



skill Development & Bioentrepreneurship Programme



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5. Regular Seminars, Workshops, FDP etc.....



Workshop
on IOT



Faculty Development for
School Teachers

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National Workshop in
Bioinformatics



Seminar on Foreign Trade
Policy

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International Women Day
Celebration



Seminar on Plant
Biotechnology

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workshop on Chemistry –
the way of Life



workshop on Agri-
Entrepreneurship

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6. Capacity building programmes



Partnership for Learning
(PFL)



Capacity Building for
School Students

Contact Details: Office Phone: (0364) 2224533 (M) +91-9862432280. Fax: (0364) 2223234

ANNEXURE III

BT/HRD/11/02/2008 Vol-IIGovernment of India
Ministry of Science & Technology
Department of BiotechnologyBlock No. 2, 6-8th Floor
CGO Complex, Lodi Road
New Delhi-110003
Dated: 18/07/2017**ORDER**

In continuation of this Department's sanction order of even no. dated.22.03.2016 sanction of the President is hereby accorded under Rule 18, of the delegation of Financial Powers Rules, 1978 to the release of an amount of ₹ 15.01602 lakhs (Rupees fifteen lakhs one thousand six hundred and two only) to St. Edmund's College, Laitumkhrach Road, Shillong-793003 Meghalaya being the 2nd year release of the extended period for financial year 2017-18 for the implementation of the project for strengthening of Life Science and Biotechnology Education and Training at undergraduate level under Star College Scheme as per details given below:-

(₹ in lakhs)	
Head	Amount
Recurring to all 6 depts. @ ₹ 3.00 lakhs per year/dept. (Physics, Chemistry, Botany, Zoology, Biochemistry and Biotechnology)	14.01602
Travel grant for Mentoring and Monitoring:	1.00
Total:	15.01602

Note: The unspent balance under interest head of ₹ 26,442/- has deducted from the proposed recurring amount and the same may be permitted to utilize under recurring head.

2. The amount of ₹ 15.01602 lakhs (Rupees fifteen lakhs one thousand six hundred and two only) will be directly credited by the Pay and Accounts Officer, DBT and disbursed to The Principal, St. Edmund's College, Laitumkhrach Road, Shillong-793003 Meghalaya through electronic transfer/RTGS as per the details are given below:-

Bank Name	State Bank of India
Branch Name	Laitumkhrach, Shillong
Account No.	10613595408
Nature of Account	Saving
IFSC Code	SBIN0002081
MICR Code	793002013

3. Approval is also granted to carry forward an unspent amount of ₹ 2,98,296/- (Rupees two lakhs ninety eight thousand two hundred and ninety six only) from the previous financial year 2016-17 to the current financial year 2017-18. The amount may be utilized under the same heads for which the release has been made earlier.
4. As per "Rule 236 (1) of GFR 2017", the Account of all Grantee Institution or Organisations shall be open to inspection by the sanctioning authority and audit, both by the Comptroller and Auditor General of India under the provision of CAG(DPC) Act 1971 and internal audit by the Principal Accounts Office of the Ministry or Department, whenever the institute or Organisation is called upon to do so.

Continue...2/-

ANNEXURE III

Funds Received from External Agency

No. BT/BI/12/062/2012
GOVERNMENT OF INDIA
MINISTRY OF SCIENCE & TECHNOLOGY
DEPARTMENT OF BIOTECHNOLOGY
BIOINFORMATICS DIVISION

Block No. 2, 6th – 8th Floor
C.G.O. Complex, Lodhi Road,
New Delhi – 110 003

Dated: 12/9/2017

ORDER

In continuation of this deptt.'s sanction letter of even number dated 27th May, 2016, sanction of the President of India is hereby accorded under Rule 18 of the Delegation of Financial Powers Rules, 1978 for the release of an amount of ₹ 3.50 Lakhs (Rupees Three Lakhs Fifty Thousand Only) under recurring head for the Bioinformatics Infrastructure Facility (BIF); Coordinator: Dr. Samrat Adhikari, Assistant Professor, Department of Biotechnology, St. Edmund College, Shillong – 793 003 (Meghalaya) to The Principal, St. Edmund College, Shillong – 793 003 (Meghalaya) as per details given below:-

Sl. No.	Item	Amount (₹ in Lakhs)
Recurring:		
1.	Manpower (One R.A @ ₹ 18,000 + 10% H.R.A)	1.30
2.	Contingencies including internet charges	1.454
3.	Travel	0.25
4.	Training/workshop	0.25
5.	Studentship in BI @ ₹ 8000/month	0.36
6.	Interest Earned	-0.114
Total		3.50

(Rupees Three Lakhs Fifty Thousand only)

2. The other terms and conditions governing the financial sanction will remain unaltered.
3. As per Rule 236 (1) of GFR 2017, the accounts of all Guarantee Institutions or Organizations shall be open to inspection by the sanctioning authority and audit, both by the Comptroller and Auditor General of India under the provision of CAG (DPC) Act 1971 and internal audit by the Principal Accounts Office of the Ministry or Department, whenever the Institution or Organization is called upon to do so.
4. The amount of ₹ 3.50 Lakhs (Rupees Three Lakhs Fifty Thousand only) will be directly credited by PAO towards the Principal, St. Edmund College, Shillong – 793 003 (Meghalaya) through RTGS/ECS as per the details given below.

Name of the Bank	SBI, Laitumkhrah branch
Account No.	10613595408
IFSC Code	SBIN0002081
MICR Code	793002013

5. The expenditure is debit to:

Demand No. 85	:	Department of Biotechnology
3425	:	Other Scientific Research (Major Head)
60	:	Others (Sub Major Head)
60.200	:	Assistance to Other Scientific Bodies (Minor Head)
29	:	Biotechnology Research and Development
29.17	:	Assistance for Research and Development
29.17.31	:	Grants-in-aid for the year 2017 - 2018 (Plan)

Contd...

ANNEXURE III

File No. BT/22/NE/2011(45)
GOVERNMENT OF INDIA
MINISTRY OF SCIENCE & TECHNOLOGY
DEPARTMENT OF BIOTECHNOLOGY
(NER BPMC)

Block-2, 7th Floor,
CGO Complex, Lodhi Road
New Delhi-110003
Dated: 28 / 09 /2017

ORDER

In continuation of this department's sanction order of even number dated 30/11/2011, sanction of the President of India is hereby accorded under Rule 18 of the Delegation of Financial Powers Rules, 1978 for the release of the **Sixth year grant of ₹ 27.38 lakhs (Rupees Twenty Seven Lakhs and Thirty Eight Thousand only)** to **The Principal, St. Edmund's College, Shillong, Meghalaya**, for the **Advanced level Institutional Biotech Hub (IBT Hubs) of DBT under its special programme for North Eastern States of India:**

(₹ In lakhs)	
Heads	6 th Year
Non-Recurring	
1. Equipments/ Accessories	10.00
Recurring	
(i) Manpower	12.09
(ii) Contingencies and Consumables	2.73
(iii) Travel	0.30
(iv) Training/ Workshop	1.00
(v) Overhead Charges	1.26
TOTAL	27.38

(Rupees Twenty Seven Lakhs and Thirty Eight Thousand only)

**Interest of ₹ 0.09 lakhs has been re-app to Overhead charges.*

- The other terms and conditions governing the financial sanction will remain unaltered.
- As per Rule 236 (1) of GFR 2017, the accounts of all Grantee Institutions or Organisations shall be open to inspection by the sanctioning authority and audit, both by the Comptroller and Auditor General of India under the provision of CAG(DPC) Act 1971 and internal audit by the Principal Accounts Office of the Ministry or Department, whenever the Institution or Organisation is called upon to do so.
- M/s Biotech Consortium India Ltd., Anuvrat Bhawan, 210, Deen Dayal Upadhyay Marg, New Delhi-110 002, who is administrating the North Eastern Region Biotechnology Program Management Cell (NER-BPMC) of the department, is hereby authorized to disburse the amount of ₹ 27.38 lakhs (Rupees Twenty Seven Lakhs and Thirty Eight Thousand only) as referred in para 1 above, in favour of "The Principal, St. Edmund's



ANNEXURE III

Funds Received from External Agency

✓
2017-18

2nd Instalment

No.SB/EMEQ-152/2014

विज्ञान और इंजीनियरिंग अनुसंधान बोर्ड (एसईआरबी)

(विज्ञान और प्रौद्योगिकी विभाग, भारत सरकार के एक संवैधानिक निकाय)

Science and Engineering Research Board (SERB)

(A Statutory body under Department of Science & Technology, Govt. of India)

5 & 5A, Lower Ground Floor,
Vasant Square Mall, Plot No. A,
Community Centre, Sector-B, Pocket-5
Vasant Kunj, New Delhi-110070

Date: 29-11-2017

ORDER

Sub: Research project entitled, "*Understanding phototropin regulation of photosynthesis and biomass accumulation in ornato by gene overexpression studies.*" by Dr. Eros Vasil Kharshiang, Department of Botany, St. Edmund's College, Shillong-793 003, Meghalaya – Release of grant

In continuation to SERB's sanction order No. "SB/EMEQ-152/2014 dated 06.07.2017" sanction of the Science & Engineering Research Board (SERB) is hereby accorded to the payment of a sum of Rs.6,00,000/- (Rupees six lakh only) as the grant for the financial year(FY) 2017-2018 for implementation of the above said project.

2. Sanction of the grant is subject to the conditions as detailed in Terms & Conditions available at website (www.serb.gov.in).

3. It is certified that provisions of GFR 212 relating to Utilization Certificates (UCs) for the funds released under the grant have been satisfied and the UC is enclosed herewith.

4. The expenditure involved is debitable to "Fund for Science & Engineering Research (FSER/ST) – Recurring Head". This release is made under "Empowerment and Equity Opportunities for Excellence in Science" program.

5. The Sanction has been issued with the approval of the competent authority under delegated powers and vide Diary No. SERB/F/ 7821 /2017-18 dated 28.11.2017.

6. The amount of Rs.6,00,000/- (Rupees six lakh only) will be drawn by the Finance & Budget Officer of the SERB and will be disbursed by means of RTGS transaction as per their Bank details given below

Account Name	CCBI ST.EDMUND'S COLLEGE Special A/C
Account Number	10613595408
Bank Name & Branch	State Bank of India, Laitumkbrah Branch
IFSC/RTGS Code	SBIN 0002081

7. The Institute will maintain separate audited accounts for the Project. It is found expedient to keep a part or whole of the grant in a bank account earning interest. The interest earned should be reported to the SERB. The interest thus earned will be treated as a credit to the institute to be adjusted towards further instalment of the grant.

8. As per rule 211 of GFR the accounts of Grantee Institution shall be open to inspection by the sanctioning authority / audit whenever the institute is called upon to do so.

Cont... 2/-

(161) (Major RP)
A Sanction
order



भारतीय प्रौद्योगिकी संस्थान गुवाहाटी
गुवाहाटी 781 039, असम, भारत
Indian Institute of Technology Guwahati,
Guwahati 781 039, Assam, India.

Phone Nos.: +91-361-258 2082

Fax No.: +91-361-258 2089

e-mail: dornd@iitg.ernet.in

Prof Gopal Das
Dean Research and Development & the
Coordinator, NECBH Programme
IIT Guwahati
Assam 781039
Ref: NECBH/2019-20/139

Date: 29-04-2019

Office of Dean Research and
Development Section

Sanction Letter
PI Name: Eros Vasil Kharashting
Category: Eureka
Your Project ID: 139
Project Title: Title: Functional characterisation of LOV/LOV protein (LLP) blue-light photoreceptors in tomato
Duration: 2.5 Years
Total Sanction amount: Rs.1592750.00

Account Head	For Principal Investigator	For CO PI IITG	For CO PI Other Institutes
Non-Recurring	200000.00	Nil	Nil
Man Power	660000.00	Nil	Nil
Consumables	475000.00	Nil	Nil
Travel	50000.00	Nil	Nil
Contingency	Nil	Nil	Nil
Total	1385000.00	Nil	Nil
Over Head	Nil	Nil	Nil
Instrument Maintenance For NECBH		207750.00	
Grand Total		1592750.00	

Sincerely Yours,

Gopal Das

Terms and conditions

- The principal investigator (PI) has to acknowledge project number BT/COE/34/SP28408/2018 of Department of Biotechnology (DBT), Govt. of India for the financial support.
- Funds will be released in subsequent installation subject to satisfactory performance of the project and availability of fund.
- The Institute/PI would furnish a Utilization Certificate and a audited statement of expenditure duly signed by the PI, the Head of the Institute and the Head of the Finance wing, pertaining to the grant at the end of each financial year as well as a consolidated statement of expenditure at the end of the completion of the project or whenever it is required.
- The PI is not permitted to seek or utilize funds from any other organization (Government, Semi Government, Autonomous or Private) for this research project.
- Any unspent part of amount would be surrendered to the Research and Development Section, IITG and entry forward of funds of the next financial year for utilization for the same project may be considered only with the specific approval of the Research and Development Section, IITG and Department of Biotechnology (DBT).
- IIT Guwahati or DBT reserves the right to terminate the grant at any stage and also to recover the amounts already paid if it is convinced that the grant has not been properly utilized or the work on the project has been suspended for any unduly long period or appropriate progress is not being made.
- The project will become operative with effect from April 29, 2019.
- A copy of progress report has to be sent in the month of January till the completion of project or whenever it is required.
- Travel should be used mainly for sample collection, discussion among the PIs not for other purpose. No international Travel will be undertaken from the sanctioned project grant.
- If the Investigator to whom a grant for a project has been sanctioned leaves the institution where the project is being implemented PI shall submit five copies of complete and detailed report of the work done by him on the project and the money spent till the date of his/her release and shall also arrange to refund the unspent balance, if any to IIT Guwahati.

ANNEXURE III

Funds Received from External Agency

FILE NO. EEQ/2019/000223
SCIENCE & ENGINEERING RESEARCH BOARD (SERB)
 (a statutory body of the Department of Science & Technology, government of India)
 5 & 5A, Lower Ground Floor
 Vasant Square Mall
 Plot No. A, Community Centre
 Sector-B, Pocket-5, Vasant Kunj
 New Delhi-110070

Dated: 19-Dec-2019

ORDER

Subject: Financial Sanction of the research project titled "Molecular analyses of phytochrome regulation of starch synthesis and degradation in tomato" under the guidance of Dr. Eros Vasil Kharshiing, Botany, St. Edmund's College, Laitumkhrah Shillong Meghalaya, East Khasi hills, Meghalaya-793003 - Release of 1st grant.

Sanction of Science and Engineering Research Board (SERB) is hereby accorded to the above mentioned project at a total cost of Rs. 4391120/- (Rs. Forty Three Lakh Ninety One Thousand One Hundred and Twenty Only) with break-up of Rs. 1200000/- under Capital (Non-recurring) head and Rs. 3191120/- under General (Recurring) head for a duration of 36 months. The items of expenditure for which the total allocation of Rs. 4391120/- has been approved are given below:

S. No	Head	Total (in Rs.)
A	Non-recurring	
1	Equipment -> Real Time PCR Detection System	1200000
A'	Total (Non-Recurring)	1200000
B	Recurring Items	
1	Recurring - I : (Manpower)	1257120
	Recurring - II : (Consumables, Travel, Contingencies)	1500000
	Recurring - III : Scientific Social Responsibility	35000
2	Recurring - IV : (Overhead Charges)	399000
B'	Total (Recurring)	3191120
C	Total cost of the project (A' + B')	4391120

2. Sanction of the SERB is also accorded to the payment of Rs. 1200000/- (Rupees Twelve Lakh only) under 'Grants for creation of capital assets' and Rs. 1090000/- (Rupees Ten Lakh Ninety Thousand only) under 'Grants-in-aid General' to Principal, St. Edmund's College, Laitumkhrah Shillong Meghalaya being the first instalment of the grant for the year 2019-2020 for implementation of the said research project.

3. The expenditure involved is debitable to Fund for Science & Engineering Research (FSER)
 This release is being made under Empowerment and Equity Opportunities for Excellence in Science. (Task force Committee) (ST)

4. The Sanction has been issued to St. Edmund's College, Laitumkhrah Shillong Meghalaya with the approval of the competent authority under delegated powers on 13 November, 2019 and vide Diary No. SERB/F/7883/2019-2020 dated 19 December, 2019

5. Sanction of the grant is subject to the conditions as detailed in Terms & Conditions available at website (www.serb.gov.in).

6. Overhead expenses are meant for the host institute towards the cost for providing infrastructural facilities and general administrative support etc. including benefits to the staff employed in the project.

7. While providing operational flexibility among various subheads under head Recurring-II, it should be ensured that not more than Rs. 1.5 lakh each should be spent for travel and contingency.

8. Budget sanctioned under Scientific Social Responsibility (SSR) is meant only for activities enlisted under SSR norms and under no circumstances it can be reappropriated.

9. As per rule 211 of GFR, the accounts of project shall be open to inspection by sanctioning authority/audit whenever the institute is called upon to do so.

10. The sanctioned equipment would be procured as per GFR and its disposal of the same would be done with prior approval of SERB.

11. The release amount of Rs. 2290000/- (Rupees Twenty Two Lakh Ninety Thousand only) will be drawn by the Under Secretary of the SERB and will be disbursed by means of RTGS transaction as per their Bank details given below:

PFMS Unique Code	SECCBI
Account Name	CCBI St Edmund's College, Spl
Account Number	10613595408

ANNEXURE III

Funds Received from External Agency

GOVERNMENT OF INDIA
NORTH EASTERN COUNCIL SECRETARIAT
NONGRIM HILLS SHILLONG-793003

No.NEC/ST/MG/DDL/849/2016

Dated: March 25, 2019

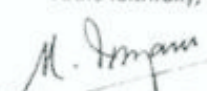
To
The Finance Officer
North Eastern Hill University
Shillong-793022

Sub: Design & Development of Laboratory Instrument Shillong, Meghalaya – Reg.

Sir,

Kindly find enclosed the approved component-wise cost breakup for the project entitled "Design & Development of Laboratory Instruments" Shillong, Meghalaya. This project was sanctioned at total cost of Rs. 15.60 lakh with 1st installment release of Rs.1.169 lakh vide A/A and sanction order ref. No.NEC/ST/MG/DDL/849/2016 dated 14th March 2018 respectively. This is for favour of kind information and compliance.

Yours faithfully,


[M. Iboyaima Meditei]
Adviser (Horti) &
I/O for Director (S&T)

Copy to:

1. The Registrar, North Eastern Hill University, Umshing, Mawalal, Shillong – 793022
- ✓ 2. Dr. Hemen Ch. Medhi, P.I., Lecturer, Department of Electronics, St. Edmund's College, Shillong

ANNEXURE IV

IQAC Composition as per NAAC Guidelines



PRESENCE COMPASSION LIBERATION



Congregation of Christian Brothers in India

St. Columba's School, Ashok Place,

New Delhi – 110 001 (INDIA)

Tel.: 00-91-11-23747637, Fax: 00-91-11-23364483

e-mail: provcf@yahoo.co.in

1st Jan 2020

To
The Secretary,
St Edmund's College, Shillong

Dear Br Pinto,

The IQAC Members for the year 2019-20 for St Edmund's College are to be the following:

1	Dr. Sylvanus Lamare	Chairperson, Principal
2	Dr. (Br) Simon Coelho	IQAC, Coordinator
3	Br. A. F. Pinto	Secretary (GB), CCBI Representative
4	Br. S. Julius	Finance Officer, CCBI Representative
5	Mr. Monotosh Chakravarty	Administration Representative
6	Mr. Gaurav Bajaj	Member, Alumni Representative
7	Mr. S. B. Nongdhar	Member, Locality Representative
8	Mr. Ramesh Bawri	Member, Industrialist Representative
9	Mr. C. Dhar	Member, Stakeholder Representative
10	Dr. (Mr) Omarlin Kyndiah	Knowledge Inputs & NAAC requirements
11	Dr. (Mr) Radhendu Das	Department of Physics
12	Dr. (Mr) Sajid Nagi	Department of Computer Science
13	Mr. Sumit Deb	Department of Chemistry
14	Dr. (Ms) Jasmine T. Sawian	Department of Environmental Science
15	Ms. Sarmistha Deb	Department of Computer Application
16	Ms. Lorraine C. Massar	Department of Economics
17	Dr. (Mr) Samrat Adhikari	Department of Biotechnology
18	Ms. Eujunita Bamon	Member, Librarian
19	Ms. Daphishisha N. Shangrit	Member, Student Representative
20	Mr. Andrew Qorzienie Jyrwa	Member, Student Representative

President
Governing Body
St. Edmund's College, Shillong

Copy to: 1) Principal, St Edmund's College, Shillong

2) The IQAC Coordinator, St. Edmund's College



CCBI Society registered under the Societies Registration Act XXI of 1860 under S/7897/289
Registered Office: St. Joseph's College, 69, Bow Bazar Street, Kolkata – 700 012

ANNEXURE V

Minutes of IQAC Meetings



St. Edmund's College

(Affiliated to North Eastern Hill University, Shillong)
Recognized by the University Grant Commission under 2 (f) and 12 (B) of UGC act 1956
Laitumkhrah, Shillong – 793003, Meghalaya, India

E-mail: stedmundscollege@gmail.comWebsite: <http://sec.edu.in>

MINUTES OF THE MEETING OF IQAC HELD ON May 24th, 2019

Venue: Principal Office**Time:** 1:00 PM

Member Present:

1. Dr Sylvanus Lamare, Chairperson & Principal,
2. Gideon L Kharkongor, IQAC Coordinator
3. Bro Simon Coelho, Secretary, GB
4. Bro S Julius, Bursar, CCBI Representative
5. Ramesh Bawri, Member, Alumni Representative
6. Bertrand Dkhar, Member
7. Gautam Deb, Member
8. Eric B Nongkynrih, Member
9. Eujunita Bamon, Member
10. Abhigyan Sharma, Member, Student Representative
11. Yshua Lyngdoh, Member, Student Representative

The Principal welcomed all the members and formally informed that the College has received the accreditation results via email on 28th March 2019 with a CGPA of 2.90 on a seven-point scale at B++ Grade valid for a period of 5 years. He also informed that in the General Staff meeting, it was unanimously decided to file an APPEAL to reconsider the result. The appeal with admissible justification were sent to the Director, NAAC, Bangalore on 11th April 2019. The College was informed on 22nd May 2019 that the NAAC Office has accepted the appeal of the College.

All the members felt that the college must evolve a mechanism to collect, document and preserve all information regarding the activities in a well-defined format as per the NAAC guidelines.

The members decided to meet again as and when the outcome of the appeal is communicated to the college. The meeting ended with a vote of thanks to and from the Chair.



Dr Sylvanus Lamare
Principal

Contact Details: Office Phone: (0364) 2224533 (M) +91-9862432280. Fax: (0364) 2223234

ANNEXURE V

Minutes of IQAC Meetings



St. Edmund's College

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Laitumkhrah, Shillong – 793003, Meghalaya, India

E-mail: stedmundscollege@gmail.comWebsite: <http://sec.edu.in>

MINUTES OF THE MEETING OF IQAC HELD ON September 6th, 2019

Venue: Principal Office**Time:** 2:30 PM

Member Present:

1. Dr Sylvanus Lamare, Chairperson & Principal,
2. Gideon L Kharkongor, IQAC Coordinator
3. Bro Simon Coelho, Secretary, GB
4. Bro S Julius, Bursar, CCBI Representative
5. Bertrand Dkhar, Member
6. Gautam Deb, Member
7. Eujunita Bamon, Member
8. Abhigyan Sharma, Member, Student Representative
9. Yshua Lyngdoh, Member, Student Representative

The meeting was called on a single agenda.

The Principal informed that the college has been informed about the EC decision of NAAC, Bangalore on the appeal filed by the college.

"As per letter from Prof. S. C. Sharma, Director of NAAC dated 29th August 2019 the College is informed that as per the EC decision in its meeting held on 20th August 2020 there is "NO CHANGE IN THE CGPA AND GRADE AWARDED".

The members accepted the decision of the NAAC and resolved to work for a better Grade in future assessments. All the members felt that the college should give priority to properly document all activities and submit the same to the IQAC.

While appreciating the efforts and commitment shown by the IQAC team in preparing the documents required for the last assessment & accreditation, the members also felt that a new committee led by a new Coordinator should be constituted. It was further decided that the proposal be forwarded to the Executive Council of the college and in turn seeks the approval of the Governing Body.

The meeting ended with a vote of thanks to and from the Chair.



Dr Sylvanus Lamare
Principal

Contact Details: Office Phone: (0364) 2224533 (M) +91-9862432280. Fax: (0364) 2223234

ANNEXURE V

Minutes of IQAC Meetings



St. Edmund's College

(Affiliated to North Eastern Hill University, Shillong)
Recognized by the University Grant Commission under 2 (f) and 12 (B) of UGC act 1956
Laitumkhrah, Shillong – 793003, Meghalaya, India

E-mail: stedmundscollege@gmail.comWebsite: <http://sec.edu.in>

MINUTES OF THE MEETING OF IQAC HELD ON February 21st, 2020

Venue: Principal Office**Time:** 2:00 PM

Member Present:

1. Dr Sylvanus Lamare, Chairperson & Principal,
2. Br. A F Pinto, Secretary, GB
3. Dr (Br). Simon Coelho, IQAC Coordinator
4. Bro S Julius, Finance Officer, CCBI Representative
5. Prof M. Chakravarty, Administration Representative
6. Prof Sumit Deb, Head, Department of Chemistry
7. Dr Samrat Adhikari, Head, Department of Biotechnology
8. Dr Jasmine Sawian, Head, Department of Environmental Science
9. Ms Sarmistha Deb, Head, Department of Computer Applications
10. Ms Daphishisha N Shangrit, Student Representative

Dr S. Lamare, Principal welcomed all the members of the IQAC that was constituted w.e.f 1st, January 2020 and requested all the esteemed members to work as a team towards a common goal of attaining the Vision/Mission of the college.

Dr (Br) S. Coelho, IQAC Coordinator, emphasized that everyone of us should put together an all-out effort in preparing for AQAR for the year 2018-19, 2019-20 within a definitive period of time.

All the members agreed to stay focused and respect the timeline set up by NAAC, Bangalore in submitting and uploading the reports.

The IQAC Coordinator informed the members on the certain action taken by the management as proposed by IQAC. They are

- (i). Appointment of Prof M Chakravarty as Vice Principal, Dr Baljuda War Nongbri as the Dean, Self-Finance courses.

Contact Details: Office Phone: (0364) 2224533 (M) +91-9862432280. Fax: (0364) 2223234

ANNEXURE V

Minutes of IQAC Meetings



St. Edmund's College

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Recognized by the University Grant Commission under 2 (f) and 12 (B) of UGC act 1956
Laitumkhrah, Shillong – 793003, Meghalaya, India

E-mail: stedmundscollege@gmail.com

Website: <http://sec.edu.in>

-
- (ii). The Commerce, Social Work (UG) and Computer Application departments are shifted to a new block above the College Library.
 - (iii). Different cells such as Grievance Cell, Discipline Cell, Eco Club, Magazine Committee are formed wherein students are made active participant.
 - (iv). A dedicated Team comprising of active faculty members are involved in initiatives such as Waste management, Water resources management, Cleanliness & Hygiene as a part of Institutional Social Responsibility (ISR).
 - (v). A new AV room at the ground floor of the main building and a Board room are made functional.
 - (vi). The academic planner-2020 was placed which was approved and Principal is authorized to circulate the same to the departments for compliance.

It was agreed upon to finalize the AQAR for the year 2018-19 and 2019-20 at the earliest and place the same for approval in the EC/GB of the college.

The IQAC coordinator requested the members present to accord approval for all the proceedings of the earlier IQAC meetings for the purpose of recording.

The meeting ended with a vote of thanks to and from the Chair.



Dr Sylvanus Lamare
Principal

Contact Details: Office Phone: (0364) 2224533 (M) +91-9862432280. Fax: (0364) 2223234

ANNEXURE VI

Significant Contributions

<u>Contributions</u>	<u>Details</u>
Adoption of Village at East Khasi Hills through Social Work department to make it ODF.	Mawlieh Village (EKH) adopted; all necessary logistics put in place. Awareness programmes organized.
Formation of different committees namely Grievances Redressal, Anti Ragging, Discipline, Library. Mentoring for students and feedback	All Committees formed and responsibility assigned. All departments comply with the same
Capacity Building/FDP for School students/teachers	6 such programmes carried out
Formation of a dedicated group to monitor WASTE MANAGEMENT, RAINWATER HARVESTING, ENERGY CONSERVATION and VERMI COMPOST PIT.	A group of teachers are entrusted with the task to execute the plan.
Organising meeting for Alumni	Alumni meet informally in different chapters scattered all over the country. They contribute their mite significantly as on when the need arises
Coordinating Intra College activities involving the NCC, NSS departments etc.	The IQAC ensures that enough exposure is given to the students in extracurricular activities, exchange among students of different institutes adds value to the overall growth of the students.

ANNEXURE VII

[Action Plan Report]

<u>Action Taken</u>	<u>Outcome/Achievement</u>
Appointment of Dean for College sponsored (Self-Financed) courses: Commerce, Social Work, Computer Applications Appointment of Vice Principal in the college Celebration of Events: National Science Day - Science Mela; World Environment Day - planting of saplings, adoption of tree; College week final day - promote traditional attire, values and inculcate fraternity among all communities; Blessed Edmund Rice Day (Founder) - organising activities like photography, creative writing, quiz etc	Proposal forwarded to the Sponsoring Body of the college. Recommended for immediate effect. Science mela organized involving 11 departments of the college wherein students from different school were invited. The college celebrated World Environment Day and pledged to adopt a TREE. The Grand Finale for the college week was celebrated wherein students from different communities participated. The Edmund Rice Day was celebrated where the students participated in different activities
Effort to start short term/ Add on Courses, research initiatives for students, enhancement of Life Skills	Departments were encouraged to give specific proposal to start ADD on courses for the benefit of the students. The college undertook programmes on Life Skills
Digitalization of the Library, augment E-learning resources, free wi-fi excess to the students in the library Continue with the good practices like mentoring, guest lectures by eminent persons, workshops/seminars involving students & Teachers, promote student participation in cultural/sports activities outside the college.	Efforts are made to put in place to augment the technical requirement The college by and large continued with the Good Practices like organizing lectures, seminars etc.

ANNEXURE VIII (ICT Tools & Resources)

Number of teachers on roll	Number of teachers using ICT (<i>LMS, e-Resources</i>)	ICT tools and resources available	Number of ICT enabled classrooms	Number of smart classrooms
109	109	Wi Fi Enabled Campus MS Office, MY SQL, Licensed Windows 10 (Academic), Adobe Photoshop, Tally Software (for accounting), PageMaker Workstation for Bioinformatics Research Work. N -list of Infilbnet UGC 10 Mbps Internet Connectivity Email, LCD Projector, CDROM/DVD Library Automation Software, Scanners, Photocopier, Printer, E-content Linways Learning Management System with Outcome Based Education Computational Biology Software - Jmol, AUTODOCK, Phylip, BLAST, Programs for Coding like (MATLAB, JAVA, C, C++, Python, R- Package)	52	3

e- Resources & Techniques Used

SI No	E Resources	Technique Used
1	N List (Consortium of UGC for College Libraries)	Use of Library books online
2	British Library	Access to Online Books
3	Bio Java, GMOD, SOAP Suite, DNA 2.0, Bio Linux, ANTHEPROT	Bioinformatics Tools for student research & Teaching
4	Flipped Classroom, Google meet & Classroom, Linways Platform	Effective teaching learning process
5	Video Play through You Tube, Khan Academy, SWAYAM Portals, MOOCS etc	Demonstration of techniques in Liew of Hands on Training and animated practical's
6	Digitalization of Old Rare books	Access through Library
7	Access to Open Access Journals - Taylor & Francis, Elsevier, Wiley, Springer Nature, JSTOR, OAL, Oxford Academic, KARGER, OMNICS, BMC, MPDI, COGENT OA etc.	Access to research students both UG & PG and also faculty

ANNEXURE IX

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

Programme Name	Programme Code	Semester/ year	Last date of the last semester-end/ year-end examination	Date of declaration of results of semester-end/ year- end examination
BSW	BSW	2/4/6	21/05/19	15/07/2019 and 15-10-2019
BCA	BCA	2/4/6	22/05/19	15/07/2019 and 15-10-2019
BCom	BCom	2/4/6	23/05/19	15/07/2019 and 15-10-2019
BSc	BSc	2/4/6	24/05/19	15/07/2019 and 15-10-2019
BA	BA	2/4/6	21/05/19	15/07/2019 and 15-10-2019

The last date for respective end semester classes are at par with the Declaration of ensuing semester exam conducted by the Affiliating University

The Declaration of the results rest with the Affiliating University.

ANNEXURE X

[Student Performance Learning Outcomes]**St. Edmund's College**

(Affiliated to North Eastern Hill University, Shillong)

Recognized by the University Grant Commission under 2 (f) and 12 (B) of UGC act 1956)

Laitumkhrah, Shillong – 793003, Meghalaya, India

E-mail: stedmundscollege@gmail.comWebsite: <http://sec.edu.in>

Outcome Based Education

Outcome Based Education (OBE) is crucial for any educational institution, especially for Higher Education. The various aspects of OBE provide the College with accurate information, more so to the Teachers, on how the students are attaining its Vision and Mission.

The processes for measuring the Program Outcomes of the Edmudian Alumni would be the informal feedback from the Institutions where they are continuing the higher studies or from the Employers where they are engaged. The latter generally speak of how the Edmudian can be depended upon to take on challenges and do their very best. They are also credited with being honest in all their dealings and ones who can be relied upon in a team.

Good indicators of the Program Specific Outcomes of the Graduates are the University results, especially with so many position holders and a low rate of attrition. A vast majority of student continuing with their higher studies in reputed Institutes is an indicator of their performance, especially when it comes face-to-face interviews.

The Course Outcomes are constantly evaluated in the College through various tools like presentations at seminars, participation in debates and quizzes, along with involvement in field-work and internships. The students are given ample opportunities to participate in role-plays, simulations, and mock parliaments. A feature that is regularly offered to the Students is the opportunity to engage in community service, in which they whole-heartedly participate. Regular experiments in the laboratories give the students the practical know-how and the chance to learn from their mistakes.

Introduction to Outcome Based Education at St. Edmund's College, Shillong

ANNEXURE X

[Student Performance Learning Outcomes]**St. Edmund's College**

(Affiliated to North Eastern Hill University, Shillong)

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Laitumkhrah, Shillong – 793003, Meghalaya, IndiaE-mail: stedmundscollege@gmail.comWebsite: <http://sec.edu.in>

**PROGRAM EDUCATIONAL OUTCOMES (PEOs),
PROGRAM OUTCOMES (POs) & PROGRAM SPECIFIC
OUTCOMES (PSO) of BCA, PHYSICS &
ENVIRONMENTAL SCIENCE**

Vision:

St. Edmund's College, Shillong has a vision that is enshrined in the motto of the College: "Facta Non Verba" which translates "Deeds Not Words". It aims at imparting equitable quality education grounded on the core values of excellence, competition and ideals. The College also stands on the principles advocated by Edmund Ignatius Rice, the Founder of the Institution.

Mission:

The College endeavors to create a stimulating environment in the Campus through various academic programmes and co-curricular activities in order to develop character, shape personality and build a sense of social responsibility among our young men and women. As the college prioritizes learning, teaching and sharing of knowledge, education is therefore perceived as a potent vehicle that works towards transforming attitudes and mind-sets for the good of one and all in the society in particular and the world at large.

Program Educational Outcomes (PEOs)

The graduates will:

- PEO1 Have the confidence and tenacity it takes to be life-long learners, keeping abreast with Knowledge and Skills.
- PEO2 Be looked up to, as young women and men, who can be counted on to be agents for transformation.
- PEO3 In keeping with the principles of Blessed Edmund Rice, be humble and at home with 'kings' and 'paupers'.
- PEO4 Be generous in being able to give back to Society what they have received, by participating in various Health Missions.

Introduction to Outcome Based Education at St. Edmund's College, Shillong

ANNEXURE X

[Student Performance Learning Outcomes]



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Learning Outcome

SUBJECT- Bachelor of Computer Applications BCA [BATCH – 2017]

Program Outcomes (POs)

At the end of the Bachelor of Computer Applications Programme, the graduates will be able to:

PO	Title	Description
PO1	Domain Expertise	Apply knowledge of Science and experiments at an appropriate level to the discipline
PO2	Skills and Ethics	Analyze a problem and define the scientific requirements, appropriate to its solution.
PO3	Lifelong Learning	Understand new concepts and be articulate while executing knowledge with peers.
PO4	Modern Tool Usage	Use current techniques, skills, and tools necessary for scientific research.
PO5	Social Contribution	Follow current thinking for implementing the technology for the larger benefit of the society.
PO6	Ethics	Recognize the social and ethical responsibilities of a professional working in the discipline.

Program Specific Outcomes (PSOs)

At the end of the Bachelor of Computer Applications Programme, the graduates will be able to:

- PSO1 Acquire in depth **knowledge** of fundamental concepts, programming skills and synthesize application oriented skills leading to **design** for stand alone ,web and mobile based applications to fulfil global interest.
- PSO2 Evolve as globally competent computer professional possessing leadership skill and domain knowledge for developing or **creating** innovative solutions in multi-disciplinary domains.
- PSO3 Able to **apply** the knowledge gained during the course of the program in the areas of problem solving, analysis, design and development of software and hardware to choose a career option in high degree of employability/ entrepreneurship/Higher education. formulate and solve real life problems to meet the core competency with continuous up gradation.

Learning Outcome of Department of BCA, St. Edmund's College, Shillong

ANNEXURE X

[Student Performance Learning Outcomes]



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Website: <http://sec.edu.in>**Course Outcomes (CO...BCASF1070)**

At the end of the Chapter/Paper :....PROJECT(BCA-1070).....students will be able to:

CO F1070.1	Recognition: The students can DESCRIBE and IDENTIFY problems pertaining to technology.
COF1070.2	Interpreting: The ability of a student to ASSOCIATE and CONTRAST traditional methods with modern tools and technology.
CO F1070.3	Ideas: Students to obtain new findings through EXPERIMENT and DEMONSTRATION.
CO F1070.4	Positive impact: The students can COMPARE the positive impact of technology in the society
CO F1070.5	Innovators: The students can CREATE and FORMULATE plans and solutions that will help solve modern days' problems.

Course Outcomes (CO...BCASF1020)

AT THE END OF THE CHAPTER/PAPER DATA WAREHOUSING AND DATA MINING 1020 STUDENTS WILL BE ABLE TO:

COF1020.1	Analysis: The students can ANALYZE data and INFER new knowledge using logical and mathematical skills.
COF1020.2	Effective Maintenance: The students will be able to efficiently MAINTAIN large storehouses of data required by client applications, while ensuring data consistency and reliability.
COF1020.3	Planning: The students can ENVISION and CARY THROUGH big-data oriented projects, through requirements gathering, collection and cleaning of data, pattern analysis and deployment of meaningful patterns useful to decision-oriented applications like businesses, healthcare, cyber security and so on.
COF1020.4	SELECT, COMPARE and carefully differentiate between situations in order to APPLY different data mining techniques like classification, prediction, clustering, frequent pattern mining, association and outlier analysis.
CO F1020.5	Evaluation: ASSESS and RANK the performance of different data-mining algorithms and Enable the students to PLAN and PREPARE for further research and innovation in the field of data mining.

Correlation:

Marks (%)	Grade	Correlation	Levels
31 - 60	1	Slight Correlation	L - Low
61 - 80	2	Moderate Correlation	M – Medium
81 - 100	3	Significant Correlation	H – High

Learning Outcome of Department of BCA, St. Edmund's College, Shillong

ANNEXURE X

[Student Performance Learning Outcomes]

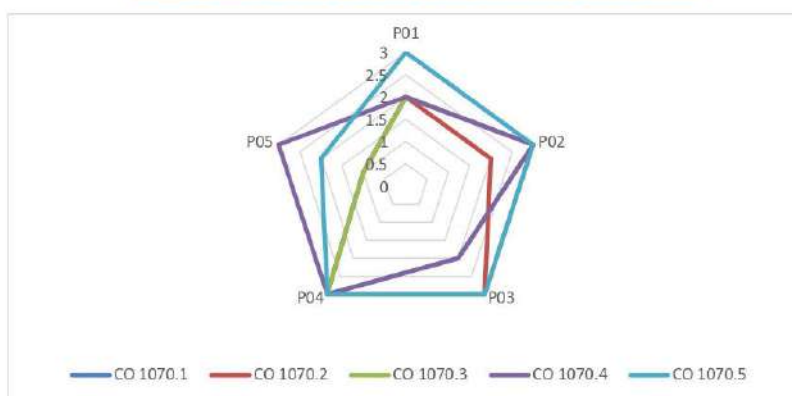
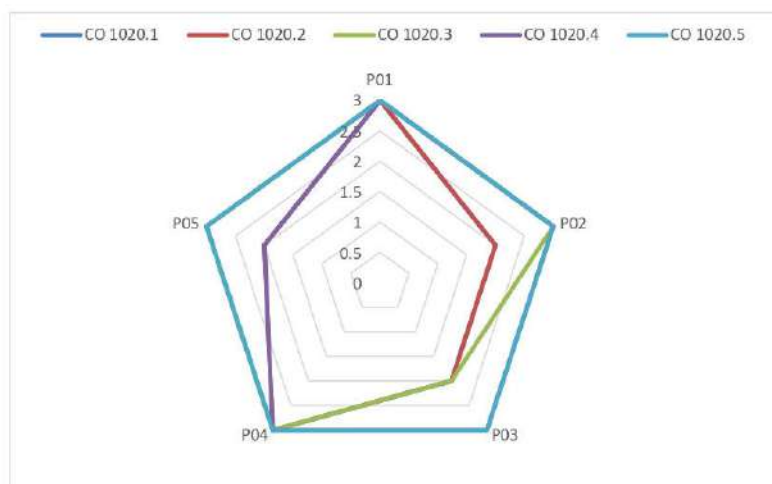
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Website: <http://sec.edu.in>**CO – PO MAPPING OF 2017...PROJECT (BCA 1070)****CO – PO MAPPING OF ...(BCA 1020)**

Learning Outcome of Department of BCA, St. Edmund's College, Shillong

ANNEXURE X

[Student Performance Learning Outcomes]

**St. Edmund's College**

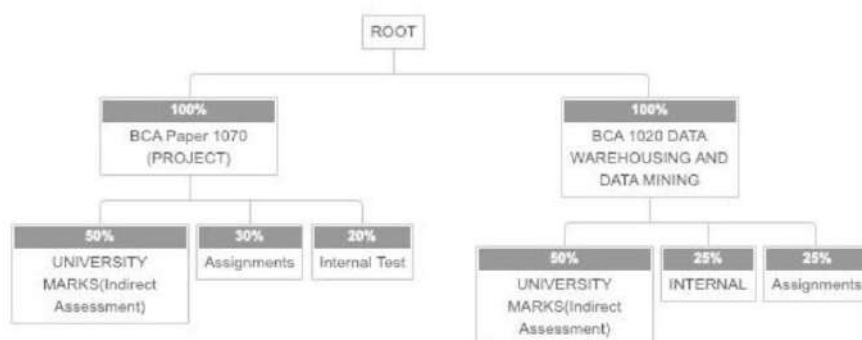
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E-mail: stedmundscollege@gmail.comWebsite: <http://sec.edu.in>**STATISTICAL PARAMETERS FOR PO, PSOs & CO**

The analysis has been computed with the College LMS- Linways OBE Software.



Papers executed for Learning Outcome	
BIOT F1070-PAPER - 603	Project work for BCA
BIOT F1020-PAPER - 602(b)	Ware Housing and Data Mining
BIOT F1070-PAPER - 603	Internal assignments, university Marks, sessional exam
BIOT F1020-PAPER - 602(b)	Internal assignments, university Marks, sessional exam

Learning Outcome of Department of BCA, St. Edmund's College, Shillong

ANNEXURE X

[Student Performance Learning Outcomes]

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Website: <http://sec.edu.in>**Consolidated CO – PO-PSO MAPPING OF ... (BCA 1020) [Linways Software Computed]**

CO-PO Mapping Report

CO	PO3
COF1020.1	2.00
COF1020.2	2.00
COF1020.3	3.00
COF1020.4	3.00
CO F1020.5	2.00

CO-PSO Mapping Report

CO	PO1	PO2	PO4	PO5
COF1020.1	3.00	3.00	2.00	1.00
COF1020.2	3.00	3.00	3.00	1.00
COF1020.3	2.00	2.00	3.00	3.00
COF1020.4	3.00	2.00	1.00	2.00
CO F1020.5	2.00	3.00	3.00	1.00

Course-PO Mapping Report

Course	Lifelong Learning
BCAS F1020	3.00

Course-PSO Mapping Report

Course	Domain Expertise	Skills and Ethics	Modern Tool Usage	Social Contribution
BCAS F1020	3.00	3.00	3.00	3.00

CO Attainment(ROOT)

Subject/CO	COF1020.1	COF1020.2	COF1020.3	COF1020.4	CO F1020.5
BCAS F1020	2	2	2	2	2

Learning Outcome of Department of BCA, St. Edmund's College, Shillong

ANNEXURE X

[Student Performance Learning Outcomes]



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CO ATTAINMENT

SELECT TREE BCA SIXTH SEMESTER 2017 BATCH

CO Attainment

Recalculate Attainment

Max Descriptor : 3.00

Print

CO Code	COF1020.1	COF1020.2	COF1020.3	COF1020.4	CO F1020.5
Attainment	2.00000	2.00000	2.00000	2.00000	2.00000
Description	Medium	Medium	Medium	Medium	Medium

* Co Attainment Rule : N Student N Percentage

Attainment is calculated as the weighted average of each individual PO attainment.

Attainment = (PO1 * weightage) + (PO2 * weightage) + ...

PO ATTAINMENT

SELECT TREE BCA SIXTH SEMESTER 2017 BATCH

PO Attainment

Recalculate Attainment

Max Descriptor : 3.00

Print

PO Code	PO1	PO2	PO3	PO4	PO5
COF1020.1	2.00000	2.00000	2.00000	2.00000	2.00000
COF1020.2	2.00000	2.00000	2.00000	2.00000	2.00000
COF1020.3	2.00000	2.00000	2.00000	2.00000	2.00000
COF1020.4	2.00000	2.00000	2.00000	2.00000	2.00000
CO F1020.5	2.00000	2.00000	2.00000	2.00000	2.00000
PO Attainment (ROOT) Course:BCAS F1020	2.00000	2.00000	2.00000	2.00000	2.00000

Rule Type : N Student N Percentage

Attainment is calculated as the weighted average of each individual PO attainment.

Attainment = (PO1 * weightage) + (PO2 * weightage) + ...

Learning Outcome of Department of BCA, St. Edmund's College, Shillong

ANNEXURE X

[Student Performance Learning Outcomes]

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Website: <http://sec.edu.in>**Consolidated CO – PO-PSO MAPPING OF ... (BCA 1070) {Linways Software Computed}**

CO-PO Mapping Report

CO	PO3
CO F1070.1	2.00
CO F1070.2	3.00
CO F1070.3	3.00
CO F1070.4	2.00
CO F1070.5	3.00

CO-PSO Mapping Report

CO	PO1	PO2	PO4	PO5
CO F1070.1	2.00	3.00	3.00	1.00
CO F1070.2	2.00	2.00	3.00	1.00
CO F1070.3	2.00	2.00	3.00	3.00
CO F1070.4	2.00	3.00	3.00	3.00
CO F1070.5	3.00	3.00	3.00	2.00

Course-PO Mapping Report

Course	Lifelong Learning
BCAS F1070	3.00

Course-PSO Mapping Report

Course	Domain Expertise	Skills and Ethics	Modern Tool Usage	Social Contribution
BCAS F1070	3.00	3.00	3.00	3.00

CO Attainment (ROOT)

Subject/CO	CO F1070.1	CO F1070.2	CO F1070.3	CO F1070.4	CO F1070.5
BCAS F1070	2.59	2.59	2.59	2.59	2.59

Learning Outcome of Department of BCA, St. Edmund's College, Shillong

ANNEXURE X

[Student Performance Learning Outcomes]



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CO ATTAINMENT

SELECT TREE BCA SIXTH SEMESTER 2017 BATCH

CO Attainment

Recalculate Attainment

Max Descriptor : 3.00

Print

CO Code	CO F1070.1	CO F1070.2	CO F1070.3	CO F1070.4	CO F1070.5
Attainment	2.58627	2.58627	2.58627	2.58627	2.58627

* Co Attainment Rule : Simple Average

PO ATTAINMENT

SELECT TREE BCA SIXTH SEMESTER 2017 BATCH

PO Attainment

Recalculate Attainment

Max Descriptor : 3.00

Print

PO Code	PO1	PO2	PO3	PO4	PO5
CO F1070.1	2.58627	2.58627	2.58627	2.58627	2.58627
CO F1070.2	2.58627	2.58627	2.58627	2.58627	2.58627
CO F1070.3	2.58627	2.58627	2.58627	2.58627	2.58627
CO F1070.4	2.58627	2.58627	2.58627	2.58627	2.58627
CO F1070.5	2.58627	2.58627	2.58627	2.58627	2.58627
PO Attainment (ROOT) Course:BCAS F1070	1.00000	1.00000	1.00000	1.00000	1.00000

Rule Type : Simple Average

Learning Outcome of Department of BCA, St. Edmund's College, Shillong

ANNEXURE X

[Student Performance Learning Outcomes]

**St. Edmund's College**

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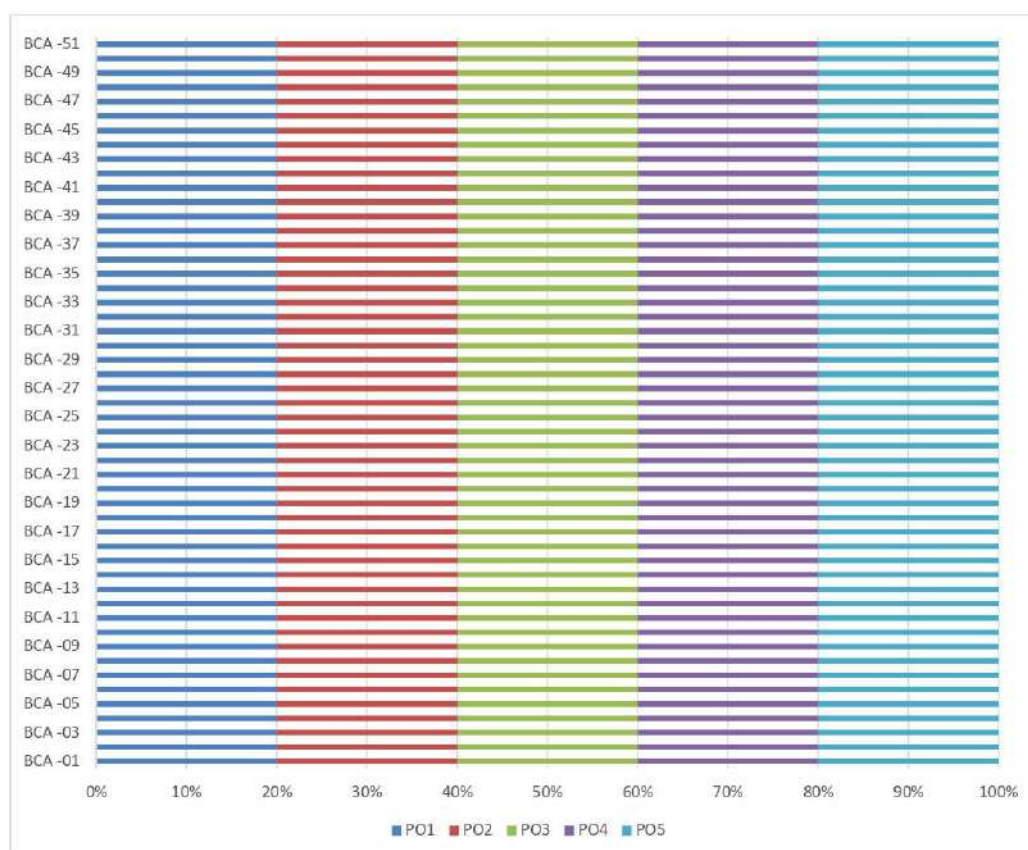
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**PO MAPPING OF (BCA 1070)- Computed using Linways OBE Software & Excel
spreadsheet**



Learning Outcome of Department of BCA, St. Edmund's College, Shillong

ANNEXURE X

[Student Performance Learning Outcomes]

**St. Edmund's College**

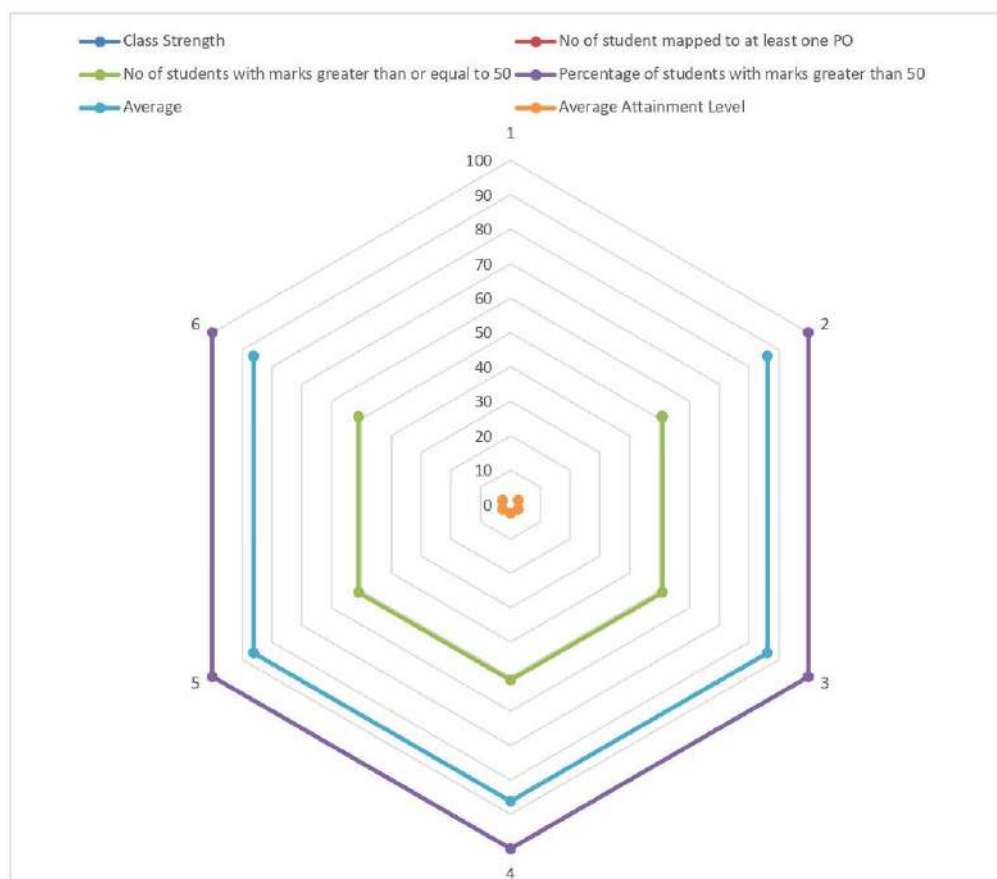
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Average Attainment Level for PO MAPPING OF (BCA 1070) - Computed using Linways
OBE Software & Excel spreadsheet



Learning Outcome of Department of BCA, St. Edmund's College, Shillong

ANNEXURE X

[Student Performance Learning Outcomes]



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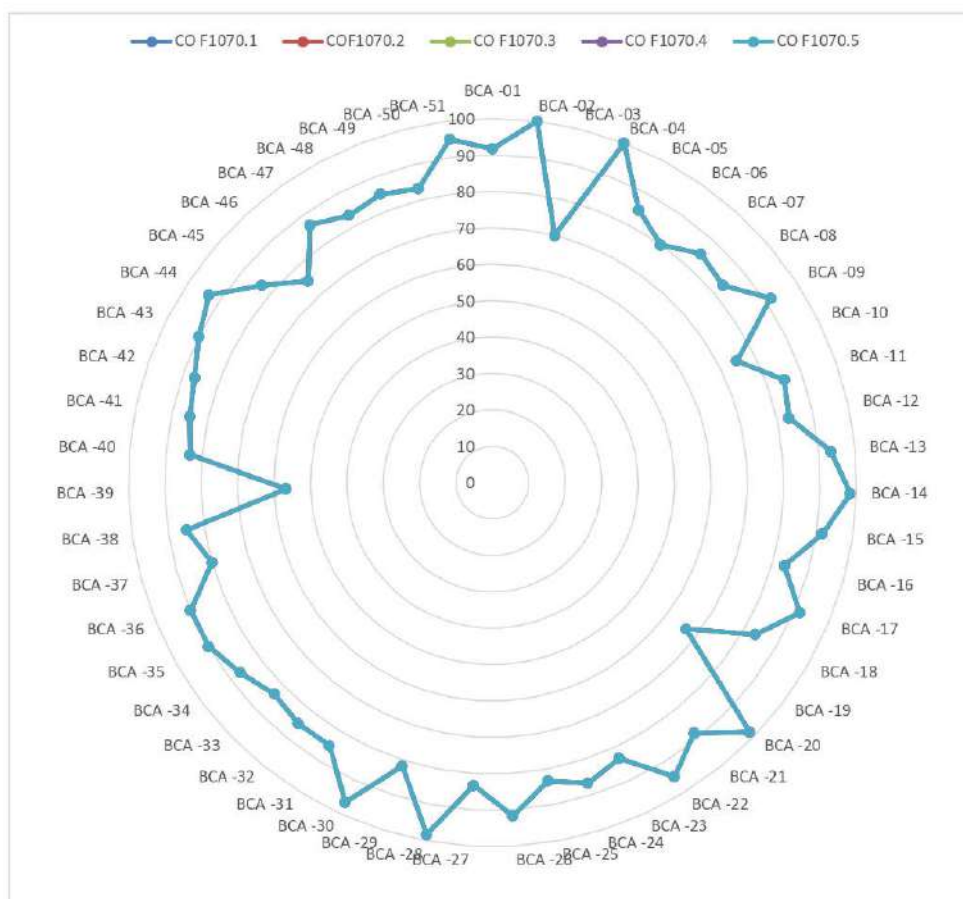
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Learning Outcome of Department of BCA, St. Edmund's College, Shillong

ANNEXURE X

[Student Performance Learning Outcomes]

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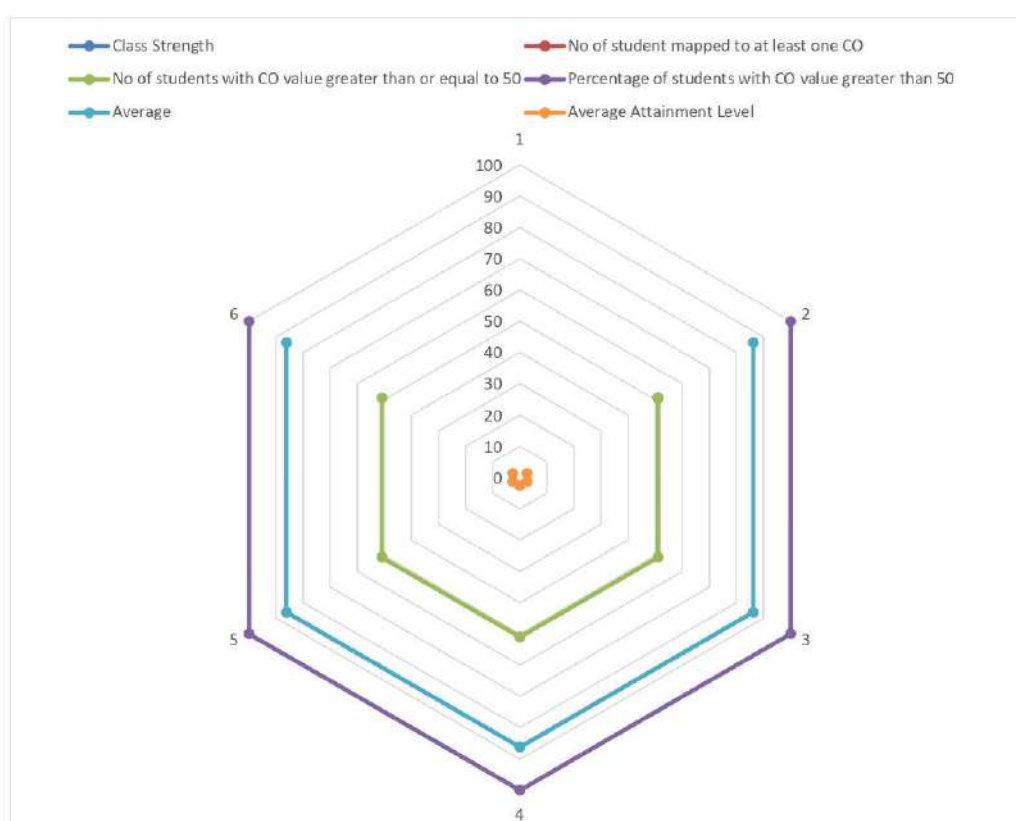
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Average Attainment Level for CO MAPPING OF (BCA 1070) – Computed using Linways
OBE Software & Excel spreadsheet



Learning Outcome of Department of BCA, St. Edmund's College, Shillong

ANNEXURE X

[Student Performance Learning Outcomes]

**St. Edmund's College**

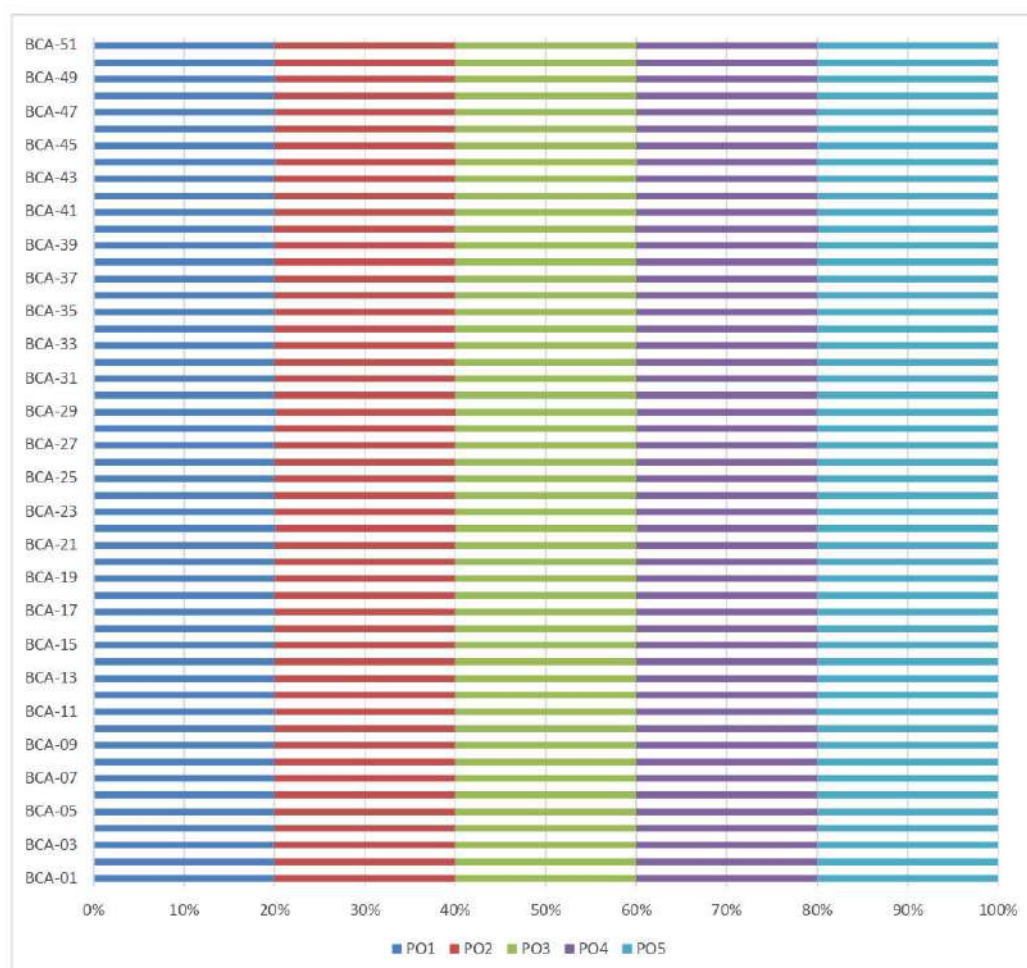
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**PO MAPPING OF (BCA 1020) -Computed using Linways OBE Software & Excel
spreadsheet**



Learning Outcome of Department of BCA, St. Edmund's College, Shillong

ANNEXURE X

[Student Performance Learning Outcomes]

**St. Edmund's College**

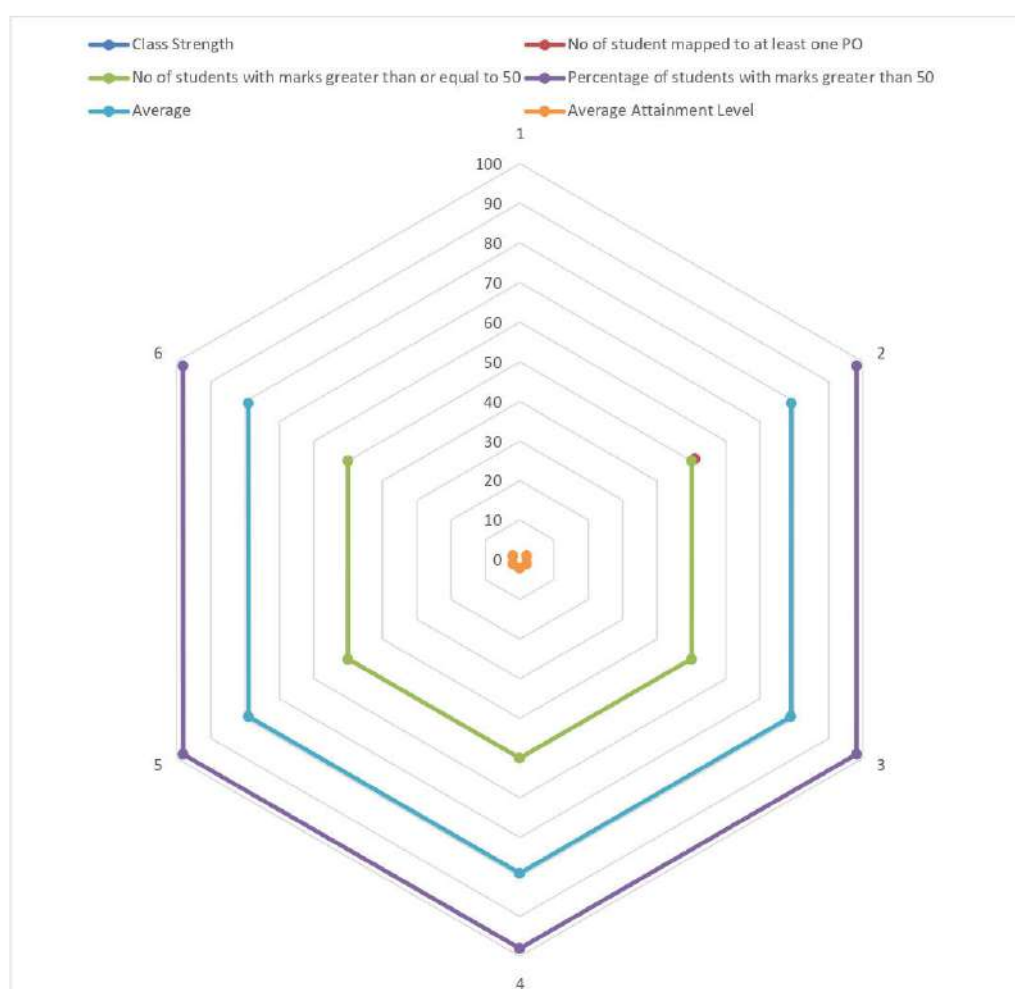
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Average Attainment Level for PO Mapping of (BCA 1020) -Computed using Linways
OBE Software & Excel spreadsheet



Learning Outcome of Department of BCA, St. Edmund's College, Shillong

ANNEXURE X

[Student Performance Learning Outcomes]

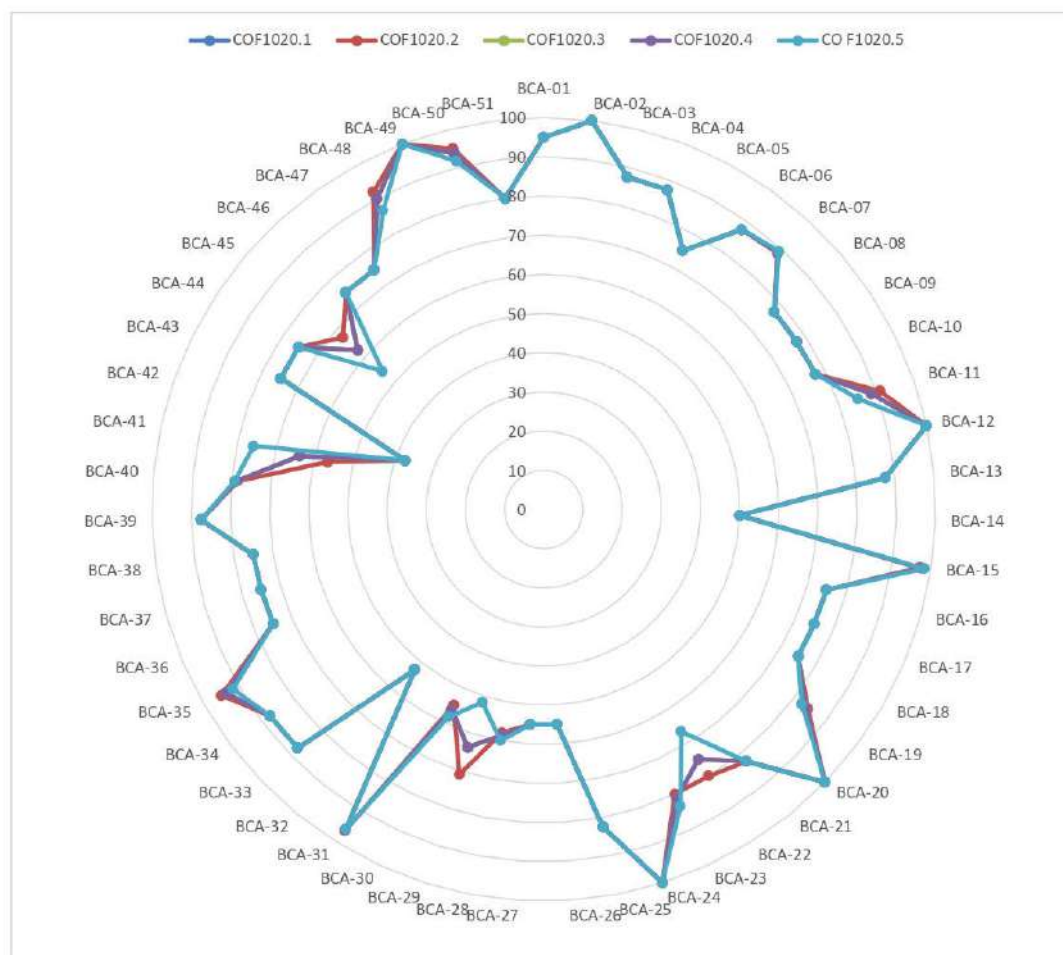
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Learning Outcome of Department of BCA, St. Edmund's College, Shillong

ANNEXURE X

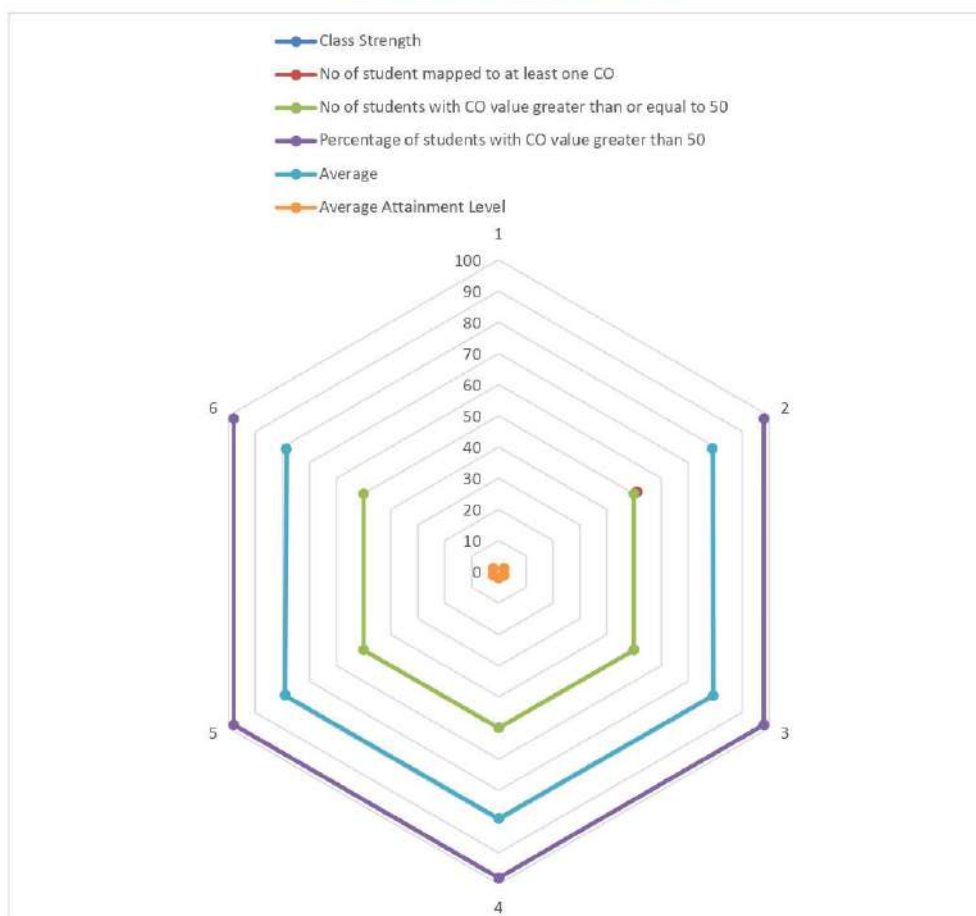
[Student Performance Learning Outcomes]

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Learning Outcome of Department of BCA, St. Edmund's College, Shillong

ANNEXURE X

[Student Performance Learning Outcomes]

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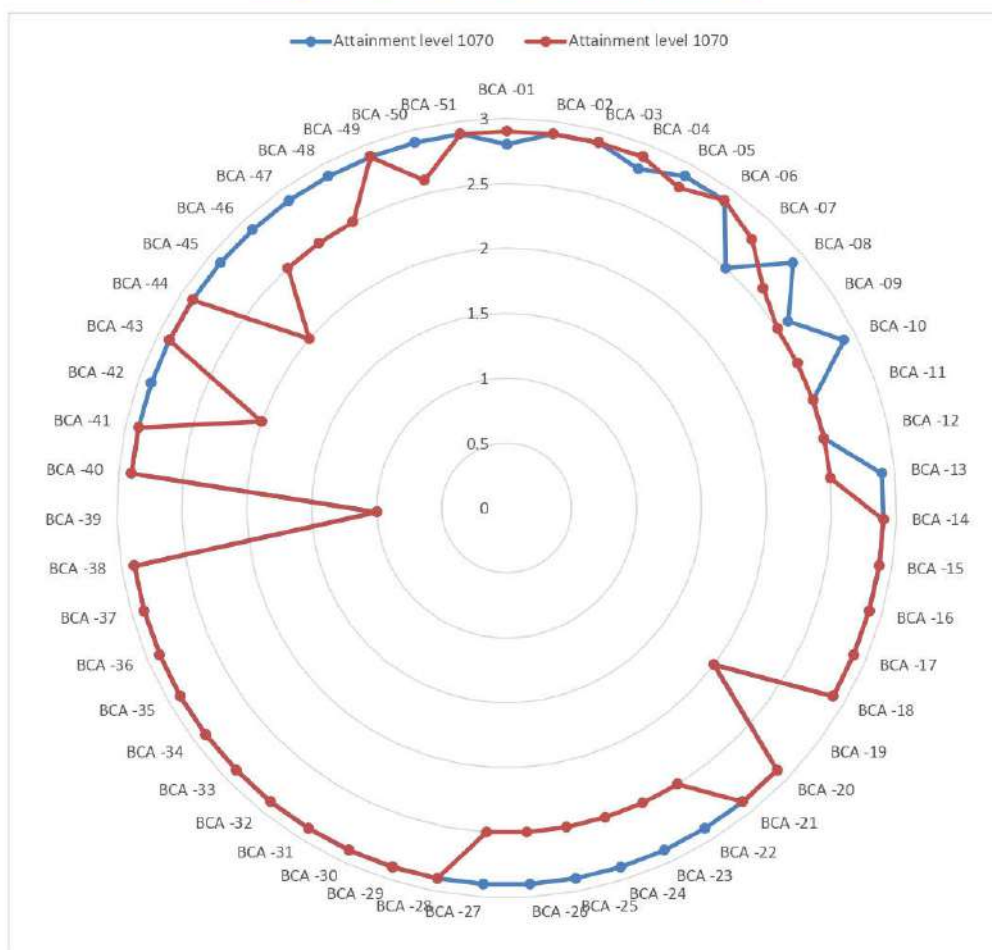
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**Individual Attainment Level of individual student of (BCA 1020 & BCA 1070) -Computed
using Linways OBE Software & Excel spreadsheet**



Learning Outcome of Department of BCA, St. Edmund's College, Shillong

ANNEXURE X

[Student Performance Learning Outcomes]

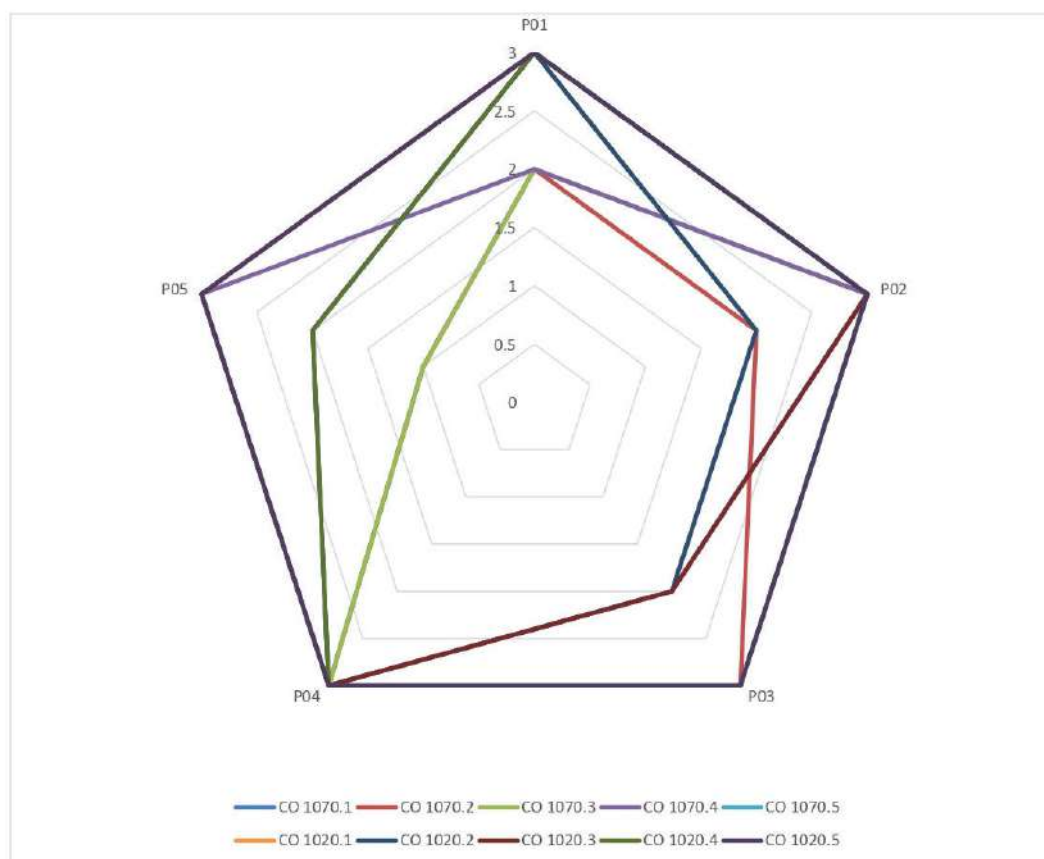
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Learning Outcome of Department of BCA, St. Edmund's College, Shillong

ANNEXURE X

[Student Performance Learning Outcomes]



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Learning Outcome

PHYSICS HONOURS[BATCH : 2017]

Program Outcomes (POs)

At the end of the BSc Physics (Hons) Programme, the graduates will be able to:

PO	Title	Description
PO1	Domain Expertise	Apply knowledge of Science and experiments at an appropriate level to the discipline
PO2	Skills and Ethics	Analyze a problem and define the scientific requirements, appropriate to its solution.
PO3	Lifelong Learning	Understand new concepts and be articulate while executing knowledge with peers.
PO4	Modern Tool Usage	Use current techniques, skills, and tools necessary for scientific research.
PO5	Social Contribution	Follow current thinking for implementing the technology for the larger benefit of the society.
PO6	Ethics	Recognize the social and ethical responsibilities of a professional working in the discipline.

Program Specific Outcomes (PSOs)

At the end of the BSc. Physics (Hons) Programme, the graduates will be able to:

PSO1	A Physics honours graduate will be able to analyze and synthesize complex data in any field, using the experimental skills acquired by him/her.
PSO2	A Physics honours graduate will be able to do precise measurement and evaluations in industry, besides being able to analyze and synthesize complex data of any field using the computer and mathematical skills acquired by him/her.
PSO3	A Physics honours graduate will be able to investigate new fields of research and development using the theoretical knowledge acquired by him/her.

Learning Outcome of Department of Physics, St. Edmund's College,
Shillong

ANNEXURE X

[Student Performance Learning Outcomes]



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Course Outcomes (CO F1040)

At the end of the Chapter/Paper : PAPER VII (Condensed Matter Physics) students will be able to:

CO F1040.1	The students can design a method for attaining low temperatures by applying/using Joule Thomson effect.
CO F1040.2	The students will be able to formulate an expression for the most probable velocity using Maxwell-Boltzmann distribution in a molecular system and evaluate it at any given temperature.
CO F1040.3	The students can design and construct a 3D model for any given crystal structure (sc, fcc, bcc) and hence evaluate the packing fraction for it.
CO F1040.4	The students will be able to evaluate the value of electrical conductivity (σ) for a given metal, when the thermal conductivity is supplied to them, using Weidemann-Franz law.
CO F1040.5	The students will be able to explain the formation of bands & band gap besides evaluating a number of parameters (such as intrinsic mobility, impurity, conductivity etc.,) for an extrinsic semiconductor.

Course Outcomes (CO F1050)

At the end of the Chapter/paper PAPER VIII Atomic & Molecular Spectroscopy, Nuclear Physics students will be able to:

CO F1050.1	The students can compare and contrast between Normal and Anomalous Zeeman effect and apply it in designing a method to study the characteristics of the system as well as to determine the unknown wavelength of a source.
CO F1050.2	The students will be able to apply the knowledge of spectral analysis in fields, such as synthesis of satellite imagery etc.,
CO F1050.3	The students can use the acquired ideas of UV, IR, AE & AA spectroscopy in investigating varied sample characteristics.
CO F1050.4	The students will be able to use the knowledge in artificial radioactivity in the design and construction of Nuclear reactor.
CO F1050.5	The students can use the concepts of elementary particles to investigate experimental high energy physics data.

CO-RELATION

Marks (%)	Grade	Correlation	Levels
31 - 60	1	Slight Correlation	L - Low
61 - 80	2	Moderate Correlation	M – Medium
81 - 100	3	Significant Correlation	H – High

Learning Outcome of Department of Physics, St. Edmund's College,
Shillong

ANNEXURE X

[Student Performance Learning Outcomes]

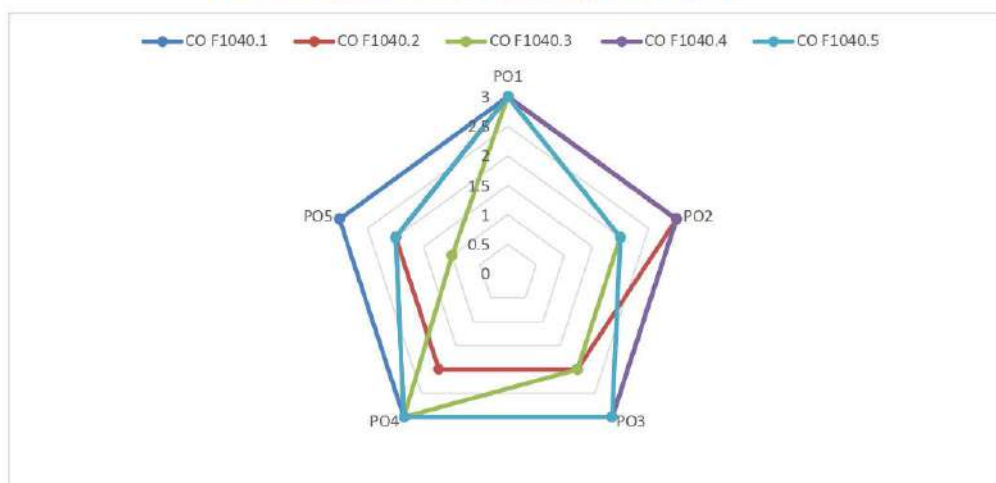
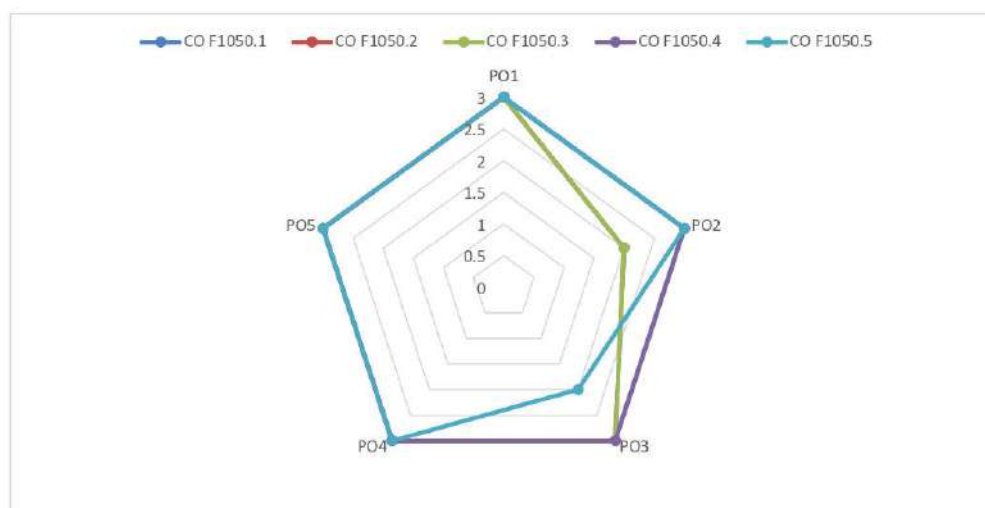
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Laitumkrah, Shillong – 793003, Meghalaya, India

E-mail: stedmundscollege@gmail.com

Website: <http://sec.edu.in>**CO – PO MAPPING OF (PAPER VII) 2017 Batch****CO – PO MAPPING OF (PAPER VIII) 2017 Batch**

Learning Outcome of Department of Physics, St. Edmund's College,
Shillong

ANNEXURE X

[Student Performance Learning Outcomes]

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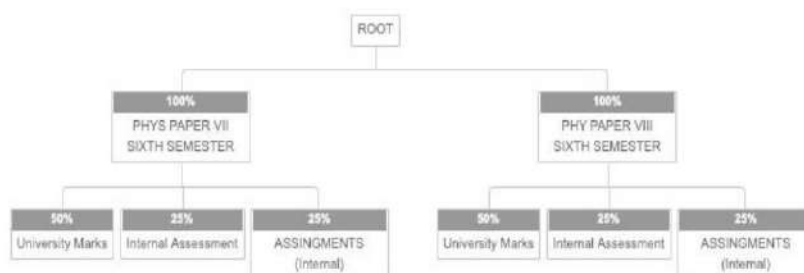
E-mail: stedmundscollege@gmail.com

Website: <http://sec.edu.in>**STATISTICAL PARAMETERS FOR PO, PSOs & CO****The analysis has been computed with the College LMS- Linways OBE Software.**

PHYSICS SIXTH SEMESTER 2019 (LEARNING OUTCOMES)

Change Tree

Note: Click on the leaf nodes and assign assessments to it.

**Papers executed for Learning Outcome Computation**

BIOT F1240-PAPER VII (T).1240	Condensed Matter Physics
BIOT F1020-PAPER VII (P).1250	Atomic & Molecular Spectroscopy, Nuclear Physics
BIOT F1240-PAPER VII (T).1240	Internal assignments, university Marks, sessional exam
BIOT F1020-PAPER VII (P).1250	Internal assignments, university Marks, sessional exam

Learning Outcome of Department of Physics, St. Edmund's College,
Shillong

ANNEXURE X

[Student Performance Learning Outcomes]



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Consolidated CO – PO-PSO MAPPING OF (PAPER VII, 1040) – 2017 Batch as computed by Linways OBE software

PO List				
Sl. No.	PO Code	PO Name	PO Description	Order No.
1	PO2	Skills and Critical	Analyze a problem and define the scientific requirements, appropriate to its solution.	2
2	PO3	Lifelong Learning	Understand and comprehend the knowledge while working knowledge with peers.	3
3	PO4	Social Contribution	Provide career, training or supporting the technology to the larger benefit of the society.	4

PSO List				
Sl. No.	PSO Code	PSO Name	PSO Description	Order No.
1	PSO1	Domain Expertise	Apply knowledge of Science and experiments at an appropriate level to the discipline.	1
2	PSO2	Modern Tool Usage	Learn and use techniques, skills and tools necessary for scientific research.	2

CO-PO Mapping Report				
CO	PO1	PO2	PO3	PO4
CO P1040.1	3.00	3.00	3.00	3.00
CO P1040.2	3.00	3.00	3.00	3.00
CO P1040.3	3.00	3.00	3.00	3.00
CO P1040.4	3.00	3.00	3.00	3.00
CO P1040.5	3.00	3.00	3.00	3.00

CO-PSO Mapping Report				
CO	PSO1	PSO2	PSO3	PSO4
CO P1040.1	3.00	3.00	3.00	3.00
CO P1040.2	3.00	3.00	3.00	3.00
CO P1040.3	3.00	3.00	3.00	3.00
CO P1040.4	3.00	3.00	3.00	3.00
CO P1040.5	3.00	3.00	3.00	3.00

Course-PO Mapping Report				
Course	Skills and Critical	Lifelong Learning	Social Contribution	
PHYS F1040	3.00	3.00	3.00	

Course-PSO Mapping Report				
Course	Domain Expertise	Modern Tool Usage		
PHYS F1040	3.00	3.00		

SELECT TREE: PHYSICS SIXTH SEMESTER 2015 (Learning Outcomes)

CO Attainment

Recalculate Attainment

Max. Descriptor : 3.00

Print

CO Code	CO P1040.1	CO P1040.2	CO P1040.3	CO P1040.4	CO P1040.5
Attainment	2.00000	2.00000	2.00000	2.00000	2.00000
Description	Medium	Medium	Medium	Medium	Medium

* Co Attainment Rule : N Student N Percentage

Attainment is calculated as the weighted average of each individual PO attainment.

Attainment = (PO1 * weightage) + (PO2 * weightage) + ...

Learning Outcome of Department of Physics, St. Edmund's College,
Shillong

ANNEXURE X

[Student Performance Learning Outcomes]



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Consolidated CO – PO – PSO MAPPING OF (PAPER VIII, 1050) 2017 Batch
computed by Linways OBE Software's

CO-PO Mapping Report

CO	PO1	PO3	PO5
CO F1050.1	3.00	2.00	3.00
CO F1050.2	2.00	1.00	3.00
CO F1050.3	2.00	1.00	3.00
CO F1050.4	3.00	3.00	3.00
CO F1050.5	3.00	3.00	3.00

CO-PSO Mapping Report

CO	PO1	PO4
CO F1050.1	3.00	3.00
CO F1050.2	3.00	3.00
CO F1050.3	3.00	3.00
CO F1050.4	3.00	3.00
CO F1050.5	3.00	2.00

Course-PO Mapping Report

Course	Sci Its and Ethics	Lifelong Learning	Social Contribution
PHYS F1050	3.00	3.00	3.00

Course-PSO Mapping Report

Course	Domain Expertise	Modern Tool Usage
PHYS F1050	3.00	3.00

CO Attainment (ROOT)

Subject/CO	CO F1050.1	CO F1050.2	CO F1050.3	CO F1050.4	CO F1050.5
PHYS F1050	2	2	2	2	2

PO Attainment Report

SELECT TREE: PHYSICS SIXTH SEMESTER 2019 (Learning Outcomes)

CO Attainment

Recalculate Attainment						Max Descriptor: 3.00	Print
CO Code	CO F1050.1	CO F1050.2	CO F1050.3	CO F1050.4	CO F1050.5		
Attainment	2.00000	2.00000	2.00000	2.00000	2.00000		
Description	Medium	Medium	Medium	Medium	Medium		

* Co Attainment Rule: N Student N Percentage
 Attainment is calculated as the weighted average of each individual PO attainment.
 Attainment = (PO1 * weightage) + (PO2 * weightage) + ...

Learning Outcome of Department of Physics, St. Edmund's College,
Shillong

ANNEXURE X

[Student Performance Learning Outcomes]

**St. Edmund's College**

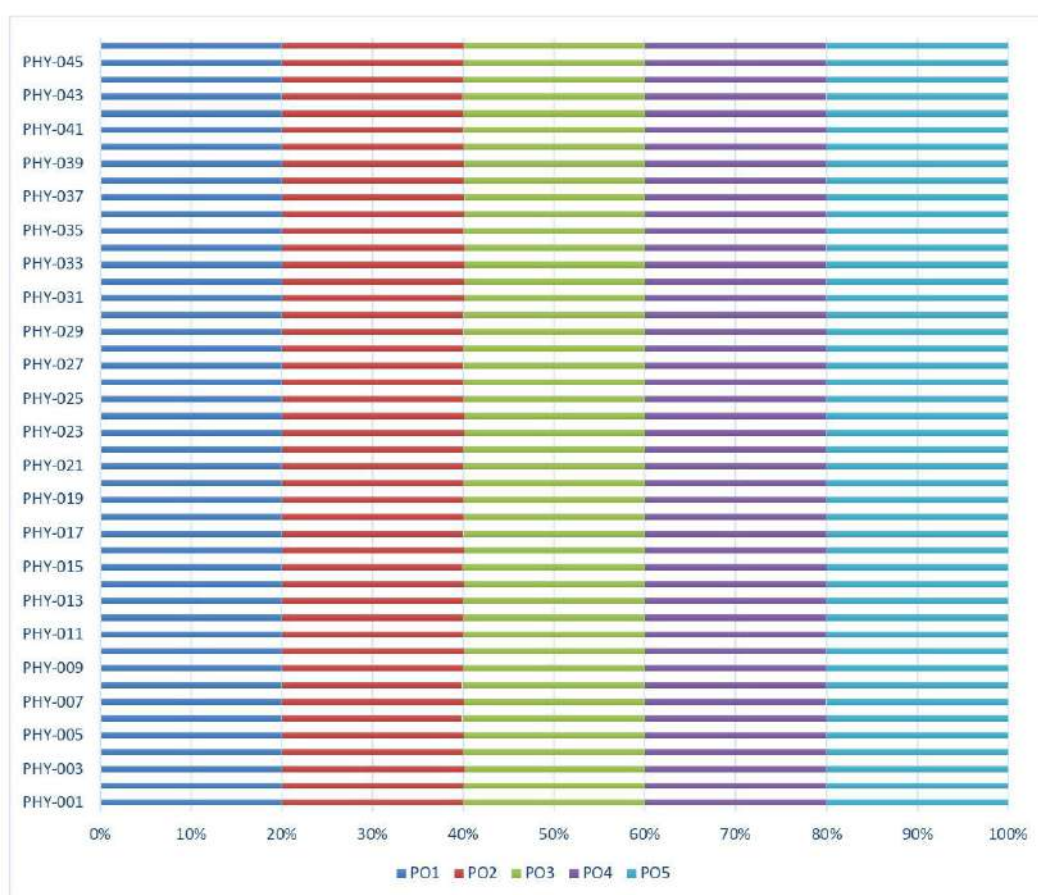
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**PO MAPPING OF (Physics 1040)- Computed using Linways OBE Software & Excel
spreadsheet**



Learning Outcome of Department of Physics, St. Edmund's College,
Shillong

ANNEXURE X

[Student Performance Learning Outcomes]

**St. Edmund's College**

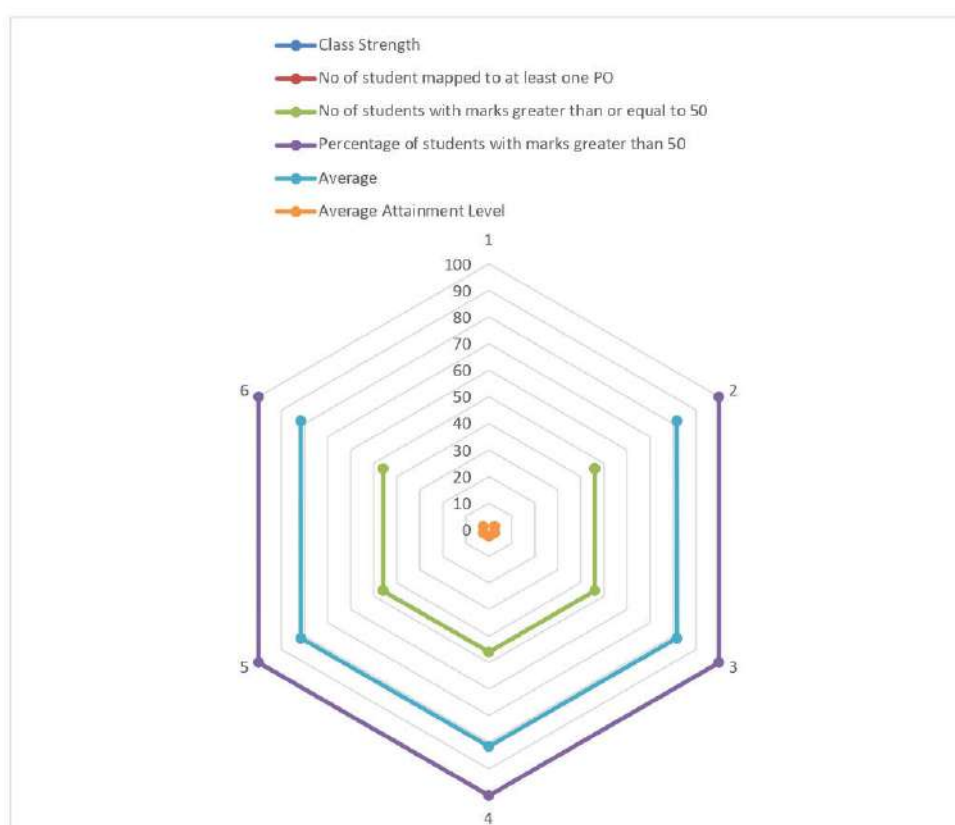
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**Consolidated Average PO Attainment Level (Physics 1040)- Computed using
Linways OBE Software & Excel spreadsheet**



Learning Outcome of Department of Physics, St. Edmund's College,
Shillong

ANNEXURE X

[Student Performance Learning Outcomes]



St. Edmund's College

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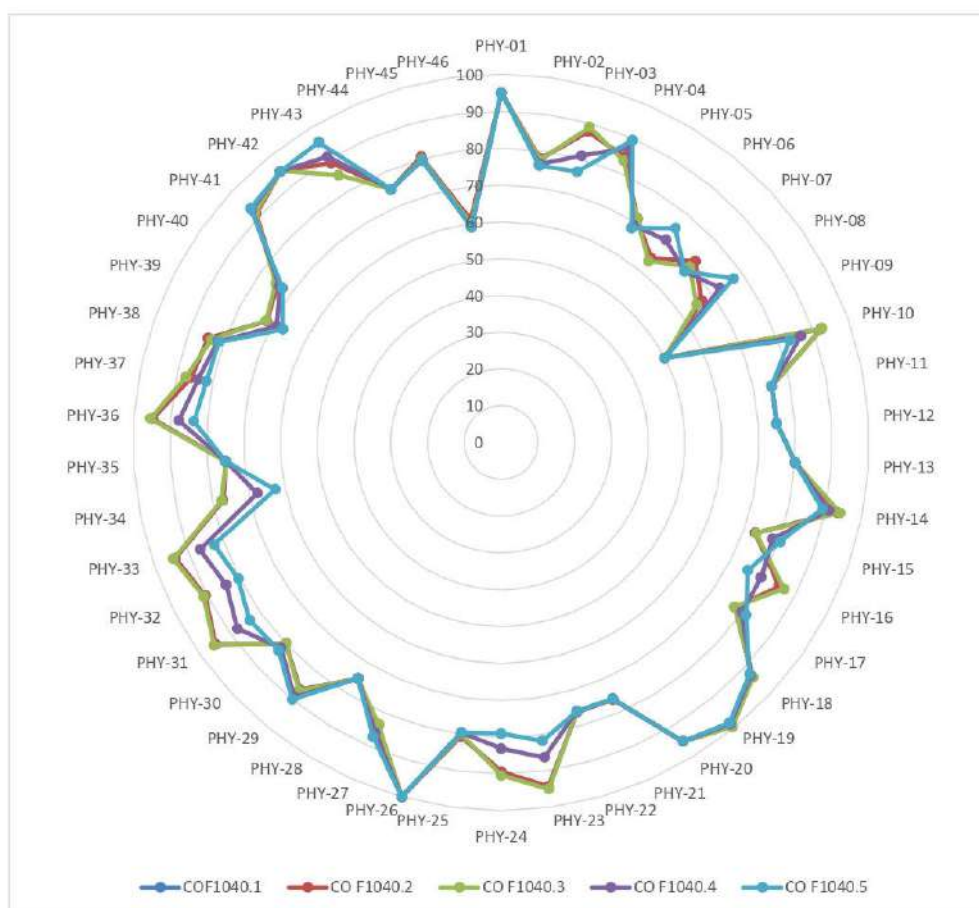
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CO MAPPING OF (Physics 1040)- Computed using Linways OBE Software & Excel spreadsheet



Learning Outcome of Department of Physics, St. Edmund's College, Shillong

ANNEXURE X

[Student Performance Learning Outcomes]

**St. Edmund's College**

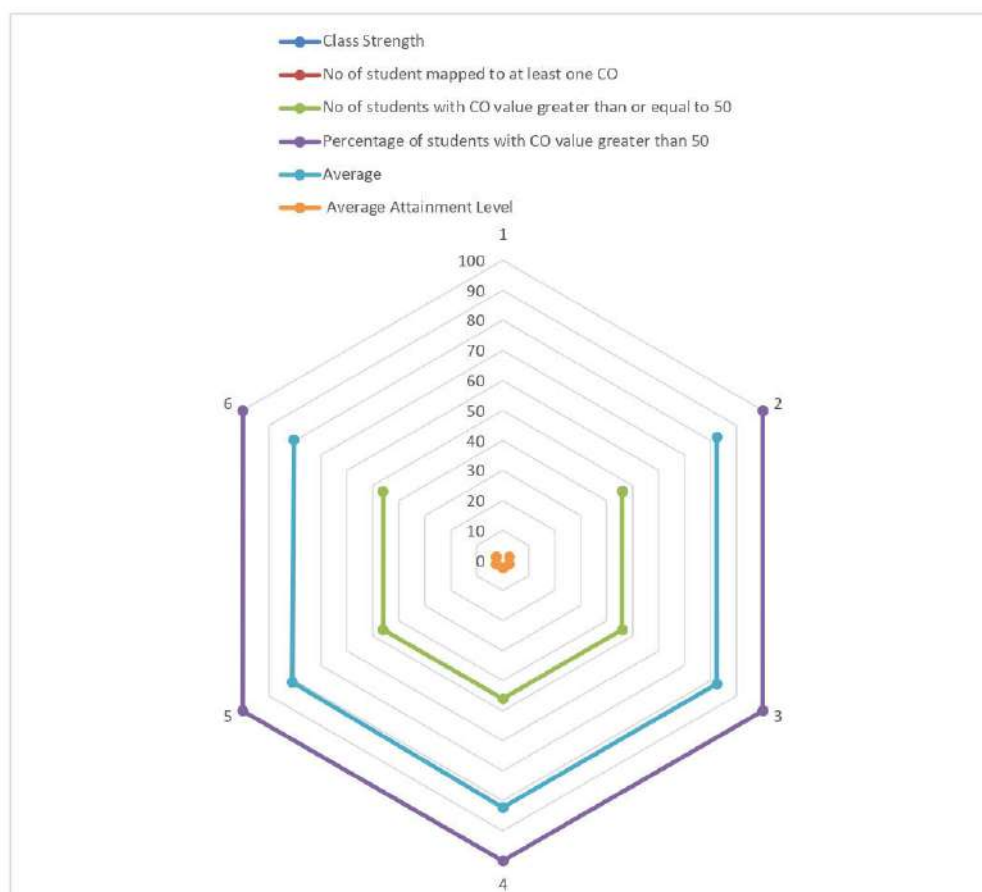
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**Consolidated Average CO Attainment Level (Physics 1040)- Computed using
Linways OBE Software & Excel spreadsheet**



Learning Outcome of Department of Physics, St. Edmund's College,
Shillong

ANNEXURE X

[Student Performance Learning Outcomes]

**St. Edmund's College**

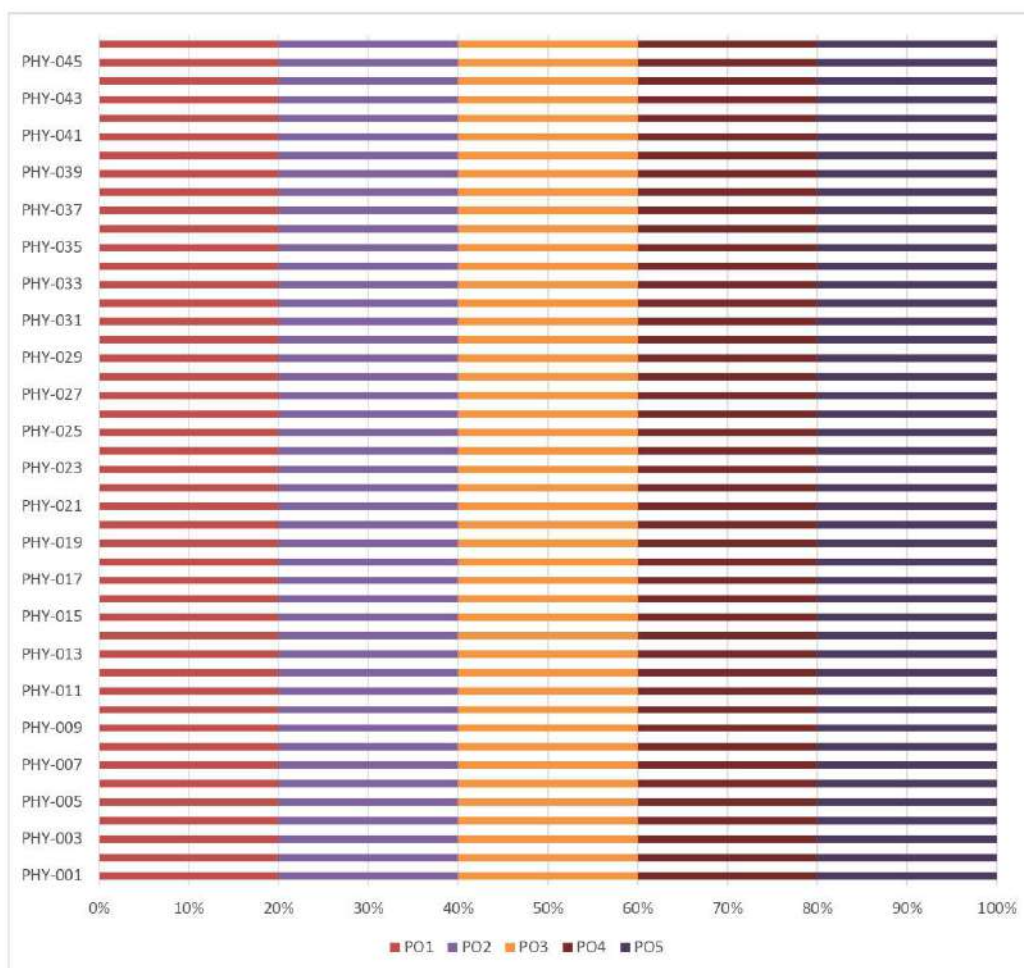
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E-mail: stedmundscollege@gmail.comWebsite: <http://sec.edu.in>

PO MAPPING OF (Physics 1045)- Computed using Linways OBE Software & Excel spreadsheet



Learning Outcome of Department of Physics, St. Edmund's College,
Shillong

ANNEXURE X

[Student Performance Learning Outcomes]

**St. Edmund's College**

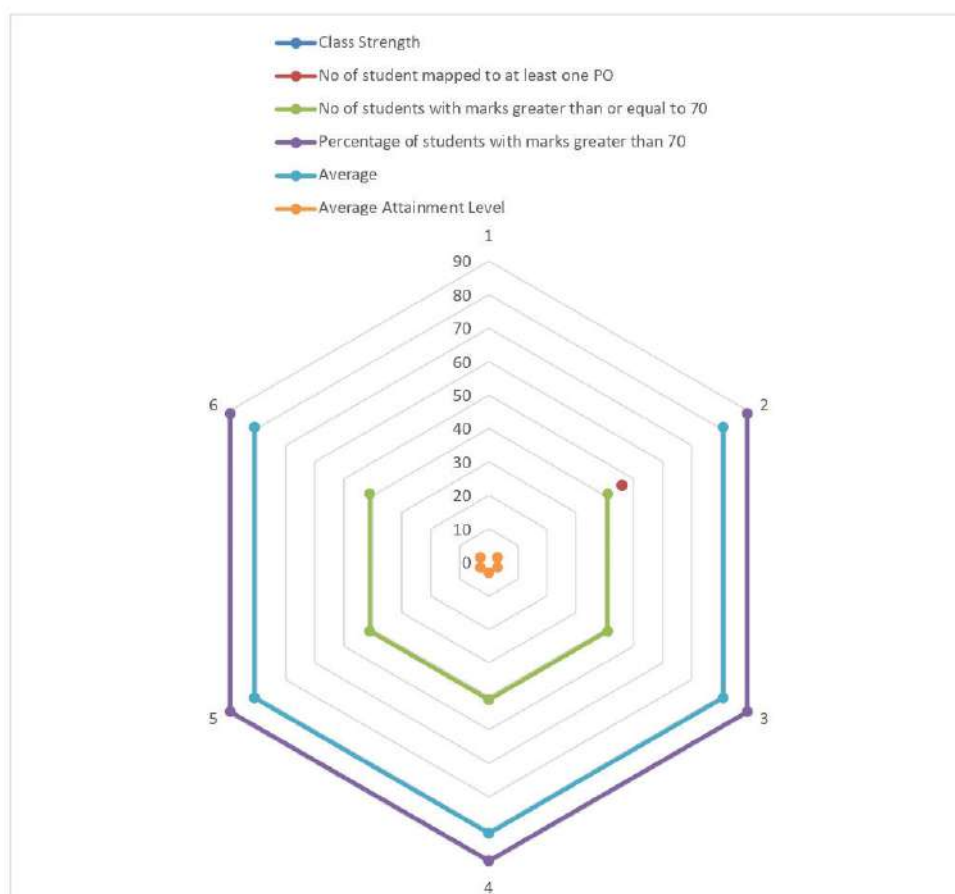
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PO MAPPING OF (Physics 1045)- Computed using Linways OBE Software & Excel spreadsheet



Learning Outcome of Department of Physics, St. Edmund's College, Shillong

ANNEXURE X

[Student Performance Learning Outcomes]



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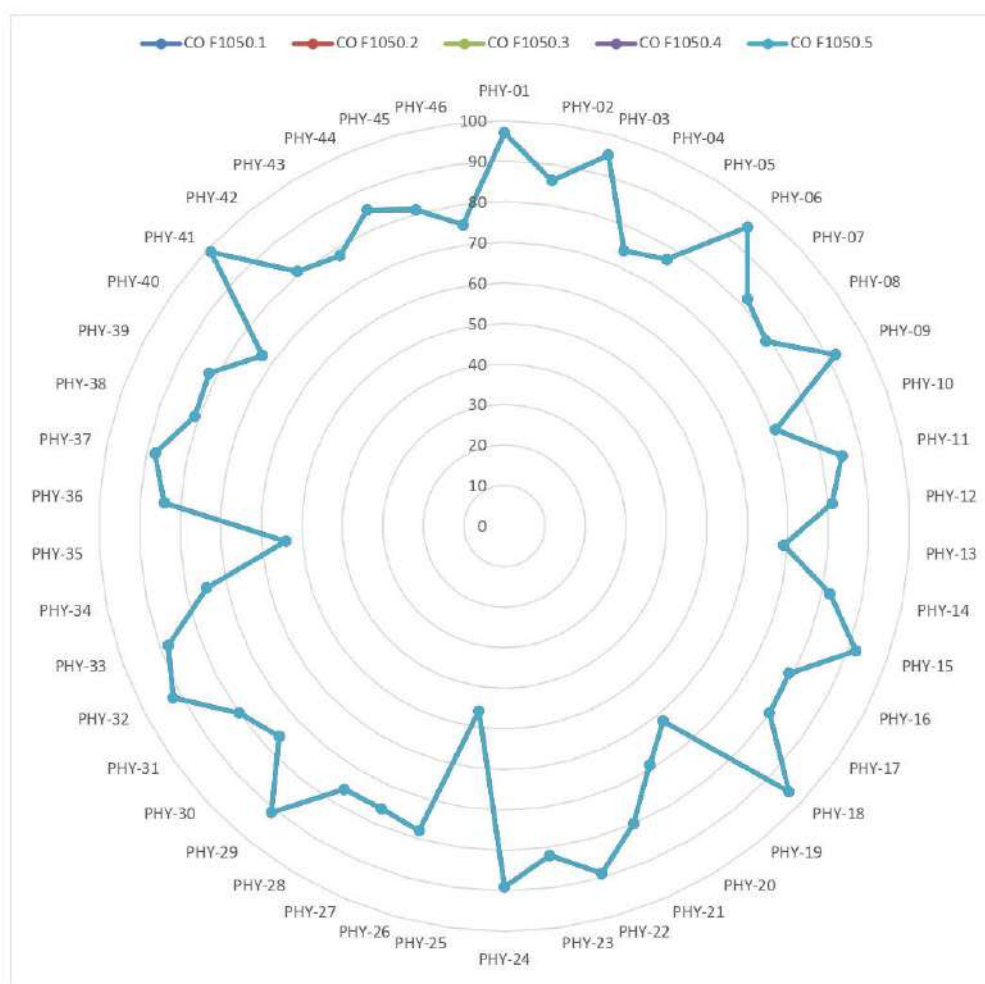
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Website: <http://sec.edu.in>

CO MAPPING OF (Physics 1050)- Computed using Linways OBE Software & Excel spreadsheet



Learning Outcome of Department of Physics, St. Edmund's College, Shillong

ANNEXURE X

[Student Performance Learning Outcomes]

**St. Edmund's College**

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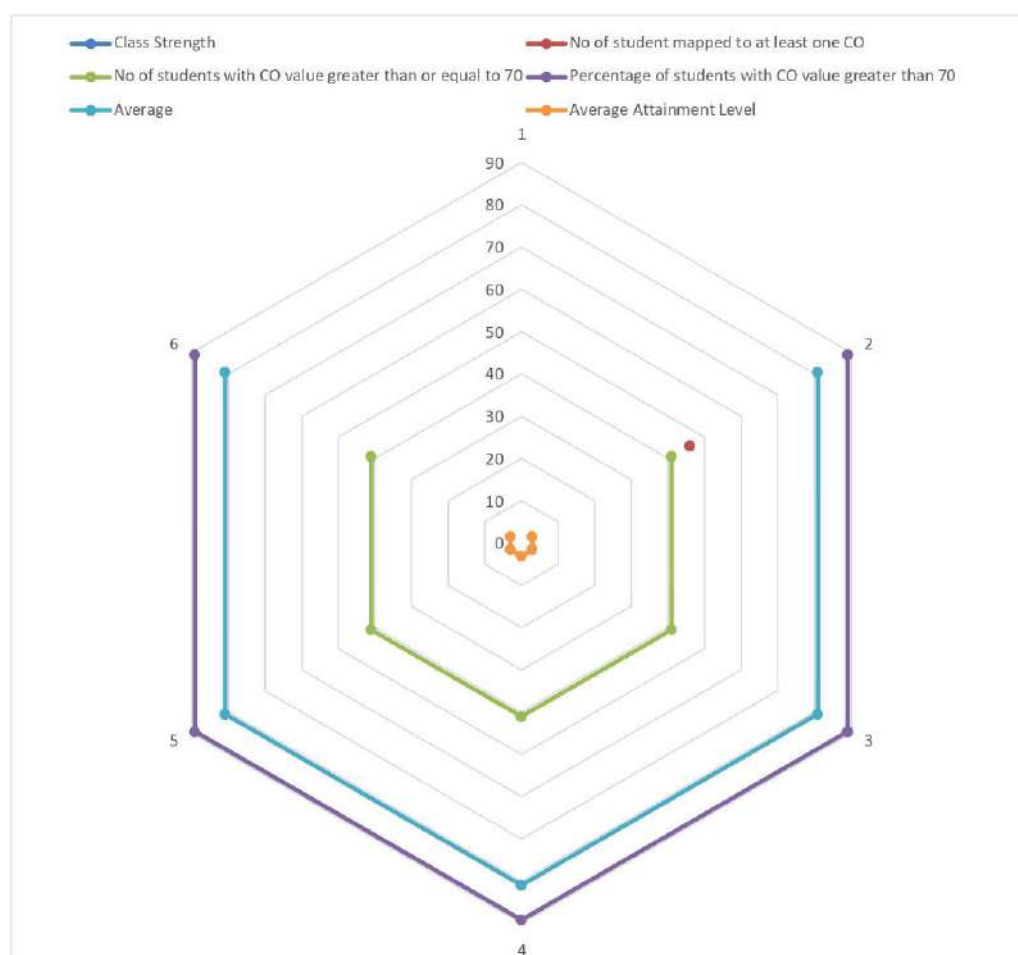
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E-mail: stedmundscollege@gmail.com

Website: <http://sec.edu.in>

**Consolidated Average CO Attainment Level (Physics 1050)- Computed using
Linways OBE Software & Excel spreadsheet**



Learning Outcome of Department of Physics, St. Edmund's College,
Shillong

ANNEXURE X

[Student Performance Learning Outcomes]

**St. Edmund's College**

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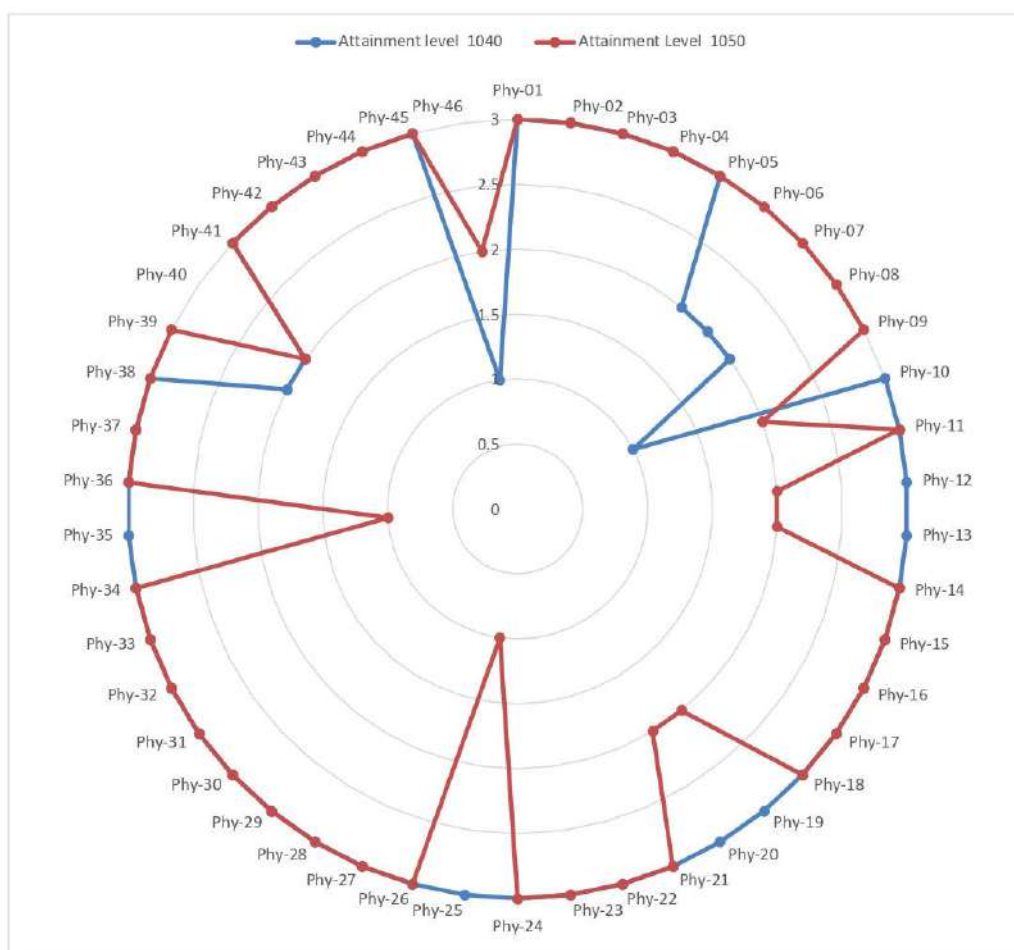
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E-mail: stedmundscollege@gmail.com

Website: <http://sec.edu.in>

**Individual Attainment Level of individual student of (Physics 1040 & 1050)-Computed
using Linways OBE Software & Excel spreadsheet**



Learning Outcome of Department of Physics, St. Edmund's College,
Shillong

ANNEXURE X

[Student Performance Learning Outcomes]

**St. Edmund's College**

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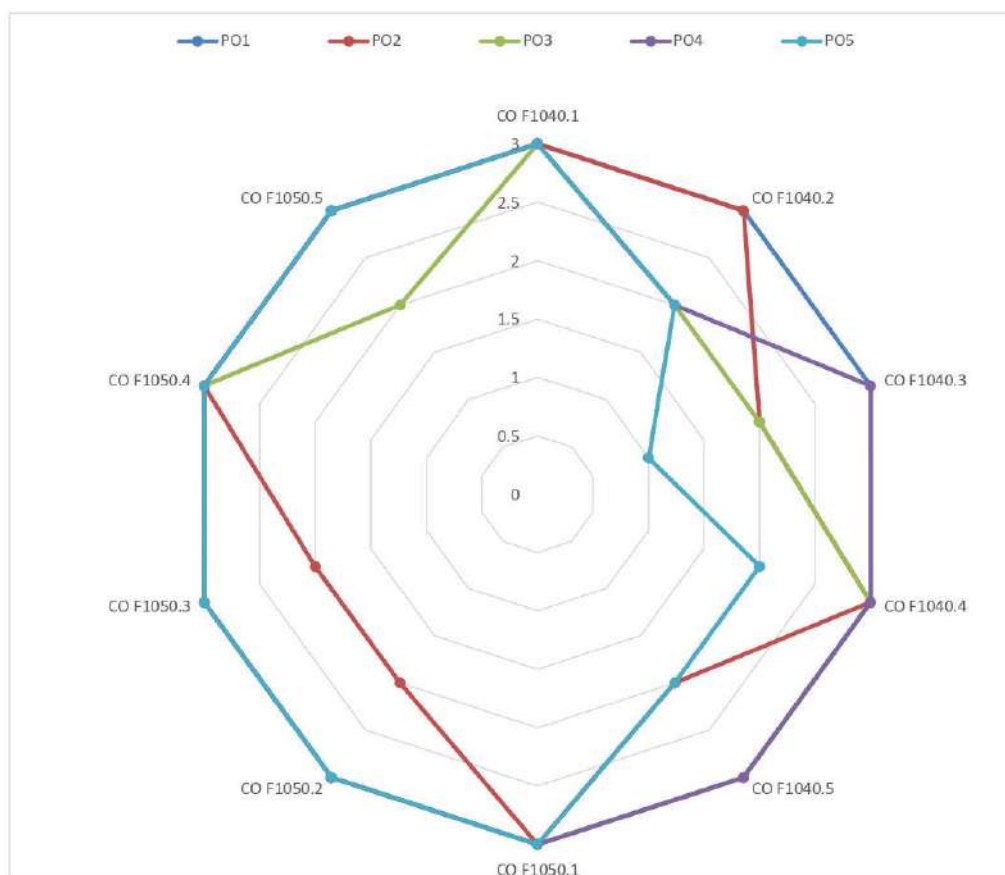
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Website: <http://sec.edu.in>

Combined CO-PO mapping of (Physics 1040 & 1050) -Computed using Linways OBE
Software & Excel spreadsheet



Learning Outcome of Department of Physics, St. Edmund's College,
Shillong

ANNEXURE X

[Student Performance Learning Outcomes]**St. Edmund's College**

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Laitumkhrah, Shillong – 793003, Meghalaya, IndiaE-mail: stedmundscollege@gmail.comWebsite: <http://sec.edu.in>**Learning Outcome****SUBJECT: Environmental Science [BATCH - 2017]****Program Outcomes (POs)**

At the end of the Environmental Science Programme, the graduates will be able to:

PO	Title	Description
PO1	Domain Expertise	Apply knowledge of Science and experiments at an appropriate level to the discipline
PO2	Skills and Ethics	Analyze a problem and define the scientific requirements, appropriate to its solution.
PO3	Lifelong Learning	Understand new concepts and be articulate while executing knowledge with peers.
PO4	Modern Tool Usage	Use current techniques, skills, and tools necessary for scientific research.
PO5	Social Contribution	Follow current thinking for implementing the technology for the larger benefit of the society.
PO6	Ethics	Recognize the social and ethical responsibilities of a professional working in the discipline.

Program Specific Outcomes (PSOs)

At the end of the Environmental Science Programme, the graduates will be able to:

PSO1	The students will acquire skills for identifying environmental problems and will be able to explain environment in its totality.
PSO2	The students will be able to explain the causes of environmental degradation and can demonstrate awareness and sensitivity to the total environment and its allied problems.
PSO3	The students will be able to test and compare environmental samples.

Learning Outcome of Department of Environmental Science, St. Edmund's College, Shillong

ANNEXURE X

[Student Performance Learning Outcomes]



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Course Outcomes (F1270) Environmental Chemistry)

At the end of the Chapter/Paper: VII students will be able to:

CO F1270.1	Examine the role of Microorganisms as catalysts in chemical reaction.
CO F1270.2	Give a schematic classification of pesticides.
CO F1270.3	Assess the impact of photochemical smog in environment.
CO F1270.4	Recommend an appropriate method of treatment of wastewater.
CO F1270.5	Classify the different elements of the earth.

Course Outcomes (F1280) EIA, Environmental Economics and Environmental Laws

At the end of the Chapter/Paper: VIII students will be able to:

CO F1280.1	Discuss the concept and principles of Environmental Impact assessment (EIA).
CO F1280.2	Compare the EIA Notification of 1994 and 2006.
CO F1280.3	Prepare the different steps of carrying out Environmental Impact Assessment of a project.
CO F1280.4	Examine the process and implementation of Environmental Audit.
CO F1280.5	Illustrate the steps involved in registration and certification process of ISO.

Correlation

Marks (%)	Grade	Correlation	Levels
31 - 60	1	Slight Correlation	L - Low
61 - 80	2	Moderate Correlation	M – Medium
81 - 100	3	Significant Correlation	H – High

Learning Outcome of Department of Environmental Science, St. Edmund's College, Shillong

ANNEXURE X

[Student Performance Learning Outcomes]

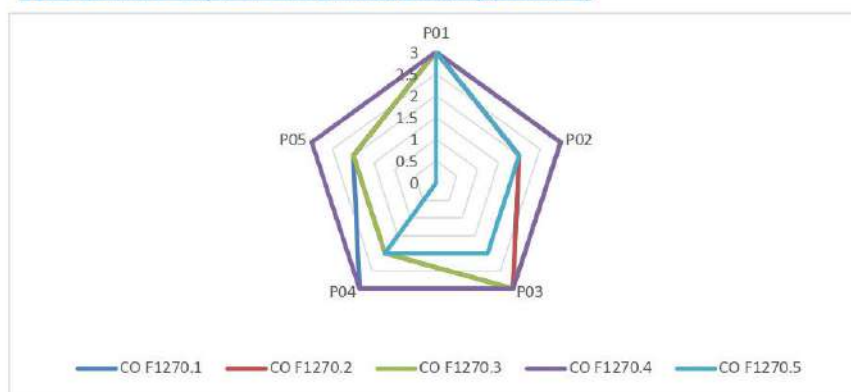
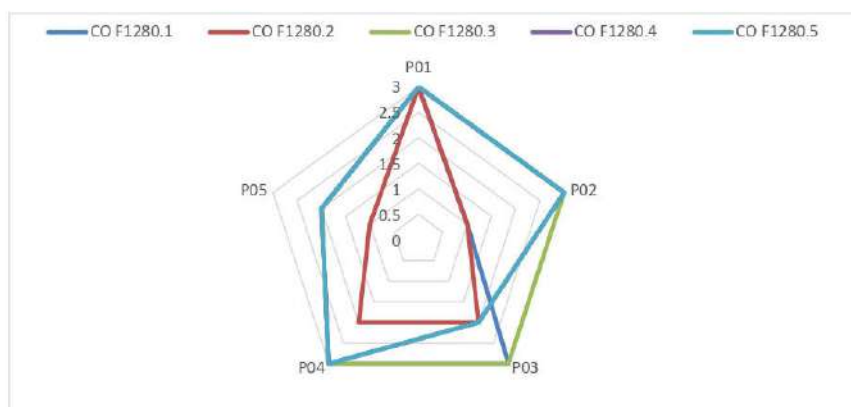
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E-mail: stedmundscollege@gmail.com

Website: <http://sec.edu.in>**CO – PO MAPPING OF Environmental Science Sixth Semester****CO PO MAPPING – Paper VII- Environmental Chemistry (Code 1270)****CO PO MAPPING – Paper VIII- Environmental Laws (Code 1280)**

Learning Outcome of Department of Environmental Science, St. Edmund's College, Shillong

ANNEXURE X

[Student Performance Learning Outcomes]

**St. Edmund's College**

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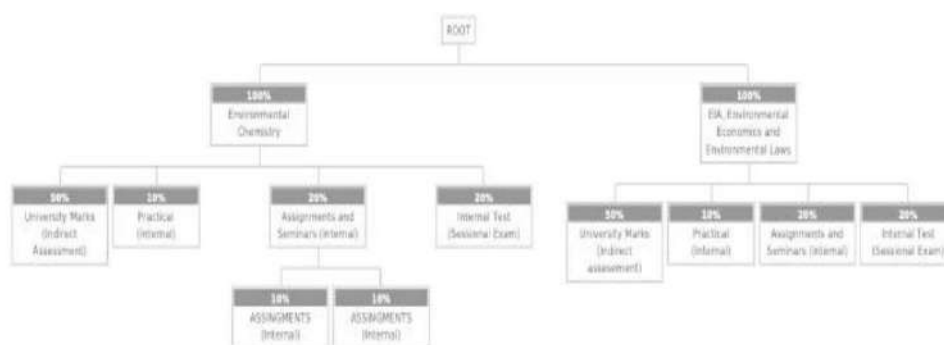
Laitumkhrah, Shillong – 793003, Meghalaya, India

E-mail: stedmundscollege@gmail.com

Website: <http://sec.edu.in>**STATISTICAL PARAMETERS FOR PO, PSOs & CO**

The analysis has been computed with the College LMS- Linways Technologies
OBE Software.

Environmental Science Sixth Semester 2017

**Papers executed for CO-PO Mapping**

BIOT F1270-PAPER VII (T).1270	Environmental Chemistry
BIOT F1280-PAPER VII (T).1280	Environmental Laws
BIOT F1270-PAPER VII (T).1270	Assignment's, Internal test, Practical Aptitude
BIOT F1280-PAPER VII (T).1280	Assignment's, Internal test, Practical Aptitude

Learning Outcome of Department of Environmental Science, St. Edmund's
College, Shillong

ANNEXURE X

[Student Performance Learning Outcomes]

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CO-PO Mapping Report

CO
CO F1270.1
CO F1270.2
CO F1270.3
CO F1270.4
CO F1270.5

CO-PSO Mapping Report

CO	PO1	PO2	PO3	PO4	PO5
CO F1270.1	3.00	2.00	3.00	3.00	2.00
CO F1270.2	3.00	2.00	3.00	2.00	2.00
CO F1270.3	3.00	3.00	3.00	2.00	2.00
CO F1270.4	3.00	3.00	3.00	3.00	3.00
CO F1270.5	3.00	2.00	2.00	2.00	–

PCs are not defined.

Course-PSO Mapping Report

Course	Domain Expertise	Skills and Ethics	Lifelong Learning	Modern Tool Usage	Social Contribution
EVSS F1270	3.00	3.00	3.00	3.00	3.00

CO Attainment(ROOT)

Subject/CO	CO F1270.1	CO F1270.2	CO F1270.3	CO F1270.4	CO F1270.5
EVSS F1270	–	–	–	–	–

Learning Outcome of Department of Environmental Science, St. Edmund's College, Shillong

ANNEXURE X

[Student Performance Learning Outcomes]



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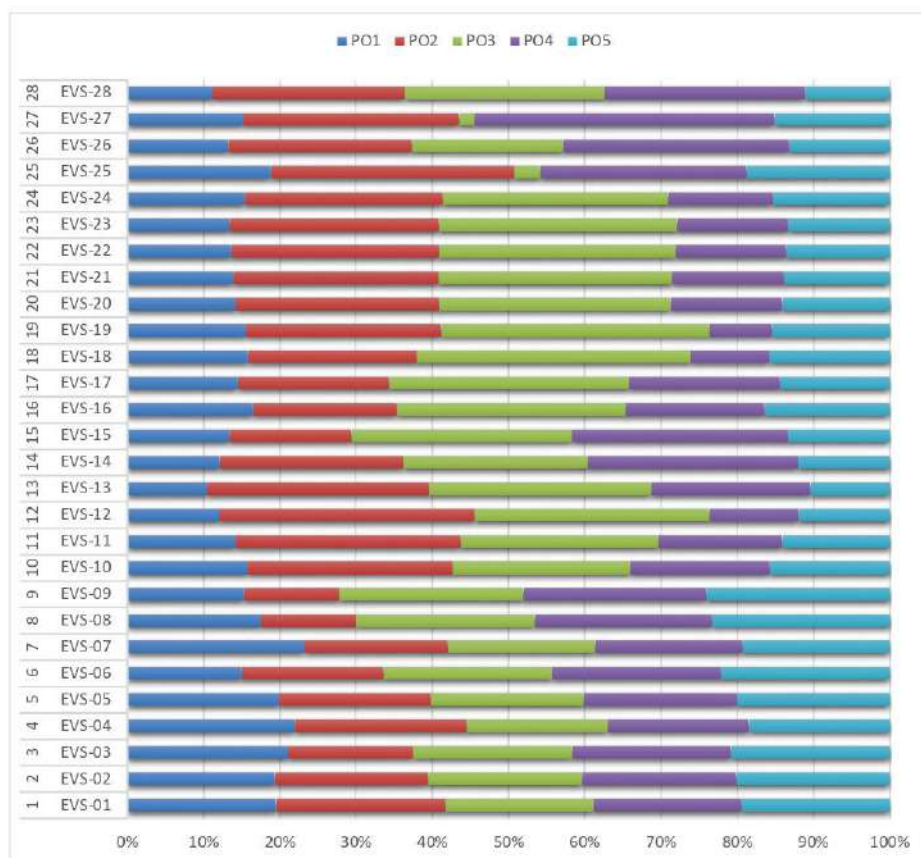
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CO PO MAPPING – Paper VII- Environmental Chemistry (Code 1270)- Computed through Linways OBE Software & Excel Spreadsheet.



Learning Outcome of Department of Environmental Science, St. Edmund's College, Shillong

ANNEXURE X

[Student Performance Learning Outcomes]

**St. Edmund's College**

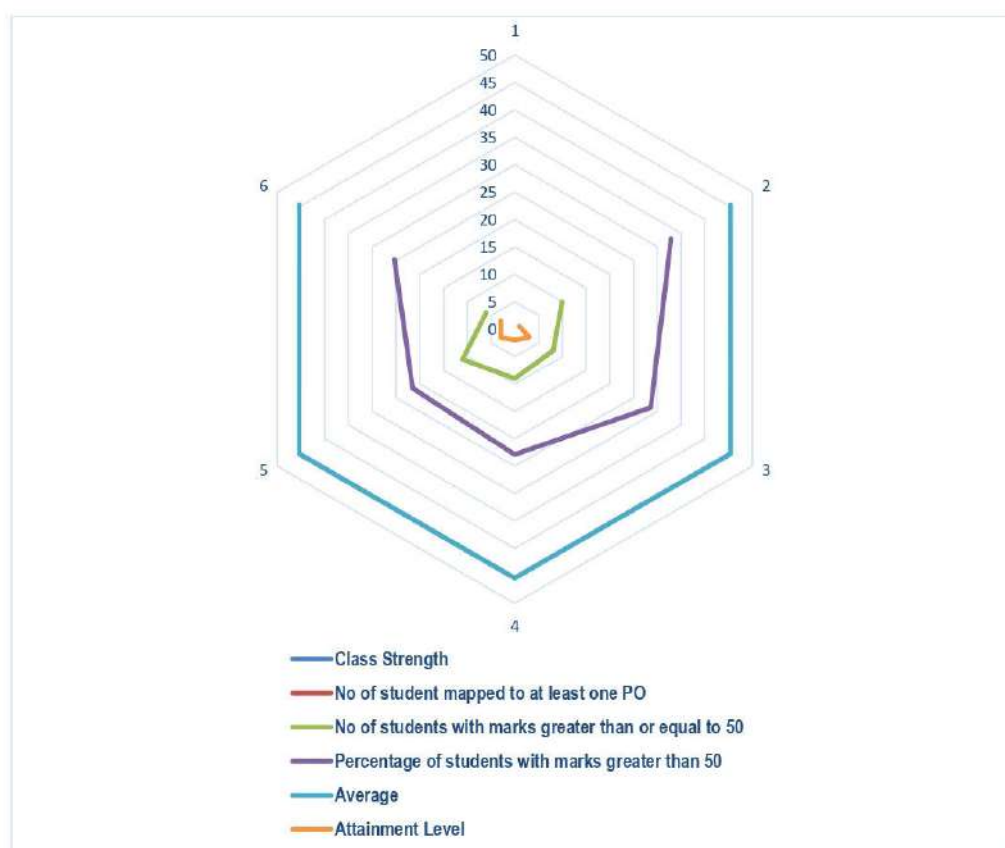
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E-mail: stedmundscollege@gmail.comWebsite: <http://sec.edu.in>

Average Attainment Level – Paper VII- Environmental Chemistry (Code 1270) - Computed through Linways OBE Software & Excel Spreadsheet.



Learning Outcome of Department of Environmental Science, St. Edmund's College, Shillong

ANNEXURE X

[Student Performance Learning Outcomes]



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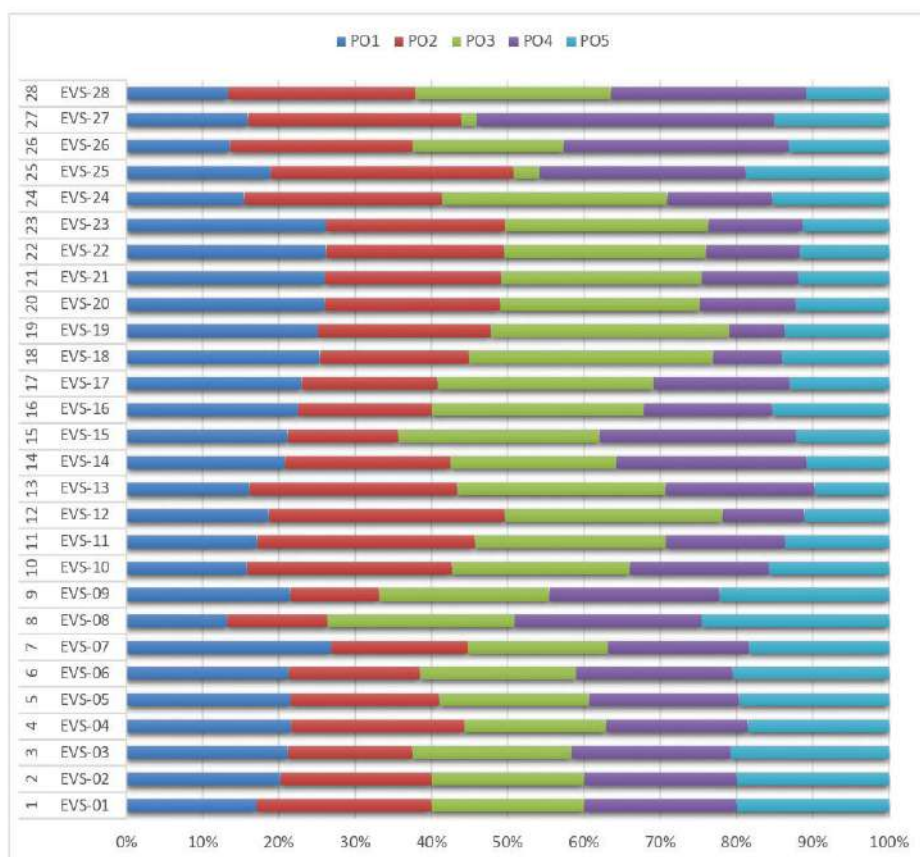
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CO PO MAPPING – Paper VIII- Environmental Laws (Code 1280) - Computed through Linways OBE Software & Excel Spreadsheet.



Learning Outcome of Department of Environmental Science, St. Edmund's College, Shillong

ANNEXURE X

[Student Performance Learning Outcomes]

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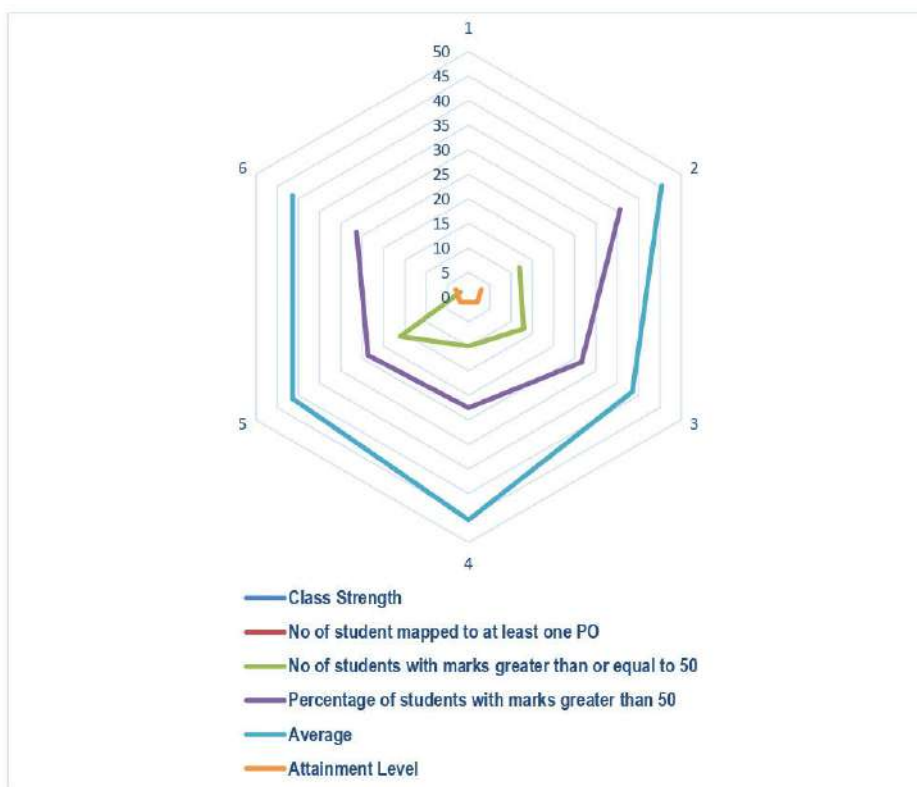
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Average Attainment Level – Paper VIII- Environmental Laws (Code 1280) - Computed through Linways OBE Software & Excel Spreadsheet.



Learning Outcome of Department of Environmental Science, St. Edmund's College, Shillong

ANNEXURE X

[Student Performance Learning Outcomes]



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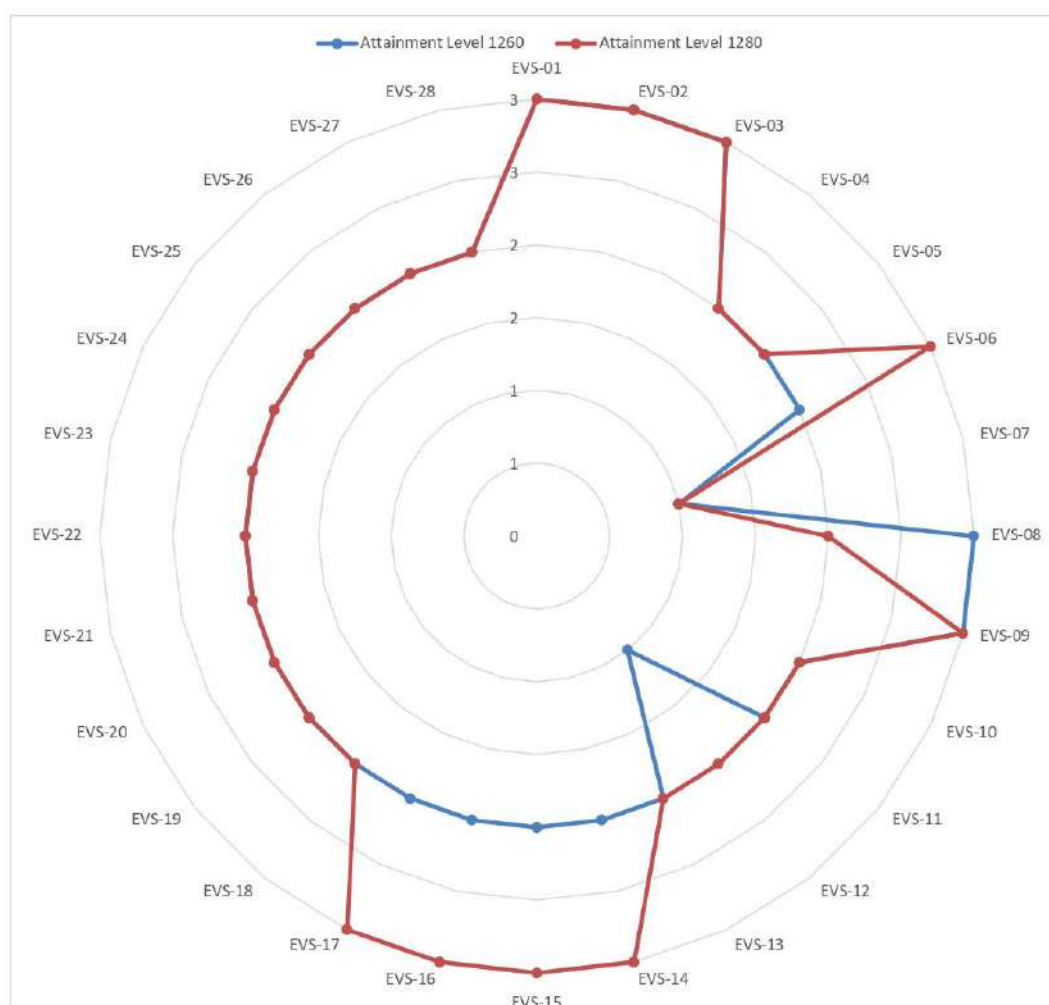
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Individual Student Attainment Level (Both Papers) - Computed through Linways OBE Software & Excel Spreadsheet.



Learning Outcome of Department of Environmental Science, St. Edmund's College, Shillong

ANNEXURE X

[Student Performance Learning Outcomes]



St. Edmund's College

(Affiliated to North Eastern Hill University, Shillong)

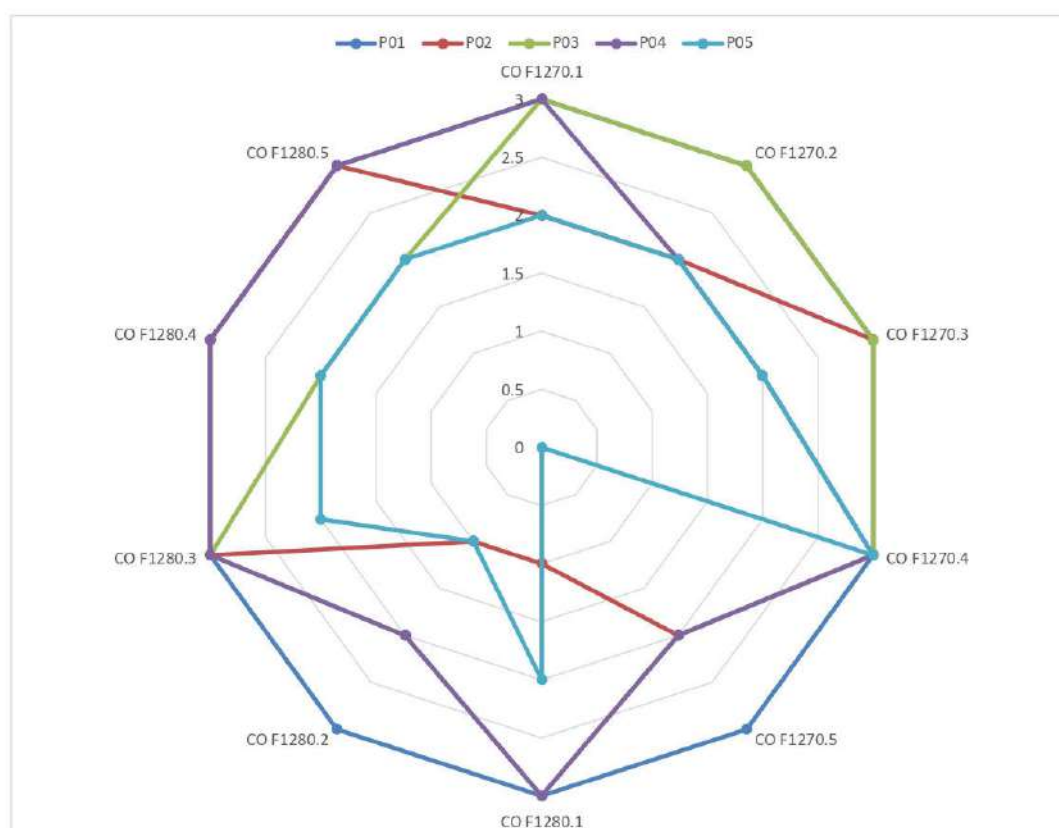
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Combined CO- PO Mapping - Computed through Linways OBE Software & Excel Spreadsheet.



Learning Outcome of Department of Environmental Science, St. Edmund's College, Shillong

ANNEXURE X

[Student Performance Learning Outcomes]**St. Edmund's College**

(Affiliated to North Eastern Hill University, Shillong)

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**SUMMARY OF THE LEARNING OUTCOMES USING LINWAYS OBE SOFTWARE
ANALYSIS**

The learning outcome using the Linways OBE software are as follows:

- The parameters for the computation of the learning outcomes were based on the performance of the students of sixth semester with 2 papers as per the syllabi, 3 science departments that were shortlisted. Each parameter used for the evaluation of Learning Outcomes was as per the Cognitive Domain levels of Bloom's Taxonomy, indicating the attainments by the students.
- The analysis was performed through the direct assessment in the form of assignments, sessional examinations, reasoning ability questions and also practical skills. The indirect assessment was computed based on the marks secured by the individual at the University Examination.
- The average attainment level was computed and found to be between 2.0-3.0 for the 3 science departments – Bachelor of Computer Applications, Bachelor of Environmental Sciences and Bachelor of Physics. It was inferred that the Learning outcomes attained by the graduating batch of these 3 departments are HIGH (H).
- The final analysis was computed using graphical presentations available in the Excel Spread Sheet for better visualization and generating a radar diagram.
- The Programme Outcome (PO) – Course Outcome (CO) are shown as percentages that are secured by the individual students at the CO and the PO levels.

*****THE END*****

ANNEXURE XI

[Student Satisfaction Survey]



St. Edmund's College

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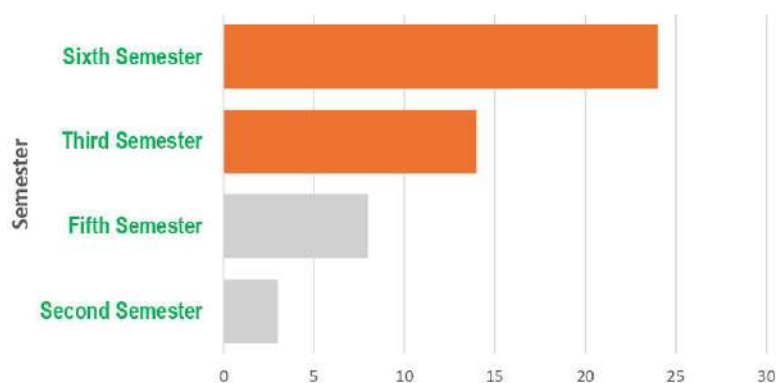
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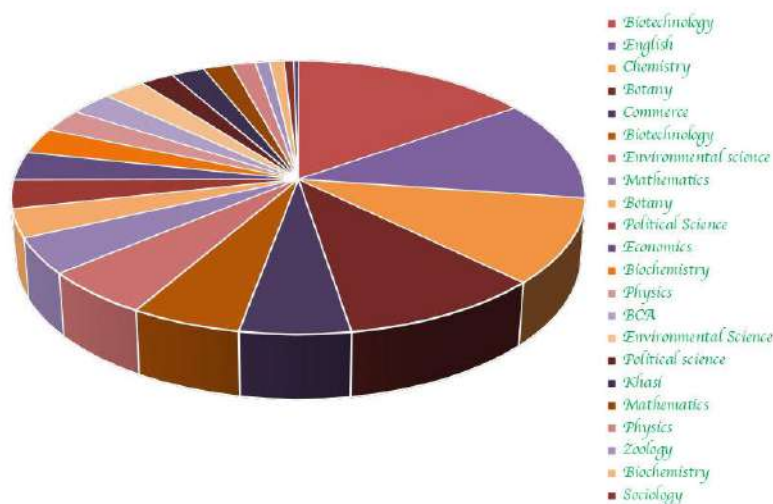
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STUDENT SATISFACTION SURVEY

Response of Students



Response from Departments



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ANNEXURE XI

[Student Satisfaction Survey]



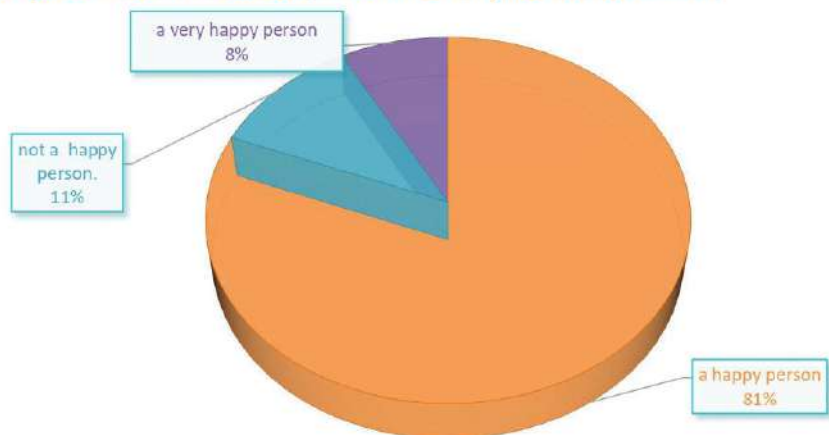
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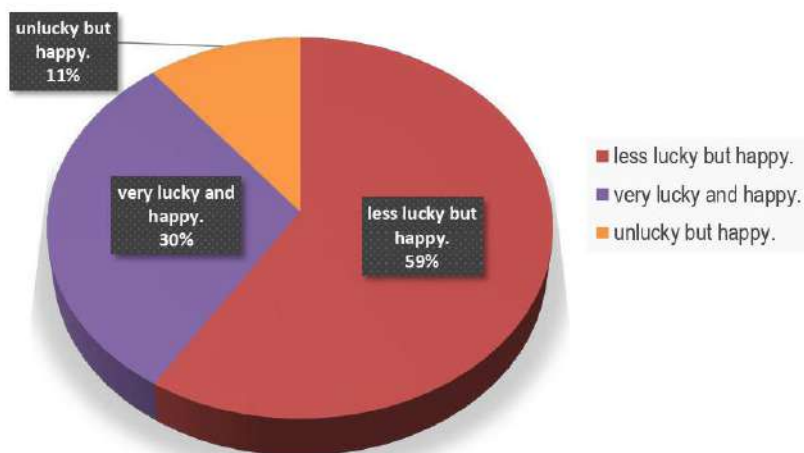
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Response Q1: In General, I consider myself as a.....



Response Q2: Compared with most of my peers, I consider myself.....



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ANNEXURE XI

[Student Satisfaction Survey]



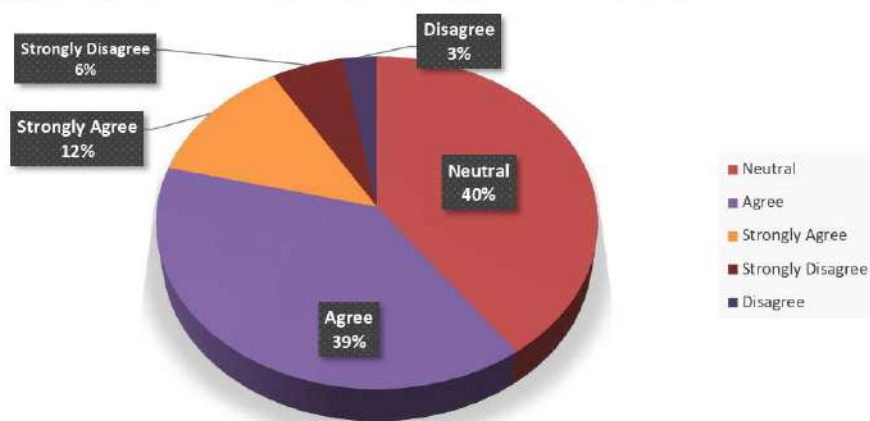
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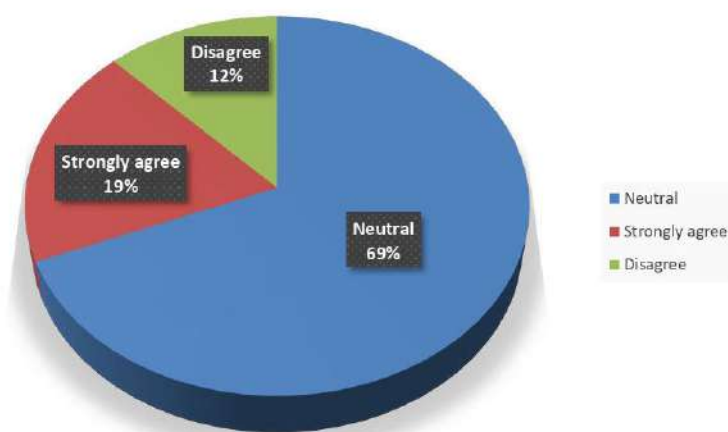
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Response Q3: Some people enjoy life regardless of what is going on, getting the most out of everything. To what extent does this characterization describe you?



Response Q4: I usually come through difficult times with little trouble.....



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ANNEXURE XI

[Student Satisfaction Survey]



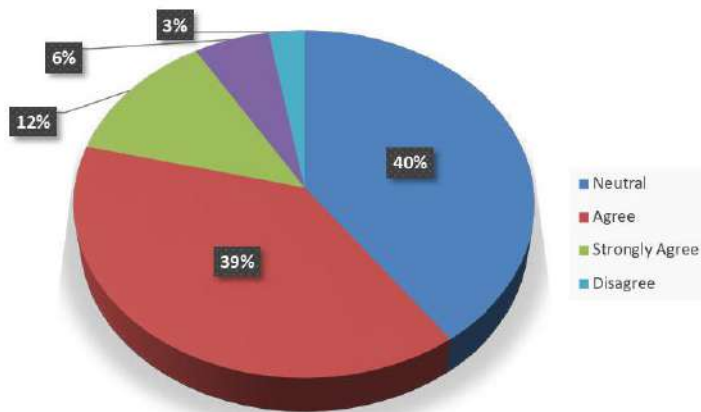
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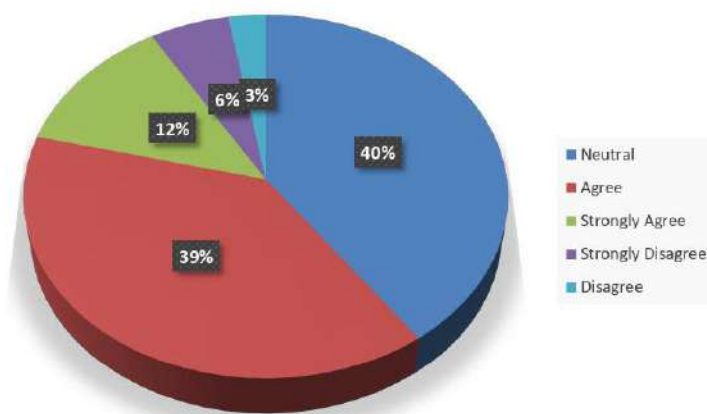
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Response Q5: I tend to bounce back quickly after every hard time/stressful event



Response Q6: Learning Outcome [My teacher encourages me to do my best.]



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ANNEXURE XI

[Student Satisfaction Survey]



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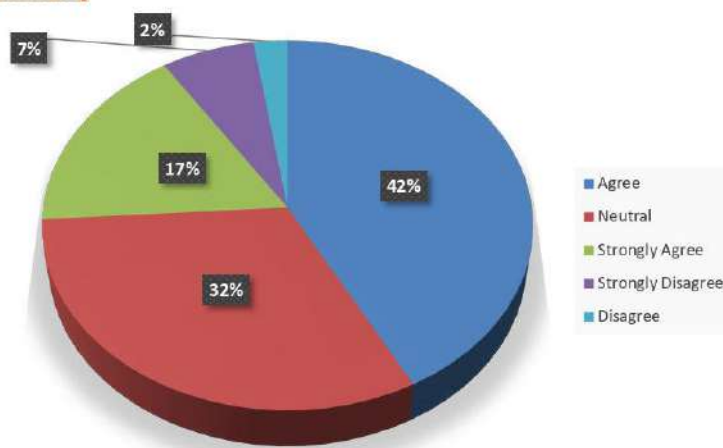
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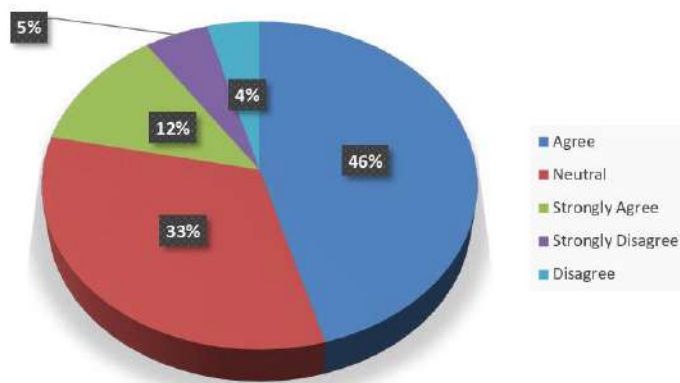
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Response Q7: Count of Learning Outcome [My teacher's classroom rules and ways of doing things are fair.]



Response Q8: Count of Learning Outcome [My classmates and I know what we should be doing and learning.]



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ANNEXURE XI

[Student Satisfaction Survey]



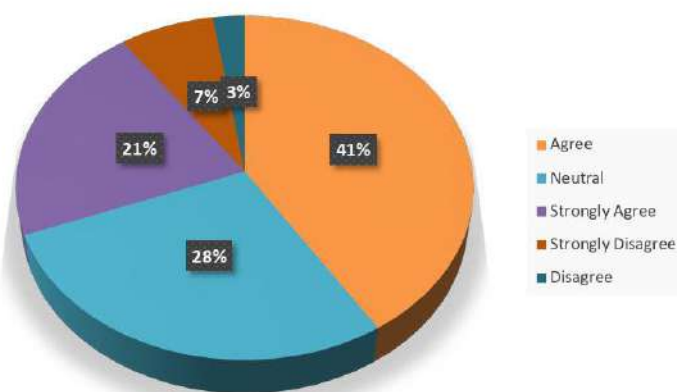
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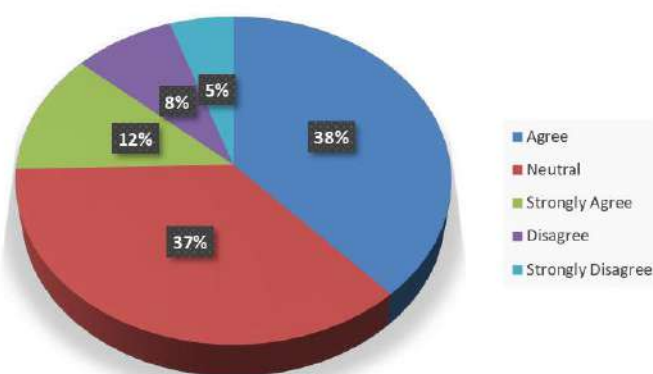
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Response Q9: Count of Learning Outcome [My teacher explains another way if I don't understand something.]



Response Q10: Count of Learning Outcome [My teacher takes time to summarize what we learn each day.]



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ANNEXURE XI

[Student Satisfaction Survey]



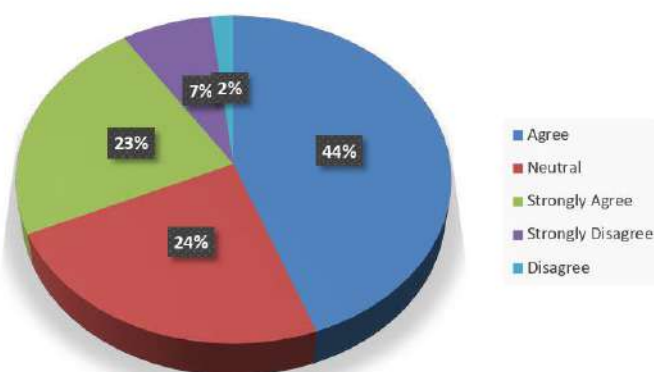
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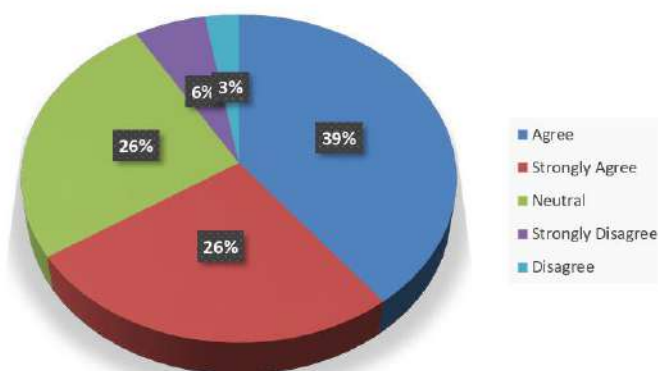
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Response Q11: Count of Learning Outcome [My teacher helps me when I need it or don't understand something.]



Response Q12: Count of Learning Outcome [My teacher wants us to improve our thinking skills.]



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ANNEXURE XI

[Student Satisfaction Survey]



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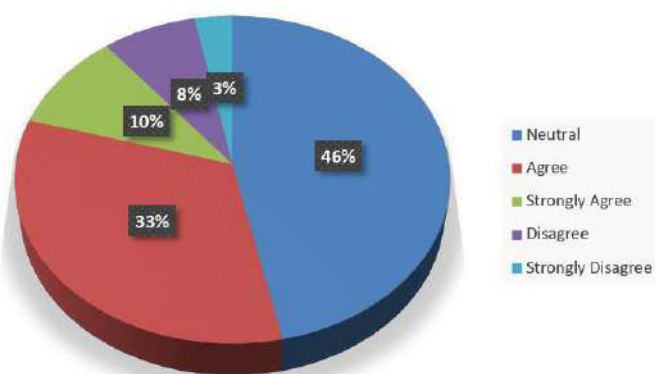
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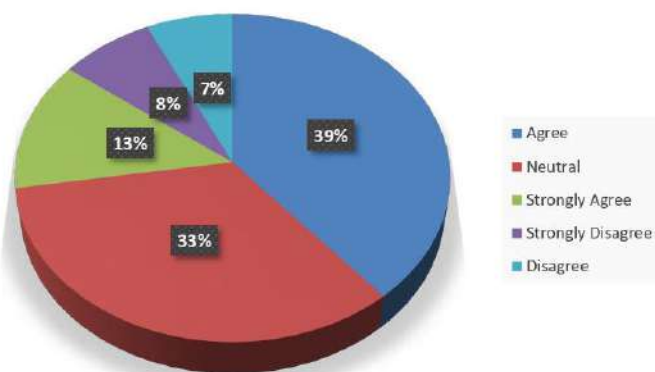
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Response Q13: Count of Learning Outcome [My teacher wants me to explain my thing]



Response Q14: Count of Learning Outcome [We learn a lot almost everyday.]



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ANNEXURE XI

[Student Satisfaction Survey]



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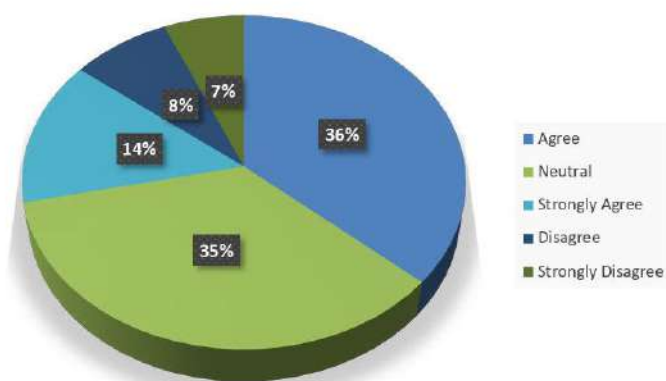
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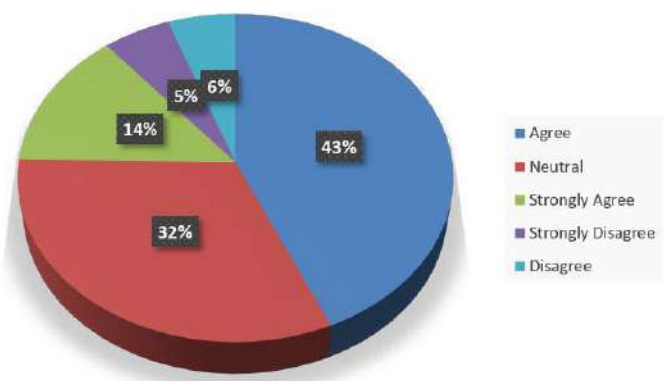
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Website: <http://sec.edu.in>

Response Q15: Count of Learning Outcome [My teacher helps us set goals for our learning and keep track of our progress.]



Response Q16: Count of Learning Outcome [My teacher makes me work hard so I learn what I need to know.]



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ANNEXURE XII
[Research Publications]Received: 16 January 2019 | Revised: 16 February 2019 | Accepted: 20 February 2019
DOI: 10.1002/aoc.4905

FULL PAPER

WILEY Applied
Organometallic
Chemistry

Tweaking the affinity of aryl-substituted diazosalicylato- and pyridine ligands towards Zn (II) and its neighbors in the periodic system of the elements, Cu (II) and Cd (II), and their antimicrobial activity

Tushar S. Basu Baul¹ | Khrawborlang Nongsiej¹ | Augustine Lamin Ka-Ot² | Santa Ram Joshi² | Irán Rojas León³ | Herbert Höpfl³¹Centre for Advanced Studies in Chemistry, North-Eastern Hill University, NEHU Permanent Campus, Umshing, Shillong 793 022, India²Department of Biotechnology & Bioinformatics, North-Eastern Hill University, NEHU Permanent Campus, Umshing, Shillong 793 022, India³Centro de Investigaciones Químicas, Instituto de Investigación en Ciencias Básicas y Aplicadas, Universidad Autónoma del Estado de Morelos, Av. Universidad 1001, Cuernavaca 62209, Mexico

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Email: basubaulchem@gmail.com; basubaul@nehu.ac.inHerbert Höpfl, Centro de Investigaciones Químicas, Instituto de Investigación en Ciencias Básicas y Aplicadas, Universidad Autónoma del Estado de Morelos, Av. Universidad 1001, Cuernavaca 62209, Mexico.
Email: hhopf@uaem.mx

Funding information

Council of Scientific and Industrial Research, India, Grant/Award Number: 01 (2734)/13/ EMR-II, 2013 01 (2734)/13/ EMR-II; University Grants Commission, India, Grant/Award Number: 42-396/2013 (SR) 2013

A series of six new Zn (II) compounds, viz., [Zn(HL^{ASA})₂(Py)₂] (**1**), [Zn(HL^{MASA})₂(Py)₂] (**2**), [Zn(HL^{MASA})₂(4-MePy)₂] (**3**), [Zn(HL^{CASA})₂(4-MePy)₂] (**4**), [Zn(HL^{BASA})₂(Py)₂] (**5**), [Zn(HL^{BASA})₂(4-MePy)₂] (**6**) and representative Cu (II) and Cd (II) complexes, viz., [Cu(HL^{ASA})₂(Py)₂(H₂O)] (**7**) and [Cd(HL^{BASA})₂(Py)₂] (**8**) [(HL^{XASA})[−] = *para*-substituted 5-[(*E*)-2-(aryl)-1-diazenyl]-2-hydroxybenzoate with X = H (ASA), Me (MASA), Cl (CASA) or Br (BASA); Py = pyridine; 4-MePy = 4-methylpyridine] have been synthesized and characterized by spectroscopic techniques and single-crystal X-ray diffraction analysis. The structural characterization of the compounds revealed distorted tetrahedral (**1–6**), square-pyramidal (**7**) and pentagonal-bipyramidal (**8**) coordination geometries around the metal atom, in which the aryl-substituted diazosalicylate ligands are coordinated only through the oxygen atoms of carboxylate groups, either in an anisobidentate or isobidentate mode; meanwhile, the 2-hydroxy groups of the monoanionic ligand (HL^{XASA})[−] are involved only in intramolecular O–H...O hydrogen bonds with the carboxylate function. In the crystal structures of **1–8**, the complex molecules are assembled by π -stacking interactions giving mostly infinite 1D strands. The intermolecular binding in the solid state structures is accomplished by diverse additional non-covalent contacts including C–H...O, C–H...N, C–H... π , C–H...Br, O...Br, Br... π and van der Waals contacts. Although the primary and secondary ligands in the Zn (II) complex series **1–6** carry different substituents at the periphery (X = H, Me, Cl, Br for (HL^{XASA})[−] and R = H, Me for 4-Py-R), five of the crystal structures were isostructural. Additionally, the antimicrobial activity of the proligands H₂L^{XASA} and their Zn (II), Cu (II) and Cd (II) compounds were studied in a comparative manner, showing high sensitivity (IZD \geq 20) against *Bacillus subtilis*.

KEYWORDS

antimicrobial activity, diazo salicylate and pyridine ligands, SCXRD structure elucidation, zinc/copper/cadmium

ANNEXURE XII

[Research Publications]

ResearchGate

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/338066161>

The world's largest known subterranean fish: a discovery in Meghalaya (NE India) of a cave-adapted fish related to the Golden Mahseer, *Tor putitora* (Hamilton 1822)

Article in Cave and Karst Science · November 2019

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ANNEXURE XII

[Research Publications]

RESEARCH COMMUNICATIONS

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ACKNOWLEDGEMENTS. We thank the Director, National Institute of Oceanography (NIO) for permission to publish this manuscript. We also thank the anonymous reviewer for constructive comments that helped improve the manuscript; Drs D. Shankar and Suprit Kumar (NIO, Goa) for help while preparing the annual precipitation map of the Krishna River basin from voluminous database; Dr M. Ramakrishna (NIO, Vizag) for help with the SIAR program; Ms Anandi (NIO, Goa) for assistance during analytical work in the laboratory and Mr T. Sujit Babu for assistance in sampling during floods. This is NIO's contribution No. 6457.

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doi: 10.18520/cs/v118/i3/461-467

Unique breeding activity and oviposition in Annandale's high-altitude tree frog, *Kurixalus naso* (Annandale, 1912) in Meghalaya, North East India

P. W. Shangpliang^{1,*}, R. N. K. Hooroo² and S. K. Dutta²

¹Department of Zoology, North Eastern Hill University, Shillong 793 022, India

²Nature Environment and Wildlife Society, Angul 759 123, India

The present study highlights the unique characteristics of the breeding activity and oviposition of Annandale's high-altitude tree frog, *Kurixalus naso* (Annandale, 1912) at Mawsynram, Meghalaya, North East India. After the cold, dry, winter months (September–January), the first rainfall in February triggers the onset of a short breeding activity of the species, which lasts for 3–4 weeks during February to March. The first shower causes an increase in soil moisture content and decrease in soil temperature. Immediately after the first showers, males make their advertisement calls, followed by females engaging in amplexus with the males and ovipositing in the moist soil. The females come only once to the breeding site and leave after mating; parental care is provided by the males. Multiple amplexing pairs at the breeding site are seen inside the burrows and some are observed to amplex in the open soil surface, lasting for 5–6 h. No aggregation and competition among the males is observed. The amplexing females lay eggs inside the excavated burrows and the males, using their hind limbs, expose the eggs by pushing them to the mouth of the burrowing hole. Sometimes, the females oviposit at the base of hollow tree trunks and occasionally in the open soil surface. The eggs are mixed with the soil and they resemble perhaps masquerade as seeds. Most frogs display a biphasic life cycle. However, *K. naso* shows a distinct non-aquatic oviposition with aquatic larva. Further, soil moisture content and temperature may support the development of embryos in open soil surfaces and burrows.

Keywords: Amplexus, breeding, burrows, *Kurixalus naso*, oviposition.

ANURANS have the highest diversity of breeding behaviours among all vertebrate taxa^{1,2}. They display a biphasic life cycle and breed in a variety of habitats such as temporary rainfed ponds, permanent ponds, cemented tanks, streams and rivers. In addition, they select different habitats, especially those that have vegetation cover, as it provides shelter and calling sites³. Anurans may be

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ANNEXURE XII
[Research Publications]

DRUDIS 2707 1–5

ARTICLE IN PRESS

Drug Discovery Today • Volume 00, Number 00 • June 2020

PERSPECTIVE



feature

Q1 Human microbial metabolite mimicry as a strategy to expand the chemical space of potential drugs

Q2 Hao Li^{1,2,3}, Harmit S. Ranhotra⁴, Sridhar Mani^{1,2,3}, sridhar.mani@einsteinmed.org, Zdeněk Dvořák⁵, Harry Sokol^{5,7,8} and Rolf Müller^{9,10,11,12}

Q3 The concept of small-molecule mimicry even of weak microbial metabolites present in rodents and
 Q4 humans, as a means to expand drug repertoires, is new. Hitherto, there are few proof-of-concept papers
 Q5 demonstrating utility of this concept. More recently, papers demonstrating mimicry of intestinal
 microbial metabolites could expand the drug repertoire for diseases such as inflammatory bowel disease
 (IBD). We opine that, as more functional metabolite–receptor pairings are discovered, small-molecule
 metabolite mimicry could be a significant effort in drug discovery.

Introduction

Biomimicry is an invaluable tool for the discovery of new solutions to problems afflicting humans. Examples include the design of Velcro, which mimics burdock burrs, shark denticles used to design surfaces (riblets) that reduce air drag, beehive patterning of circuits used to balance loads during peak hours, and design of energy-conserving pools that imitate soap bubbles [1]. Another example relates to biology and predation. Various organisms, such as caterpillars, use eyespots to give predators the
 Q6 impression of a sizeable toxic animal (e.g., snake's head) [3].

Biomimicry has been explored in therapeutics [4,5], but there is a real paucity of emerging concepts and drugs [6]. In therapeutics, biomimicry would theoretically yield potent drug-like molecules with minimal liabilities (i.e., adverse effects). This assumption is made based on the similarity of the small molecule to the original

parent metabolite that it mimicked, no significant metabolic liabilities, as well as overall safety in animal studies. These small molecules could improve the chemical space utilized in traditional drug discovery efforts (Fig. 1) [7]. We base our concepts on the debated rationale that Nature minimizes the cost of development of molecules that have the most effect on their targeted goal with minimal effects on its environment (i.e., untargeted liabilities). As an example, several invading plant pathogens (e.g., *Xanthomonas*), when present within their host, induce the expression of a specific protein, RaxX. RaxX is a mimic of a plant peptide hormone, plant peptide containing sulfated tyrosine (PSY). The rice immune receptor XA21 detects sulfated RaxX preferentially over endogenous peptide PSY. The binding of RaxX to XA21, in turn, allows control over host signaling and immunity that protects both the host and the pathogen [8]. Sulfated RaxX–XA21 interactions are specific,

and there are no known other receptors that are engaged by RaxX [9]. In this example, Nature conserves biochemistry and targets specific host proteins without collateral damage, thus ensuring pathogen–host survival. One possible conjecture is that Nature-made metabolites (and proteins) that have evolved to reach and influence their specific target would have limited toxicity to the host (e.g., unless they are purposefully made to be toxins, antibiotics, etc.). However, caution is required because this could also simply be coevolution, whereby the host has evolved to avoid toxicity from the metabolite (or protein).

Biomimicry and drug discovery

Bioinspired chemical libraries are clearly changing traditional drug discovery approaches. For example, Thireou *et al.* used a two-filter chemical screening approach, in which, in the first filter, they screened for shape and chemical

Features • PERSPECTIVE

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<https://doi.org/10.1016/j.drudis.2020.06.007>

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ANNEXURE XII

[Research Publications]

Article



EMBO
Molecular Medicine

Targeting the pregnane X receptor using microbial metabolite mimicry

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Abstract

The human PXR (pregnane X receptor), a master regulator of drug metabolism, has essential roles in intestinal homeostasis and abrogating inflammation. Existing PXR ligands have substantial off-target toxicity. Based on prior work that established microbial (indole) metabolites as PXR ligands, we proposed microbial metabolite mimicry as a novel strategy for drug discovery that allows exploiting previously unexplored parts of chemical space. Here, we report functionalized indole derivatives as first-in-class non-cytotoxic PXR agonists as a proof of concept for microbial

metabolite mimicry. The lead compound, FKK6 (Felix Kopp Kortagere 6), binds directly to PXR protein in solution, induces PXR-specific target gene expression in cells, human organoids, and mice. FKK6 significantly represses pro-inflammatory cytokine production cells and abrogates inflammation in mice expressing the human PXR gene. The development of FKK6 demonstrates for the first time that microbial metabolite mimicry is a viable strategy for drug discovery and opens the door to underexploited regions of chemical space.

Keywords drugs; microbial metabolite; mimics; pregnane X receptor; therapy

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§Correction added on 17 March 2020, after first online publication: the author name has been corrected.

ANNEXURE XII

[Research Publications]

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A study on the differentiation of filamentous cyanobacterial isolates using DNA fingerprinting approach

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The present study investigates the implication of DNA fingerprinting in discrimination of class isolates collected from a spread of habitats in south west Khasi Hills district of Meghalaya, India. Five totally different primers i.e., M13, enterobacterial repetitive intergenic consensus (ERIC), short tandem repetitive repeats (STRs) 1A & B and long tandem repetitive repeats (LTRs), derived from repetitive sequences gift within the ordering of true bacteria, were utilized. The generated knowledge was then evaluated for fingerprinting exploitation procedure and unweighted pairgroup method of arithmetic average (UPGMA) based dendrograms. Clear and variable stripe patterns were obtained for every of the targeted genomic regions used, LTRR being the sole exception. The stripe patterns delineate the existence of 2 basic distinct populations of true bacteria among the 19 isolates. The UPGMA cluster analyses in addition, disclosed the presence of numerous lineages among the isolates. On examination the resolution capability of the four genomic regions studied, it had been seen that, with the exception of LTRR, all the opposite regions hold smart resolution and therefore the ability to differentiate between numerous class populations. The results of the current study indicate the incidence of genetic variants among the 19 morphologically identical isolates of filiform cyanobacteria. Additionally, the study additionally explicates the quality of DNA fingerprinting supplemented with UPGMA cluster analysis as a speedy, economical and value effective tool for differentiating among morphologically identical populations.

Keywords: Cyanobacteria; genetic diversity; DNA fingerprinting; UPGMA cluster analysis

Introduction

The phylum cyanobacteria represents the largest sub-groups of Gram negative microorganisms characterized by the ability to perform photosynthesis. Besides being oxyphototrophic, some of the cyanobacteria are also endowed with the capability of fixing atmospheric nitrogen¹⁻⁶. An additional aspect of cyanobacteria being a subject of research interest lies in the fact that they are amongst the ancient evolutionary lineages of phototrophs believed to have originated during the early Pre-cambrian super eon of the geological time scale (approx 2.6-3.5 Bya)⁷⁻⁸. With immense potential, cyanobacteria offer diverse applications in bioremediation, biofertilizers, bio-monitoring of soil fertility and water quality⁹⁻¹².

Conventional approaches for identification of cyanobacteria have mostly relied on morphological characters; which, however, tends to suffer from uncertainties and is often misleading¹³⁻¹⁷. Furthermore, assessment of genetic diversity among cyanobacterial

population has also been problematic owing to their small size and non distinctive phenotypic characteristics (Rasmussen and Svenning). With the advancement in the field of molecular biology, a number of techniques have been made available for identification, delineation and studying genetic diversity of cyanobacteria. In this context, 16S rRNA sequence analysis, restriction fragment length polymorphism (RFLP), random amplified polymorphic DNA (RAPD) and amplified ribosomal DNA restriction analysis (ARDRA) analyses have been successfully employed for molecular characterization, identification and resolving taxonomic and phylogenetic issues among the various cyanobacterial taxa¹⁸⁻²⁶. With regard to investigation of genetic diversity, PCR based DNA finger printing have been considered as a valuable tool²⁷⁻²⁹. Furthermore, in comparison to the other available techniques, such as 16S rRNA and whole genome sequence analysis, which are commonly used for assessment of microbial diversity, DNA finger printing is a cost effective technique and can be routinely used. In this context, the repetitive sequences, which constitute an important part of

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ANNEXURE XII
[Research Publications]

Research Note

**Aspects of Change
Among Female
Migrants: The Case
of Kukis in Delhi**

Indian Journal of Gender Studies

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journals.sagepub.com/home/ijg**Thanggoulen Kipgen¹**
Biswambhar Panda¹**Abstract**

Female migration has increased globally in the last few decades. Women no longer migrate as passive followers of husbands, family or relatives but as independent migrants, causing various changes in their socio-economic life. Drawing insights primarily from field work data, the paper examines the changing role and status of Kuki women in Delhi, India, and argues that they have moved away from their traditional domestic roles. After migration, they have occupied important positions in various organizations such as the *Sum Lom*, Prayer Cell, the Church and the Kuki *Inpi*. They now play an important role in decision-making processes in the public sphere, thereby eroding elements in the traditional patriarchal system.

Keywords

Migration and change, women's status in migration, Kuki, Delhi

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ANNEXURE XII

[Research Publications]

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Original Research Article

Microbiology



International Journal of Pharma and Bio Sciences

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EFFECT OF MERCURY ON THE GROWTH AND BIOCHEMICAL BEHAVIOR OF *NOSTOC MUSCORUM* AND *ANABAENA VARIABILIS*

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ABSTRACT

Cyanobacteria are a highly diversified group of photosynthetic organisms which can be exploited as a potential candidate for bioremediation processes. The present study evaluates the toxic effect of a heavy metal, mercury (Hg^{2+} (II)), on the growth and biochemical aspects of *Nostoc muscorum* and *Anabaena variabilis*. The results depicted negative effects of Hg^{2+} on cyanobacteria by hampering normal growth and physiological activities. The treated cells showed diminishing growth pattern and decrease in the photosynthetic pigments. Significant decline was also revealed in the biomass and lipid content. The LC_{50} value of Hg was determined to be $0.6\mu M$ for both the cultures. Activity of the enzymes involve in nitrogen metabolism such as Glutamine Synthetase (GS), Nitrate Reductase (NR) and Nitrite Reductase (NIR) were studied and showed reduced activity. This decreased activity also correlates with the reduction in the heterocyst frequency as obtained in the results. In contrast, the enzyme superoxide dismutase (SOD) and proline content concerned with stress management in cyanobacterial cells showed significant increase in activity. The result obtained in the present study exemplifies the cytotoxic environment created by the Hg^{2+} ions on the microbial cultures by altering their membrane's physiological functions. Thus, causing leaching of photosynthetic pigments leading to decreased photosynthetic efficiency and consequently restraining growth. The growth inhibiting effect of Hg^{2+} ions was also evident from the reduced activity of enzymes entailed with assimilation and uptake of nitrogen, resulting in decline in heterocyst frequency. Furthermore, the apparent increase in cell's SOD and proline content can be ascribed to the production of reactive oxygen species (ROS) due to heavy metal stress created by the Hg^{2+} ions.

KEYWORDS: Cyanobacteria, Hg^{2+} , Heavy metal stress, Growth, Biochemical assays, antioxidant



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B-11

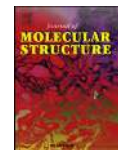
ANNEXURE XII
[Research Publications]

Journal of Molecular Structure 1200 (2020) 127106



Contents lists available at ScienceDirect

Journal of Molecular Structure

journal homepage: <http://www.elsevier.com/locate/molstruc>

Synthesis, crystal structures, magnetic properties and antimicrobial screening of octahedral nickel(II) complexes with substituted quinolin-8-olates and pyridine ligands

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ABSTRACT

New nickel(II) compounds, viz. *trans*-[Ni(L^{HAQ})₂(Py)₂]·C₆H₆ (**1**), *cis*-[Ni(L^{HAQ})₂(3-MePy)₂] (**2**), *cis*-[Ni(L^{2-MeAQ})₂(3-MePy)₂] (**3**), *trans*-[Ni(L^{4-MeAQ})₂(Py)₂]·C₆H₆ (**4**), *trans*-[Ni(L^{4-OMeAQ})₂(Py)₂]·C₆H₆ (**5**), *trans*-[Ni(L^{4-OEtAQ})₂(Py)₂]·C₆H₆ (**6**), *trans*-[Ni(L^{4-BrAQ})₂(Py)₂]·C₆H₆ (**7**) and *trans*-[Ni(L^{4-ClAQ})₂(3-MePy)₂]·2(3-MePy) (**8**) (primary ligands: L^{HAQ} = substituted 5-[(*E*)-2-(aryl)-1-diazenyl]quinolin-8-olate; secondary ligands: Py = pyridine or 3-MePy = 3-methylpyridine) have been synthesized and characterized by elemental analysis, IR, UV–vis spectroscopy. The magnetic susceptibilities of the compounds were also measured. Single-crystal X-ray diffraction analysis of the compounds revealed octahedral geometries with *trans* configurations for **1**, **4**–**8** and *cis* configurations for **2** and **3**. The occurrence of intramolecular Ni···H_{pyridine} interactions in **2** and in **3**, may account for additional stabilization of their assemblies at least in the solid state. The effective magnetic moment (μ_{eff}) in the range 3.02–3.40 BM agree with the expected values for octahedral Ni(II) cations with two unpaired electrons. Ni(II) compounds were also screened for their antimicrobial activity.

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1. Introduction

Quinolin-8-ols (HL^Q) are good metal ion chelators [1–9] and their derivatives 2-(quinolin-8-yloxy)propionates, 5-aryl-8-hydroxyquinolines [10–12] and 8-aminoquinoline [13–16] were widely studied. Metal compounds of HL^Q were extensively used in photochemical processes [17–21], optical sensing [22–24] or as organic light-emitting diodes [25–29]. Other applications of HL^Q encompass thin film formation of nano-sized metal quinolin-8-olates [30] and nanobelt structures [31] involving 3d metals. The coordination behavior of 5-[(*E*)-2-(aryl)-1-diazenyl]-quinolin-8-ol (HL^{XAQ}) towards M(II)/M(III) ions has been developed [32–39] with recent focus on their use as colorimetric sensors [40] as well as in the extraction of Cu(II) and Ni(II) at low concentrations [41].

Nanosized [Co(L^{XAQ})₂] thin films with energy gaps of 4.01 eV [42], HL^{XAQ} and its M(II) complexes as dyes in polyester fabrics [43], HL^{XAQ}-Zn(II) complexes as zinc source for nano-structured materials [44], and promising non-linear optical behavior of some HL^{XAQ} with 3d transition metal complexes [32d], are recent research developments.

Despite such progresses crystal structures of the HL^{XAQ} complexes are scarce. The N- and O- atoms of HL^{XAQ} as bidentate ligand can bind both medium and hard metal ions and give rise to different geometries. Two molecules of HL^{XAQ} can give rise to square-planar (e.g., with Cu(II) ions) and tetrahedral complexes (e.g., with Cu(I) or Co(II) ions). Thus, for obtaining stable six coordinate octahedral metals complexes derived from HL^{XAQ}, additional ancillary ligands such as pyridines are needed. Pyridine derivatives not only enhance solubility therefore ensuring the homogeneity of the reaction mixture, but also modulate the acidity of the metal center. On the basis of this hypothesis, the pro-ligands HL^{XAQ} have been utilized for designing various types of discrete compounds, frequently involving Co(II) and Zn(II) cations with different

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ANNEXURE XII [Research Publications]

Syiemiong & Jha *J Pure Appl Microbiol*, **13**(2), 789-802 | June 2019
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RESEARCH ARTICLE

OPEN ACCESS

Antibacterial potential of Actinobacteria from a Limestone Mining Site in Meghalaya, India

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Abstract

This work attempts to assess the antimicrobial potential of actinobacteria isolated from limestone mining sites which hitherto, is an under-explored niche for exploring novel bioactive metabolites. Actinobacteria were selectively isolated from Mawsmat, Meghalaya, India, a limestone mining area, using different pretreatment methods. Forty-seven isolates were obtained, which were identified based on their morphological, biochemical and chemotaxonomical characteristics. *Streptomyces* was the dominant cultivable genera which constituted 76% of the isolates cultivated. All the isolates were screened for antimicrobial activity against three Gram-negative viz. *Escherichia coli*, *Pseudomonas aeruginosa* and *Klebsiella pneumoniae*, and three Gram-positive bacteria viz. *Staphylococcus aureus*, *Bacillus subtilis* and *Micrococcus luteus* and besides, two candidal species viz. *Candida albicans* and *C. tropicalis*. 19% of the total isolates showed antibacterial activity against at least one of the test bacterial strains used. The identity of the four bioactive isolates viz. LD-21, LD-29, LD-34 and LD-39 was confirmed as *Streptomyces* sp. on the basis of their 16S rDNA sequence and 16S rRNA secondary structure analysis. These isolates showed antibacterial activity against at least two Gram-positive bacteria and all the four harbored at least one of the three biosynthetic gene clusters viz. type-I and type-II polyketide synthases and non-ribosomal peptide synthetase which are related to synthesis of bioactive metabolites.

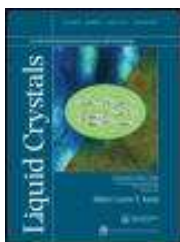
Keywords: *Streptomyces*, Antimicrobial, Biosynthetic gene clusters, 16S rRNA secondary structure.

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ANNEXURE XII
[Research Publications]

Liquid Crystals

ISSN: 0267-8292 (Print) 1366-5855 (Online) Journal homepage: <http://www.tandfonline.com/loi/tlct20>**Comparative Raman study of two laterally fluorinated LC compounds having different terminal chains**

Marpliephar Lyndem, Roman Dabrowski & Ayon Bhattacharjee

To cite this article: Marpliephar Lyndem, Roman Dabrowski & Ayon Bhattacharjee (2019): Comparative Raman study of two laterally fluorinated LC compounds having different terminal chains, Liquid Crystals, DOI: [10.1080/02678292.2018.1558463](https://doi.org/10.1080/02678292.2018.1558463)

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ANNEXURE XII
[Research Publications]

Molecular Crystals and Liquid Crystals

ISSN: 1542-1406 (Print) 1563-5287 (Online) Journal homepage: <https://www.tandfonline.com/loi/gmcl20>**Raman and FTIR Study of a 2, 3'-difluoro-4''-isothiocyanato-4-propyl-1,1':4',1''-terphenyl compound or C3P(3F)P(3F)P-NCS**

Marpliephar Lyndem, Ayon Bhattacharjee & Roman Dabrowski

To cite this article: Marpliephar Lyndem, Ayon Bhattacharjee & Roman Dabrowski (2019) Raman and FTIR Study of a 2, 3'-difluoro-4''-isothiocyanato-4-propyl-1,1':4',1''-terphenyl compound or C3P(3F)P(3F)P-NCS, Molecular Crystals and Liquid Crystals, 681:1, 45-57, DOI: [10.1080/15421406.2019.1651535](https://doi.org/10.1080/15421406.2019.1651535)

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ANNEXURE XII

[Research Publications]

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ORIGINAL ARTICLE

A Bioinformatics-based Investigation to Screen and Analyze the Bioactivity of *Piper longum* Linn. Compounds as a Ground-breaking Hostile to Antidiabetic Activity

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Submitted: 10-09-2019

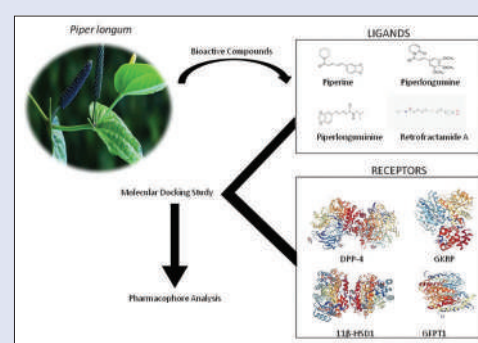
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ABSTRACT

As of today, the utilization of herbal medicines has taken up the pace in treating diseases. This is due to the fact that they have lower risk of adverse reactions. Numerous plants are being used traditionally to treat various dreadful diseases including diabetes. *Piper longum* is one of the major and important medicinal plants in various systems of medicine, including the Ayurvedic system of medicine. Among the major bioactive compounds found in this plant, few compounds, viz., piperine, piperlongumine, piperlonguminine, and retrofractamide A, have been selected for studying the effectiveness on antidiabetic activity. An *in silico* approach was utilized to observe the major phytochemical properties and interaction studies of the constituents of *P. longum*, and finally, a pharmacophore investigation was carried out. In this study, we have observed the interaction of the four bioactive compounds taken from *P. longum* with the receptors via molecular docking technique. The binding of the ligands firmly with the receptors confirmed the fact that piperine, piperlongumine, piperlonguminine, and retrofractamide A act as inhibitors for dipeptidyl peptidase-4, GKRP, 11 β -hydroxysteroid dehydrogenase type 1, glutamine-fructose-6-phosphate transaminase 1, and protein tyrosine phosphatase 1B, which encourage the glucose digestion and increment insulin affectability. The information acquired from this investigation might be taken further for *in vitro* examinations, which may, in the long run, be useful in recognizable proof of novel and successful particles. The outcomes acquired from this examination might provide strong understanding in the utility of phytochemicals against diabetes.

Key words: Antidiabetic, bioactive compounds, molecular docking, pharmacophore, *Piper longum*



Abbreviations used: DPP-4: Dipeptidyl peptidase inhibitor 4; GKRP: Glucokinase regulatory protein; 11 β -HSD1: 11 β -Hydroxysteroid dehydrogenase type 1; GFPT1: Glutamine-fructose-6-phosphate transaminase 1; PTB1B: Protein tyrosine phosphatase 1B.

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INTRODUCTION

Piper longum Linn., additionally called as long pepper, is one of the regular culinary herbs, which has been widely utilized as a constituent in different indigenous drugs. This long pepper has bioavailability upgrading action for some dietary substances and a few medications.^[1] The pharmacological properties of this plant additionally incorporate the antioxidant, mitigating, hostile to hyperlipidemic, against corpulence and hepatoprotective.^[2] Piperine, an alkaloid from *Piper nigrum* and *P. longum*, is a known inhibitor of different proteins in charge of biotransformation of medications. By restraining the digestion of medications, piperine improves the bioavailability of medications^[3] which are hostile to diabetic action of the roots as likewise has been reported. Piperine in the blend with a sub-remedial portion of metformin has been reported for lowering blood glucose levels when contrasted with control gathering and furthermore demonstrated the more prominent bringing down of blood glucose^[4] by other compounds alone or in a combination of piperine, piperlongumine,

piperlonguminine, and retrofractamide A are recognized in *P. longum*. The detailed pharmacological exercises of piperlongumine incorporate cytotoxic, genotoxic, tumor enhancement, anti-angiogenic, anti-metastatic, anti-platelet congregation, antinociceptive, anxiolytic, energizer, prone to atherosclerotic, antidiabetic, antibacterial, hostile to contagious, leishmanicidal, trypanocidal, and schistosomicidal exercises.^[5] Piperlonguminine and retrofractamide A which essentially expanded the measure of adiponectin discharged

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ANNEXURE XII

[Research Publications]

Plant Physiology Preview. Published on March 27, 2019, as DOI:10.1104/pp.19.00206

1 Running title: De-etiolation Enhances Phototropic Growth

2

3 **De-etiolation Enhances Phototropism by Modulating NON-PHOTOTROPIC**

4 **HYPOCOTYL 3 Phosphorylation Status**

5

6 Stuart Sullivan¹, Eros Kharshiing², Janet Laird¹, Tatsuya Sakai³ and John M. Christie¹

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16

17 **One-sentence Summary**

18 Phototropism is enhanced by seedling de-etiolation and is achieved by a molecular rheostat that

19 fine-tunes the phosphorylation and localization status of the phototropic signaling component,

20 NPH3.

21

22 **Author Contributions**

ANNEXURE XII [Research Publications]



Article

Migrants and Their Social Networks: A Study of Kuki Migrants in Delhi

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Thanggoulen Kipgen¹
Biswambhar Panda¹

Abstract

This paper discusses the role and importance of social networks in the migration process. It explores the formation of social networks among the Kuki migrants in Delhi. Drawing insights from the theoretical and conceptual literature on social networks and based on field observations and personal narratives of migrants, the study analyses the importance of social networks for migrants and explains how social networks help the migrants cope with a new social environment. The Kuki migrants have been classified into two categories, namely 'pioneer' and 'follower' migrants. While pioneer Kuki migrants hardly had any ties and merely depended on 'weak ties', it was follower migrants who took the benefits of ethnic and kinship networks. The study conclusively found that social networks have been instrumental though various pull factors at the place of destination and push factors at the place of origin have contributed for Kuki migration to Delhi. The migrants have formed ethnic clusters, which have turned out to be a survival strategy in a new social milieu. The social networks not only have helped migrants to deal with challenges and constraints in an alien environment but also instilled a sense of confidence in them to overcome psychological stress and isolation.

Keywords

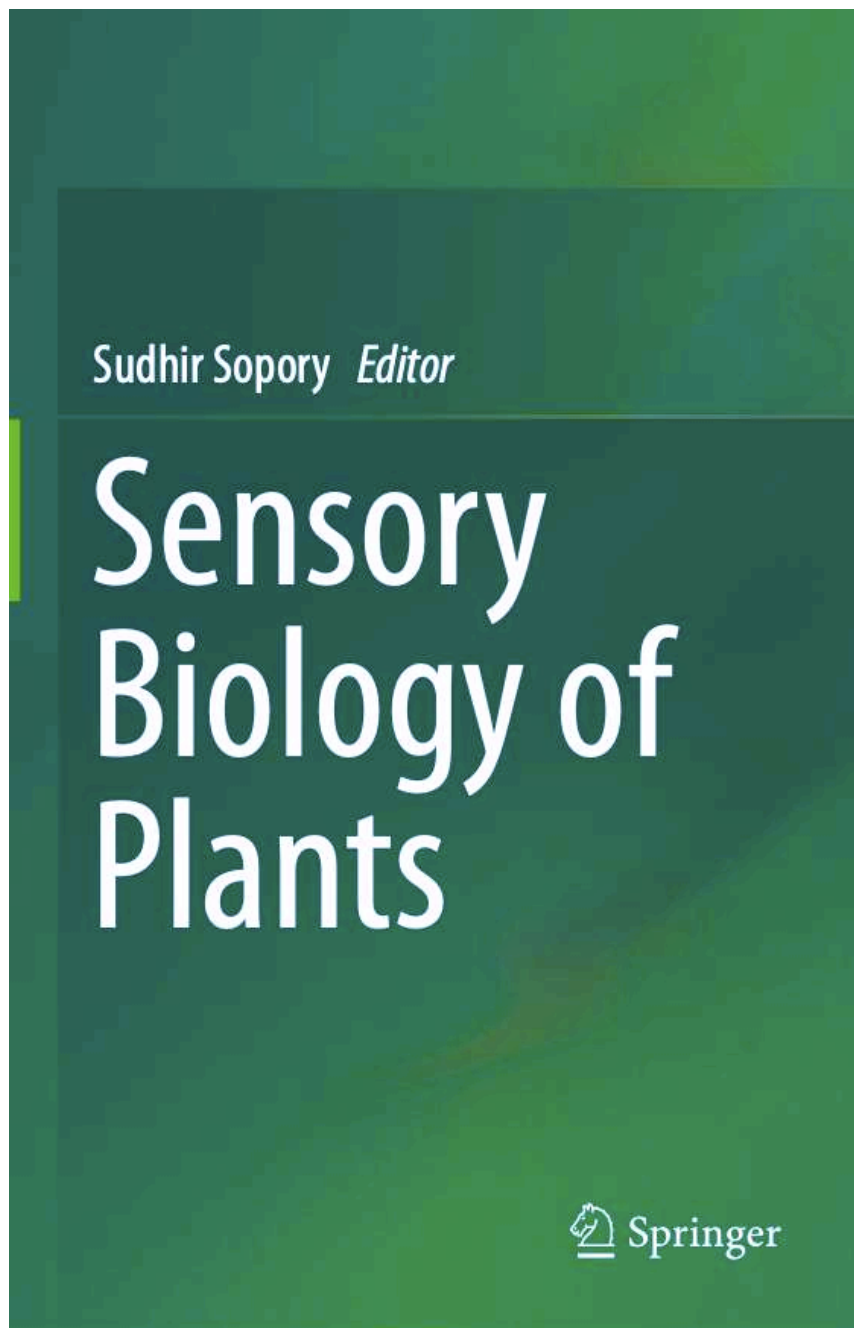
Pioneer Kuki migrants, follower Kuki migrants, kinship networks, ethnic networks, ethnic clusters

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ANNEXURE XIII
[Book Chapter]



ANNEXURE XIII [Book Chapter]



The Light Awakens! Sensing Light and Darkness

2

Eros Kharshiing, Yellamaraju Sreelakshmi,
and Rameshwar Sharma

Abstract

In the late nineteenth century, Charles Darwin observed that 'light exerts a powerful influence on most vegetable tissues, and there can be no doubt that it generally tends to check their growth' (*The Power of Movement in Plants*, 1880). Subsequent to this seminal work, light has been recognised as an important regulator of plant growth. Over the next 150 years, research on light regulation of plant growth and development by immensely imaginative and talented researchers in various laboratories across the globe has given us tremendous insights into how light governs plant growth both at the organismal and molecular levels. The discovery of light-responsive photoreceptor proteins that are activated by red, far-red, blue/UV-A and UV-B light has helped further our understanding of how plants respond to the light that falls on the surface of the earth. This chapter brings together the recent developments in our understanding of how plants sense light by using photoreceptors and the various molecular mechanisms involved in light perception and transmission of the light signal within the plant. Furthermore, the chapter discusses recently ascribed functions of photoreceptors such as the ability of plants to distinguish their kin from non-kin through the action of phytochrome, the role(s) of cryptochrome as a magnetoreceptor and the role of phytochrome and phototropin as temperature sensors. The chapter also rekindles the debate about whether plants can have vision despite the lack of optical or light-sensitive organs such as eyes.

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S. Sopory (ed.), *Sensory Biology of Plants*,
https://doi.org/10.1007/978-981-13-8922-1_2

21

ANNEXURE XIII [Book Chapter]

Chapter 9

Print ISBN: 978-93-89562-10-1, eBook ISBN: 978-93-89562-11-8

Bioinformatics Based Investigation on the Assortment of Industrially Accessible Azodyes with Azoreductase Enzyme of *Pseudomonas putida*

Bikash Thakuria¹ and Samrat Adhikari^{1*}

DOI: 10.9734/bpi/csbbt/v1

ABSTRACT

Azo dyes are the most widely applied chemical dyes that have also raised great concerns for environmental contamination and human health issues. There has been an increased interest in discovering new novel bioremediation strategies to degrade azo dyes for environmental issues and also economic purposes. Azoreductase are key enzymes evolved in nature capable of degrading the azo dyes. As azoreductase enzyme is a key enzyme in degrading these azo dyes, they are good and potential candidates for industrial wastewater treatment and environmental restoration. The initial critical step of reduction of azo bond during the metabolism of azo dyes is catalysed by a group of NADH and FAD dependant enzyme called azoreductase. Although several azoreductase have been identified from microorganisms and partially characterized, very little is known about the structural basis of the substrate specificity and the nature of catalysis. Azoreductase enzyme of *Pseudomonas putida* has a wider broad spectrum of substrate specificity and capable of degrading a wide variety of azo dyes. In the present study, the crystal structure of the enzyme from PDB and 10 azo dyes from NCBI PubChem compound were retrieved and their interactions were studied. These azo dyes were then docked with the FMN-dependent NADH-azoreductase enzyme to analyse the binding affinity of the azo dyes with the enzyme and predict the catalytic sites. Consequently, the catalytic residues of FMN-dependent and NADH dependent enzyme were then analysed in terms of properties including function, hydrogen bonding and flexibility. The results suggest that Ala-114, Phe-172 and Glu-174 play a predominant role as catalytic site residues in the enzyme. Furthermore, the approach emphasis on predicting the active sites of this enzyme where substrates can bind in order to give a better understanding of the biodegradation of some of the commercially important azodyes mediated by azoreductase. These results will pave way for further increase in azoreductase activity and for better understanding of the dye degradation pathway. In addition to it, the different types of azo reductases can be further biochemically characterized for their novelty in near future.

Keywords: Azoreductase; NADH; FMN; chemical properties; docking; active sites.

1. INTRODUCTION

Azodyes are known to be generally utilized class of colors that are exceptionally toxic and contain cancer-causing mixes. Despite the fact that parcel of research has been done for their expulsion from modern effluents, almost no consideration is given to changes in their lethality and mutagenicity during the treatment forms [1]. Azo colors speak to practically 70% of the material dyestuffs created and the effluents discharged into the water framework upsets the biological parameters of for the most part water bodies [2]. Because of colossal modernization the most hazardous condition contamination in the wastewater are the effluents discharged from creation of colors and the coloring businesses. These remaining colors in modern effluents are a danger to general wellbeing due to its high poisonous quality and cancer-causing nature [3,4]. The uncontrolled arrival of these mixes in the earth causes extreme issues by diminishing light ingestion which altogether influence photosynthetic

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ANNEXURE XIII [Book Chapter]



Survey of Methods Used for Differential Expression Analysis on RNA Seq Data

Reema Joshi^(✉) and Rosy Sarmah

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reema.csc@gmail.com, rosy8@tezu.ernet.in

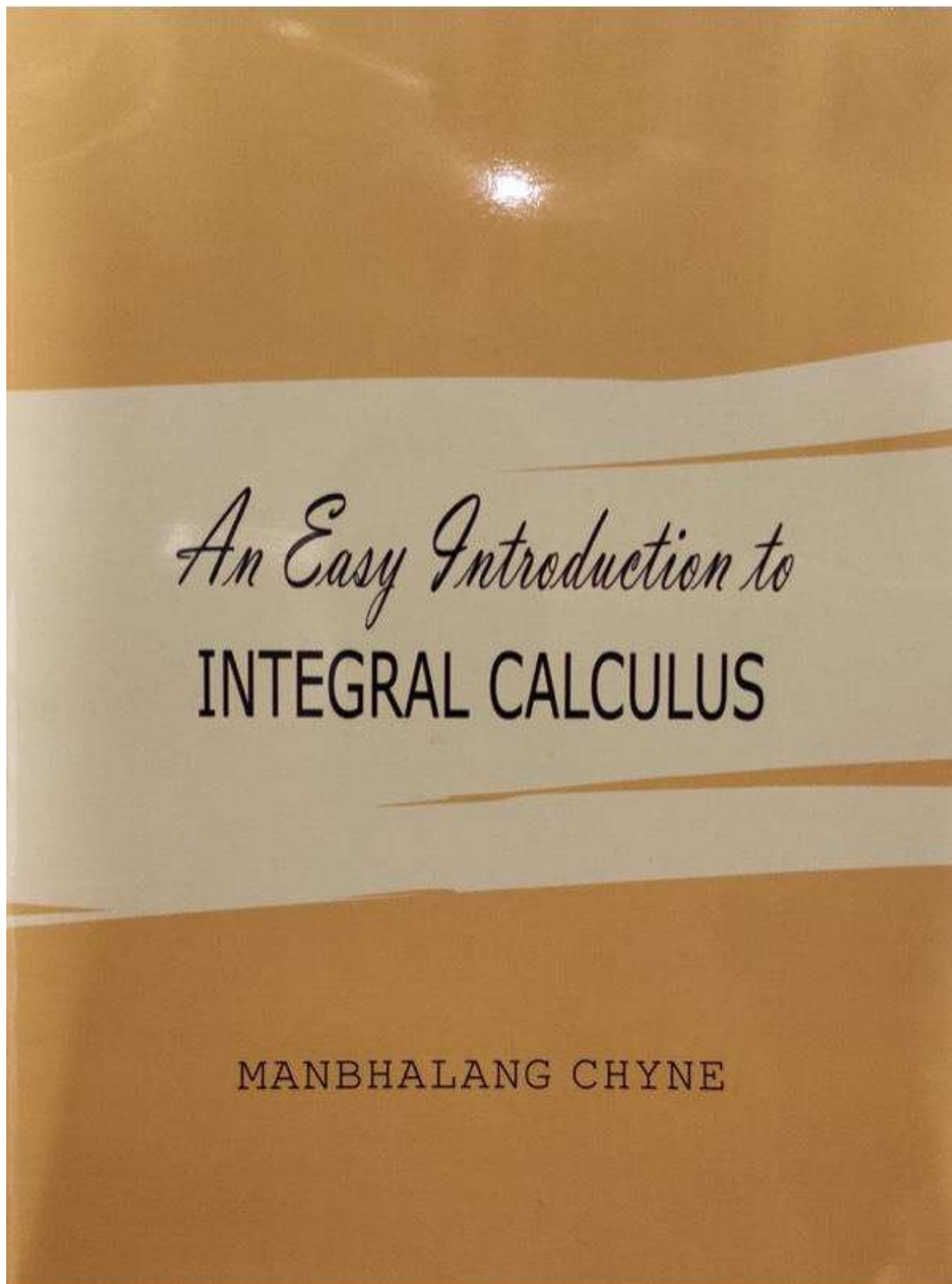
Abstract. Gene expression indicates the amount of mRNA produced by a gene under a particular biological condition. Genes responsible for changes in biological conditions of an organism will have different gene expression values across different conditions. Gene expression analysis is useful in the domain of transcriptomic studies to analyse functions of and interactions among different molecules inside a cell. A significant analysis is that of a differential gene, that is a gene that exhibits strong change in behaviour between two or more conditions. Thus behavioural cell changes can be attributed to the differentially expressed genes. Statistical distributional properties in the read counts that constitute RNA-seq data are used for detecting the differentially expressed genes. In this paper we provide a comparison study of different tools which aid in RNA-seq based differential expression. It is important to note how the results of these tools differ and which tool provides more statistically significant results for the same.

Keywords: RNA-seq · Differential expression · Differential gene · Empirical study · Differential expression tools

1 Introduction

A gene is a small section of genetic material called DNA which contains genetic information. Every cell in an organism contains the whole genome (i.e. the DNA), which contains heritable information. The DNA is a helical-structured, double stranded molecule that is capable of undergoing certain biological processes to produce useful products such as proteins. Protein making goes through two stages: (1) Transcription, in which the DNA is converted into mRNA (messenger RNA) molecules with the help of an enzyme called the RNA polymerase (2) Translation, which occurs after the messenger RNA (mRNA) has carried the transcribed 'message' from the DNA to ribosomes [2], where proteins are made. Though thousands of transcripts are produced every second in each cell, the amounts and types of mRNA molecules in a cell reflect the function of that cell. Gene expression can also be understood as a measure of the activity level of a gene as it goes through the two stages mentioned above. Gene expression levels differ for different genes across cells and this is indicative of the function of a particular cell. As mentioned earlier, only a fraction of genes contained in the DNA are used in a cell at a given time. Measuring the expression level of each gene helps biologists understand cell

ANNEXURE XIII
[Book Chapter]



ANNEXURE XIII

[Book Chapter]

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Aging of the Endocrine System

Banteiskhem Kharwanlang, St. Edmund's College, Shillong, India

Ramesh Sharma, North Eastern Hill University, Shillong, India

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Glossary

<https://www.ncbi.nlm.nih.gov/pubmedhealth/PMHT0022071/2018> (accessed on 13/09/18)

AXES A systematic arrangement of the hypothalamus, pituitary, endocrine glands and target organs exhibiting a specific endocrinal function, along with the feedback control loop.

Endocrine glands A group of specialized cells synthesizing/storing hormones. They release hormones into the blood circulatory system.

Endocrine system A systematic anatomical arrangement of glands synthesizing hormones and organs perceptive to hormones.

Endocrinology The science of studying cells or organs communication via hormones.

Gerontology The scientific study of the process of aging.

Homeostasis A steady state equilibrium of chemical messengers released from the endocrine glands to elicit a specific response in the targeted organ.

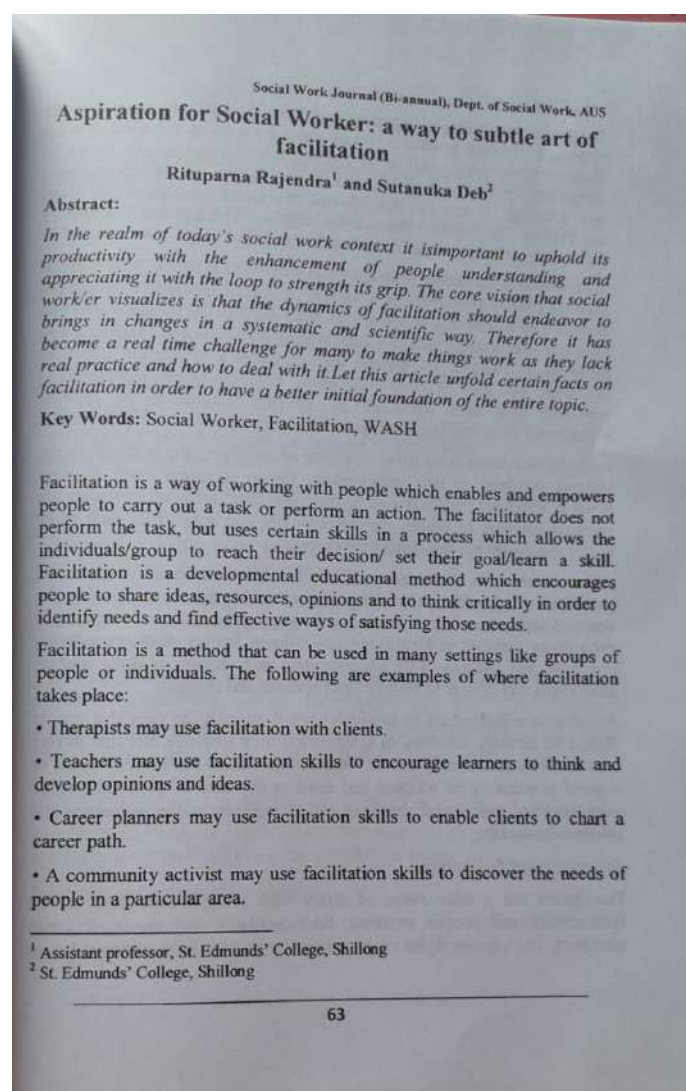
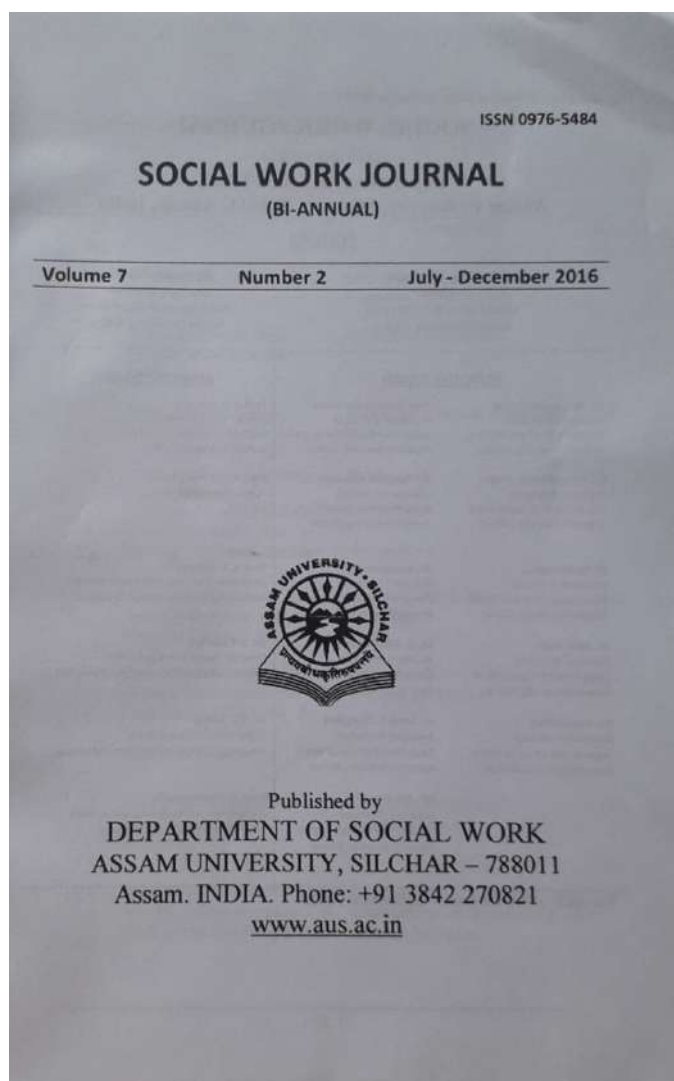
Hormones A chemical messenger released from the endocrine glands or specialized cells to elicit a specific response in the targeted organ.

Receptors A molecule on the targeted cell surface or in cytoplasm/nucleus which interacts with the hormone and activates downstream intracellular signaling pathway to produce the required biological function.

Signaling pathway/cascade An array of molecular interactions which relay, transduce and amplify the hormonal signal into the effective biological action.

ANNEXURE XIII

[Book Chapter]



ANNEXURE XIII

[Book Chapter]

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ANNEXURE XIV [Faculty Participation in Seminar/Symposia]

Nature of Participation	Department	Name of the Faculty	International	National
Resource Person	Biotechnology	Samrat Adhikari	-	National Annual meeting on STAR College Scheme, Organised by DBT, Govt. of India & Pondicherry University, 18 th - 20 th July, 2019
Resource Person	Botany	Debulman Syiemiong	-	Faculty Development Programme for Science Teachers on 20 th - 21 st September, 2019. organized by Department of Biotechnology, St. Edmund's College, Shillong
Resource Person	Chemistry	Dr Khrawborlang Nongsiej	-	Workshop on "Capacity Building, Sensitization and awareness in Basic Science for Higher Secondary Science Students of Shillong" at Department of Biotechnology, St. Edmund's College, Shillong on the 29 th February, 2020.
Resource Person	Chemistry	Dr Iadeishisha Kharbangar	-	Science Exhibition held on 28 th February, 2020 in St. Anthony's College, Shillong on the occasion of National Science Day Celebration
Resource Person	Chemistry	Prof Sumit Deb	-	Faculty Development Programme for Science Teachers on 20 th - 21 st September, 2019. organized by Department of Biotechnology, St. Edmund's College, Shillong
Resource Person	Chemistry	Mr Baristar Lyngkhohi	-	"Basic Sciences: Popularization through interaction, practical demonstrations and laboratory exposure for Rural Secondary School Students of East Khasi Hills District of Meghalaya" organised by the Department of Biotechnology, St. Edmund's College Shillong, held on the 7 th September, 2019.
Resource Person	Chemistry	Mr Baristar Lyngkhohi	-	Institutional Biotech Hub Kiang Nangbah Government College, Jowai on 28 th August, 2019.
Resource Person	Mathematics	Dipankar Deb	-	Seminar on Beauty of Mathematics; Organized by G. C College, Silchar, Assam; 24 th January, 2020
Presented (Poster)	Biotechnology	Samrat Adhikari	-	National Annual meeting on STAR College Scheme, Organised by DBT, Govt. of India & Pondicherry University, 18 th - 20 th July, 2019
Presented (Poster)	Biotechnology	Sumit Deb	-	National Annual meeting on STAR College Scheme, Organised by DBT, Govt. of India & Pondicherry University, 18 th - 20 th July, 2019

ANNEXURE XIV

[Faculty Participation in Seminar/Symposia]

Presented (Poster)	Botany	Debulman Syiemiong	60th Annual Conference of Association of Microbiologists of India (AMI-2019) & International Symposium on Microbial Technologies in Sustainable Development of Energy, Environment, Agriculture and Health" organized by Central University of Haryana; 15 th - 18 th November, 2019	
Presented (Oral)	Botany	Debulman Syiemiong	International Symposium on "Nature, Microbes and Society" Organized by Indian Mycological Society & Department of Botany, University of Calcutta; 26 th - 8 th Feb, 2020	
Presented (Oral)	Botany	Eros V Kharshiing	-	Advancement of Biology in the 21 st Century organized by Visva-Bharati, Shanti Niketan; 28 th - 29 th Feb, 2020
Presented (Oral)	Political Science	<i>Tosanbha Marwein</i>	International Conference on Recent Developed Challenges to Indo-US relations organized by Association for Scientific and Academic Research (ASAR), 24 th August, 2019	
Presented (Oral)	Political Science	<i>Tosanbha Marwein</i>	International Conference on The Sovereign Socialist and Secular nature of the Indian State as introduced in the Preamble to the Indian Constitution organized by Society	

ANNEXURE XIV

[Faculty Participation in Seminar/Symposia]

for education, 31st
August, 2019

Presented (Oral)	Political Science	Tosanbha Marwein	-	National Conference on India and Bangladesh Relations. Present Day Challenges organized by Jadavpur Association of International Relations, Kolkata, ICSSR-NERC, Shillong & NEHU (ASAR), 14 th - 15 th February, 2020
Presented (Oral)	Sociology	Ms Finley E J Syngai	-	Presented a paper entitled "Folklore in a Changing World: A Khasi Perspective" at a Two Day National Seminar on 'The Changing Dynamics of Tribal Society with Special Reference to North-eastern Region' on the 5 th to 6 th November, 2019 at Shillong College, Shillong.
Presented (Oral)	Sociology	Ms Finley E J Syngai	-	Presented Paper "United Nations Year of Indigenous Languages 2019" organised by the Khasi Department in collaboration with Syngkhong Kyntiew Ri, St. Edmund's College, at the College Auditorium on the 19 th September 2019.
Presented (Oral)	Sociology	Ms Ritisha Kharshong	-	Presented a paper entitled "Decentralization of Democracy: Khasi Dorbar Shnong (Khasi Village Durbar)" at a two day National Conference organised by William Carey University (WCU), Shillong on "Relevance of Gandhian Philosophy of Universal Uplift (Sarvodaya) in the Contemporary World" at William Carey University on the 17 th October 2019.
Presented (Oral)	Chemistry	Dr Biinoyargha Dam	4th International Caparica Symposium on Nanoparticles and Applications, 21 st - 23 rd January, 2020	
Presented (Oral)	Environmental Science	Dr Jasmine Sawian		Presented Paper in National Seminar on Recent Advances in Science & Technology; organised by UCC College & NESAC, Shillong 12 th -14 th June, 2019
Presented (Oral)	Environmental Science	Mr E Sumer		Presented Paper in National Seminar on Recent Advances in Science & Technology; organised by UCC College & NESAC, Shillong 12 th -14 th June, 2019

ANNEXURE XIV [Faculty Participation in Seminar/Symposia]

Presented (Oral)	Environmental Science	Ms L Jeengaph		Presented Paper in National Seminar on Recent Advances in Science & Technology; organised by UCC College & NESAC, Shillong 12 th -14 th June, 2019
Presented (Oral)	Environmental Science	Mr D Suchiang		Presented Paper in National Seminar on Recent Advances in Science & Technology; organised by UCC College & NESAC, Shillong 12 th -14 th June, 2019
Attended (Workshop)	Chemistry	Prof Sumit Deb	-	“Value additions to reach Bio-resource and Entrepreneurship Development” organised by Advanced Level Biotech - Hub St. Edmund's College, Shillong and Biotech Park, Lucknow on the 13 th – 16 th September, 2019
Attended (Workshop)	Chemistry	Mr Baristar Lyngkhoi	-	7 days' Workshop on “Bioinformatics-Tools & Techniques” at Bioinformatics Facility, organized by Department of Biotechnology, St. Edmund's College, Shillong under BTISNET Programme and sponsored by Department of Biotechnology, Govt. of India, New Delhi from 28 th June to 5 th July, 2019.
Attended (Workshop)	Chemistry	Dr Khrawborlang Nongsiej	-	7 days Workshop on “Bioinformatics-Tools & Techniques” at Bioinformatics Facility, organized by Department of Biotechnology, St. Edmund's College, Shillong under BTISNET Programme and sponsored by Department of Biotechnology, Govt. of India, New Delhi from 28 th June to 5 th July, 2019.
Attended (Seminar)	Chemistry	Prof Sumit Deb	Chemtech World Expo -2019, Mumbai, February 20-23, 2019.	
Attended (Seminar)	Chemistry	Dr Iadeishisha Kharbangar	-	Orientation Programme on Right to Information Act 2005 held on 11 th January, 2019.
Attended (Workshop)	Computer Science	Mr Bertrand Dkhar	-	National Workshop on Cyber Security organized by NIT, Meghalaya, 14 th - 19 th October, 2019
Attended (Workshop)	Computer Science	Dr Sajid Nagi	-	National Workshop on Cyber Security organized by NIT, Meghalaya, 14 th - 19 th October, 2020
Attended (Workshop)	Electronics	Mr B Thangkiew	-	Conflict Resolution and peace building for NSS Programme organized by Rajiv Gandhi National Institute of Youth Development & NSS, NEHU, 5 th - 7 th August, 2019

ANNEXURE XIV [Faculty Participation in Seminar/Symposia]

Attended (Workshop)	Electronics	Mr B Thangkiew	-	Challenges and opportunities in NSS organized by RNSS, NEHU, 27 th - 28 th Feb, 2020
Attended (Seminar)	Khasi	Ms Rosa M Mawlong	-	Seminar on Teaching & Evaluation organized by Khasi Department, Sankerdev College, Shillong; 24 th October, 2019
Attended (Workshop)	Khasi	Ms Rosa M Mawlong	-	Workshop for preparation of 4 years integrated BAM, B.Ed. & BSC Syllabus organized by Department of Education, NEHU; 5 th - 6 th November, 2019
Presented (Oral)	Zoology	P Wankitlang Shangpliang	-	National Symposium on Recent trends in Zoological Sciences organized by NEHU, Shillong; 28 th - 29 th February, 2020.
Attended (Seminar)	Sociology	Ms Ritisha Kharshong	-	Attended a Seminar on "United Nations Year of Indigenous Languages 2019" organised by the Khasi Department in collaboration with Syngkhong Kyntiew Ri, St. Edmund's College, at the College Auditorium on the 19 th September 2019.
Attended (Workshop)	Sociology	Ms Ritisha Kharshong	-	Workshop on "Instructional Strategies for Sociology Teachers," organised by the Department of Sociology, Sankar Dev College, Shillong on the 13 th of March, 2020.
Attended (Workshop)	Sociology	Mr William B F Lyngrah	-	Workshop on "Instructional Strategies for Sociology Teachers," organised by the Department of Sociology, Sankar Dev College, Shillong on the 13 th of March, 2020.
Attended (Workshop)	Mathematics	Dipankar Deb	-	Workshop for preparation of 4 years integrated BAM, B.Ed. & BSC Syllabus organized by Department of Education, NEHU; 5 th - 6 th November, 2019
Attended (Seminar)	Zoology	Dr Duwaki Rangad	-	International Seminar on The Role of Research in Biodiversity & Conservation Organized by Lady Keane College, Shillong; 24 th October, 2019
Attended (Seminar)	Zoology	Mr D A War	-	International Seminar on The Role of Research in Biodiversity & Conservation Organized by Lady Keane College,

ANNEXURE XIV [Faculty Participation in Seminar/Symposia]

Shillong; 24th
October, 2019

Attended (Seminar)	Zoology	<i>Dr Duwaki Rangad</i>	Seminar on Climate Change, issues and Challenges organized by Sankardev College, Shillong' 9 th August, 2018
Attended (Seminar)	Zoology	<i>Mr D A War</i>	Seminar on Climate Change, issues and Challenges organized by Sankardev College, Shillong' 9 th August, 2018
Attended (Seminar)	Biochemistry	<i>Dr B Kharwanlang</i>	Training of teachers (ToT) on Student Induction (SIP) Programme; organized by Down Town University, Guwahati; 8 th -10 th August, 2020
Attended (Seminar)	Environmental Science	<i>Dr Jasmine Sawian</i>	International Seminar on understanding water crisis: the way forward, organised by Synod College; 6 th -7 th June, 2019
Attended (Seminar)	Environmental Science	<i>Dr Jasmine Sawian</i>	Training of Trainers on conflict Resolution and peace building process for the NSS programme officers; organized by RGIYD, NSS Unit, NEHU, Shillong; 5 th - 7 th August, 2019
Attended (Seminar)	Environmental Science	<i>Dr Jasmine Sawian</i>	National Conference on Relevance of Gandhian Philosophy on Universal Uplift (Sarvodaya) in Contemporary world; Organized by William Carey University, 17 th -18 th October, 2018
Attended (Seminar)	Environmental Science	<i>Ms M. D Khongwir</i>	International Seminar on understanding water crisis: the way forward, organised by Synod College; 6 th - 7 th June, 2019
Attended (Seminar)	Environmental Science	<i>Ms M. D Khongwir</i>	Workshop on Social Work Research Methodology; Organised by Department of Social Work, St. Edmund's College, Shillong ; 30 th Sep - 1 st October, 2019
Attended (Seminar)	Commerce	<i>Ms D Nongkynrih</i>	Workshop on Social Work Research Methodology; Organised by Department of Social Work, St. Edmund's College, Shillong ; 30 th Sep - 1 st October, 2019
Attended (Seminar)	Environmental Science	<i>Ms L Jeengaph</i>	International Seminar on understanding water crisis: the way forward, organised by

ANNEXURE XIV

[Faculty Participation in Seminar/Symposia]

Synod College; 6th -
7th June, 2019

Attended (Seminar)	Environmental Science	<i>Ms I Ryngah</i>	Workshop on Social Work Research Methodology; Organised by Department of Social Work, St. Edmund's College, Shillong ; 30 th Sep - 1 st October, 2019
Attended (Conference)	Botany	<i>Dr Eros Kharshiing</i>	Young Thinkers Conference on India and its Neighbourhood: Next Gen Concerns & Ideas-Jobs, Skills & Education organized by British Council, Kolkata & Asian Confluence; 8 th -9 th August, 2019
Attended (Seminar)	Mathematics	<i>Dr Amplify Sawkmie</i>	National Seminar on Recent Advances in Science & Technology; organised by UCC College & NESAC, Shillong 12 th -14 th June, 2019
Attended (Seminar)	Mathematics	<i>Bankhrawnam Dkhar</i>	National Seminar on Recent Advances in Science & Technology; organised by UCC College & NESAC, Shillong 12 th -14 th June, 2020
Attended (Seminar)	Mathematics	<i>Dipankar Deb</i>	Indian National Mathematical Olympiad Training Camp; organised by NEHU, Shillong; 13 th -18 th January, 2020
Attended (Seminar)	Mathematics	<i>Sabari Sarkar</i>	Seminar on Indian Women & Mathematics; Organised by NIT, Meghalaya; 19 th -20 th October, 2020

ANNEXURE XV [Extension Activities]

Number of extension and outreach programmes conducted in collaboration with industry, community and Non- Government Organisations through NSS/NCC/Red cross/Youth Red Cross (YRC) etc., during the year

Title of the activities	Organising unit/ agency/Collaborating agency	Number of teachers coordinated in such activities	Number of students participated in such activities
International Women Day Celebration (8 th March, 2019)	Department of Social Work, St. Edmund's College	3	42
Capacity Building, Sensitization and Awareness in Basic Science for Higher Secondary Schools of Shillong" (19 th September, 2019)	Department of Biotechnology & Chemistry, St. Edmund's College, Shillong	3	21
Capacity Building, Sensitization and Awareness in Basic Science for Higher Secondary Schools of Shillong" (11 th November, 2019)	Department of Biotechnology & Chemistry, St. Edmund's College, Shillong	3	31
The Great Backyard Campus- Bird Count (14 th February, 2020)	Department of Zoology & Science Club, St. Edmunds' College, Shillong	3	60
Outreach Programme- Chemistry made easy through Experiments (23 rd June, 2019)	Department of Chemistry, St. Edmund's College, Shillong	3	36
International Yoga Day (21 st June, 2019)	NSS Unit, St. Edmund's College, Shillong	4	36
Founder's Day Celebration (2 nd August, 2019)	St. Edmund's College, Shillong	6	56
Constitution Day Celebration (19 th September, 2019)	St. Edmund's College, Shillong	9	65
Medical/dental camp at Mawsynram Village, East Khasi Hills (11 th December, 2019)	Department of Biochemistry, St. Edmund's College, Shillong	4	12
World Environment Day Celebrations (26 th June, 2019)	Department of Environment Science & NSS Unit, St. Edmund's College, Shillong	8	65

ANNEXURE XV [Extension Activities]

Orientation Programme for NSS Volunteers (31 st July, 2019)	NSS Unit, St. Edmund's College, Shillong	2	23
NSS Workshop on Swachhta Pakhwada (1 st August, 2019)	NSS Unit, St. Edmund's College, Shillong	3	36
Celebration of Independence Day (15 th August, 2019)	NSS Unit, St. Edmund's College, Shillong	12	66
Launching of My Shillong, My Passion: A Call to Act Now (31 st August, 2019)	NSS Unit, St. Edmund's College, Shillong	4	41
NSS Foundation Day (24 th September, 2019)	NSS Unit, St. Edmund's College, Shillong	3	23
Celebration of 150th Anniversary of Mahatma Gandhi (1 st October, 2019)	NSS Unit, St. Edmund's College, Shillong	4	39
Hackathon (16 th November, 2019)	NSS Unit, St. Edmund's College, Shillong	6	21
General Awareness drive about Covid -19 (17 th -15 th April, 2020)	NCC Unit, St. Edmund's College, Shillong & Shillong Police Department	1	8
Awareness on Data Entry Work for Daily wage earner (7 th Dec, 2020)	NCC Unit, St. Edmund's College, Shillong & Govt. of Meghalaya	1	9
Awareness on Substance Abuse and POSCO Act (29 th August, 2019)	Department of Social Work, St. Edmund's College	3	16
Field Trip to Soil and Water Conservation, Thadmulthong, West Jaintia Hills (23 rd Aug, 2019)	Department of Environment Science & Eco Club, St. Edmund's College, Shillong	4	22
Field Trip to India Meteorological Observatory, Laimer, Shillong (29 th October, 2019)	Department of Environment Science & Eco Club, St. Edmund's College, Shillong	4	19

ANNEXURE XVI
[Extension Activities – Student Participation]

Students participating in extension activities with Government Organisations, Non-Government Organisations and programmes such as Swachh Bharat, Aids Awareness, Gender Issue, etc. during the year

Name of the scheme	Organising unit/Agency/collaborating agency	Name of the activity	Number of teachers coordinated in such activities	Number of students participated in such activities
Diamond Jubilee Celebrations	Eastern Air Command, Upper Shillong, Shillong	AIRFEST - 2019	2	16
Climate Change	Department of Zoology, Sankerdev College, Shillong	Climate Change: Issues & Challenges	1	22
Earth Day	Department of EVS, Eco Club & NSS Unit, St. Edmund's College, Shillong	Field Trip to Soil & Conservation Site, Thadmuthlong	5	22
Environment Day	Department of EVS, Eco Club & NSS Unit, St. Edmund's College, Shillong	World Environmental Day Celebration	5	69
Health Camp	Department of Social Work (MSW), St. Edmund's College & Lamjingshai Organization, Nongthymmai, Shillong	Distribution of Plant Saplings to Female Sex Workers (FSW)	3	11
Health Camp	Department of Social Work (MSW), St. Edmund's College & Lamjingshai Organization, Nongthymmai, Shillong	Awareness Programme cum Health Camp at Lamjingshai Village, East Khasi Hills	5	21
Hygiene	Department of Social Work (MSW), St. Edmund's College & Lamjingshai Organization, Nongthymmai, Shillong	Awareness on HIV test for Female Sex Worker at Lamjingshai Village, East Khasi Hills	5	28
Maths made Easy	Sikkim Manipal Institute, Sikkim	Mini MTTs	0	3

ANNEXURE XVI
[Extension Activities – Student Participation]

NCC Initiative	NCC Unit, St. Edmund's College, Shillong, & NCC Directorate, NER, Shillong	Armed Forces Flag Day	2	21
Performing Arts	NEC, Shillong	Art Competition (Pencil & Colour)	2	36
Performing Arts	Department of Botany, St. Edmund's College, Shillong	Festival of Light - Rangoli Competition	3	19
Physical Health	NCC Unit, St. Edmund's College, Shillong, & NCC Directorate, NER, Shillong	Combined Annual Training Camp, Shillong (2nd Meghalaya Battalion)	0	4
Rural Camp	NCC Unit, St. Edmund's College, Shillong, & NCC Directorate, NER, Shillong	Inter Group Competition for RDC, Bishnupur, Shillong (41 Meghalaya ATTRY BTRY)	0	10
Physical Health	NCC Unit, St. Edmund's College, Shillong, & NCC Directorate, NER, Shillong	Combined Annual Training Camp, Mawphlang, Shillong (61 Meghalaya Girls Battalion)	0	5
Physical Health	NCC Unit, St. Edmund's College, Shillong, & NCC Directorate, NER, Shillong	Combined Annual Training Camp, Bishnupur, Shillong, Shillong (42 Meghalaya SIG COY Battalion)	0	14
Physical Health	NCC Unit, St. Edmund's College, Shillong, & NCC Directorate, NER, Shillong	Inter Group Competition for RDC, Umroi Cantt, Barapani (61	0	6

ANNEXURE XVI
[Extension Activities – Student Participation]

		Meghalaya Girls Battalion)		
		Inter Group Competition for Pre RDC 2, Narangi Cantt, Guwahati (61 Meghalaya Girls Battalion)	0	3
Physical Health	NCC Unit, St. Edmund's College, Shillong, & NCC Directorate, NER, Shillong			
		IMA National attachment Camp, Dehradun	0	1
		Inter Group Competition for Pre RDC 1, Narangi Cantt, Guwahati (61 Meghalaya Girls Battalion)	0	4
Physical Health	NCC Unit, St. Edmund's College, Shillong, & NCC Directorate, NER, Shillong			
		Ek Bharat Shrestha Bharat (National Camp, New Delhi	0	3
Physical Health	NCC Unit, St. Edmund's College, Shillong, & NCC Directorate, NER, Shillong	OTA Attachment Camp, National (Kampte)	0	1
Trekking	NCC Unit, St. Edmund's College, Shillong, & NCC Directorate, NER, Shillong	Orissa Coastal Trek.	0	3
Substance Abuse	Department of Social Work (MSW), St. Edmund's College & Local Body, Lamjingshai	Awareness Programme on Substance Abuse & POSCO Act	5	26

ANNEXURE XVI
[Extension Activities – Student Participation]

		Awareness		
Substance Abuse	Department of Social Work (MSW), St. Edmund's College & Local Body, Lamjingshai	Programme on Tobacco & Ling Health at Lamjingshai Village, East Khasi Hills	5	27
Swachhta Initiatives	NSS Unit, St. Edmund's College, Shillong & NSS Unit, St. Anthony's College, Shilong	150th Anniverssary of Mahatma Gandhi, Cleaning Drive from Umphysri Bridge to 3rd Mile, Shillong	6	150
Swachhta Initiatives	Meghalaya Clean & Green, Shillong	Cleaning Drive at Umiam Niew Point	0	2
Swachhta Initiatives	Eco Club & NSS Unit, St. Edmund's College, Shillong	Eco Trekking & Cleaning Drive	5	110
Swachhta Initiatives	NSS Unit, St. Edmund's College, Shillong	Cleaning Drive at Laitmysaw Village, East Khasi Hills	4	38
Trekking	NCC Unit, St. Edmund's College, Shillong, & NCC Directorate, NER, Shillong	Dekitting Camp CATC-II	0	1
Vigilance Awareness Week	NEC, Shillong	Quiz Competition on Better Citizen	2	8
Vigilance Awareness Week	NEC, Shillong	Essay Competition	1	2
Vigilance Awareness Week	NEC, Shillong	Painting Competition	1	3
Women Rights	Department of Political Science, St. Mary's College, Shillong	Awareness programme on Human Rights and	0	13

ANNEXURE XVI
[Extension Activities – Student Participation]

		issues relating to Rights to Women		
Fast Food	Department of Commerce, St. Edmund's College, Shillong	FOOD FEST-2019	2	46
Job Skills	SBI, Shillong Branch	Career Prospects in State Bank of India	1	22
Sports	Meghalaya Cricket Team Players, Shillong	Pre Season Conditioning Camp on Cricket	1	6
Awareness	Mangkathiang Makdoh Sec School & St. Edmund's College, Shillong	Awareness programme on Drug Abuse	3	11
Sports	State Sports Academy, Shillong	State level Football Tournament	1	5
NCC Initiative	NCC Directorate, NER, Shillong	National cadet crops Youth exchange programme, Singapore	0	1
National Science Day Celebration	Star College Departments, St. Edmund's College, Shillong & DBT, Govt. of India	"Science Mela - Edscientia 2019" - (Model Competition)	10	40
National Science Day Celebration	Star College Departments, St. Edmund's College, Shillong & DBT, Govt. of India	"Science Mela - Edscientia 2019" - (Chart Competition)	10	30
National Science Day Celebration	Star College Departments, St. Edmund's College, Shillong & DBT, Govt. of India	"Science Mela - Edscientia 2019" - (Essay Competition)	2	20
National Science Day Celebration	Star College Departments, St. Edmund's College, Shillong & DBT, Govt. of India	"Science Mela - Edscientia 2019" - (Quiz Competition)	4	30

ANNEXURE XVI
[Extension Activities – Student Participation]

National Science Day Celebration	Star College Departments, St. Edmund's College, Shillong & DBT, Govt. of India	"Science Mela - Edscientia 2019" - (Debate Competition)	4	32
National Science Day Celebration	Star College Departments, St. Edmund's College, Shillong & DBT, Govt. of India	"Science Mela - Edscientia 2019" - (Painting Competition)	2	28
National Science Day Celebration	Star College Departments, St. Edmund's College, Shillong & DBT, Govt. of India	"Science Mela - Edscientia 2019" - (Screening of Sci Fi Movies)	1	98
National Science Day Celebration	Star College Departments, St. Edmund's College, Shillong & DBT, Govt. of India	"Science Mela - Edscientia 2019" - (Photography Competition)	2	19

ANNEXURE XVII [Maintenance of Campus Infrastructure]



St. Edmund's College

(Affiliated to North Eastern Hill University, Shillong)
Recognized by the University Grant Commission under 2 (f) and 12 (B) of UGC act 1956
Laitumkhrah, Shillong – 793003, Meghalaya, India

E-mail: stedmundscollege@gmail.com

Website: <http://sec.edu.in>

Procedures and policies for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc.

- The institution ensures that all the physical facilities that includes classrooms, laboratories, library etc., are maintained by qualified and dedicated associate staffs.
- A dedicated policy is in place whereby budget allocation for each department on expendables, maintenance are fixed.
- Different committees namely Building Maintenance committee, Canteen Committee, Purchase Committee are in place that ensures funds are properly utilised.
- The Purchase Committee follows the GF rules during the choice of vendors/contractors during allotment of work on the basis of COMPETITIVE PRICE INDEX (CPI) and Quality Assurance (QA). The same is employed during procurement of equipment's /instruments.
- Procurement and maintenance of Books/Journals in the Library (Central/Departmental) are done through the Library Committee, approved by the management.
- Waste management cleanliness are carried by qualified cleaners in association with Local Municipal Board during Garbage disposal.
- Laboratories safety protocols SOP are documented and forwarded to the respective laboratories for compliance.
- Safety audit of the campus is ensured by installing Firefighting equipment's, ample storage of water in underground reservoir following the directive issued by the Local administrations.



Dr Sylvanus Lamare
Principal

Contact Details: Office Phone: (0364) 2224533 (M) +91-9862432280. Fax: (0364) 2223234

ANNEXURE XVII
[Maintenance of Campus Infrastructure]



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- Dedicated solar panels are installed within the campus for adequate lighting all the classrooms are fitted with SFL/LED lights to reduce power consumption without compromising the brightness inside the classroom 2 x 25 KVA generators are in place for uninterrupted power supply during college hours.
- The sports facilities (indoor outdoor) are well maintained by dedicated staff along with proper lighting facility to be used at night.
- All the physical infrastructures including the college greenery are adequately maintained by dedicated personnel with the active supervision of group of faculty members.



Dr Sylvanus Lamare
Principal

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ANNEXURE XVIII [Student Progression to Higher Education]

Year	No. of students enrolling into higher education	Programme graduated from	Department graduated from	Name of institution joined	Name of programme admitted to
2019	4	UG Professional	BCA	Pondicherry University, Pondicherry	MCA
2019	5	UG Professional	BCA	St. Anthony's College, Shillong	MSc (Computer Applications)
2019	1	UG Professional	BCA	B.M.S College of Engineering, Bangalore	MCA
2019	1	UG Professional	BCA	PES University, Bangalore	MCA
2019	13	UG Honours	Biochemistry	NEHU, Shillong	MSc (Biochemistry)
2019	1	UG Honours	Biochemistry	Pondicherry University, Pondicherry	MSc (Biochemistry & Molecular Biology)
2019	1	UG Honours	Biochemistry	Manipur University, Manipur	MSc (Biochemistry)
2019	1	UG Honours	Biochemistry	MLCU, Shillong	MSc (Medical Technology)
2019	1	UG Honours	Biochemistry	Mount Carmel College, Bangalore	MA (Public Policy)
2019	14	UG Honours	Biotechnology	NEHU, Shillong	MSc (Biotechnology & Bioinformatics)
2019	3	UG Honours	Biotechnology	Don Bosco University. Assam	MSc (Biotechnology)
2019	1	UG Honours	Biotechnology	Reva University, Bangalore	MSc (Biotechnology)
2019	1	UG Honours	Biotechnology	Dada Saheb University, Lucknow	MSc (Forensic Science)
2019	6	UG Honours	Botany	NEHU, Shillong	MSc (Botany)
2019	2	UG Honours	Botany	NEHU, Shillong	MSc (Library Science)
2019	1	UG Honours	Botany	NEHU Campus Tura, Meghalaya	MSc (Rural Development)
2019	1	UG Honours	Botany	Don Bosco University. Assam	MSc (Botany)
2019	1	UG Honours	Botany	Royal Global University, Guwahati	MSc (Botany)
2019	1	UG Honours	Botany	Dakshin Guwahati BEd College	B.Ed.
2019	3	UG Honours	Chemistry	NEHU, Shillong	MSc (Chemistry)
2019	2	UG Honours	Chemistry	Jyoti Nivas College, Bangalore	MSc (Organic Chemistry)
2019	2	UG Honours	Chemistry	USTM, Meghalaya	MSc (Chemistry)
2019	1	UG Honours	Chemistry	NIT, Meghalaya	MSc (Chemistry)
2019	1	UG Honours	Chemistry	Manipur University, Manipur	MSc (Chemistry)
2019	2	UG Honours	Chemistry	Don Bosco University. Assam	MSc (Chemistry)
2019	1	UG Honours	Chemistry	Royal Global University, Guwahati	MSc (Chemistry)
2019	8	UG Honours	Commerce	Don Bosco University. Assam	M.Com
2019	1	UG Honours	Commerce	NEHU, Shillong	M.Com
2019	1	UG Honours	Commerce	ICMAI, Khanapara	M.Com
2019	1	UG Honours	Commerce	Chandigarh University	MBA
2019	1	UG Honours	Computer Science	St. Joseph College, Bangalore	MSc (Computer Science)
2019	1	UG Honours	Computer Science	St. Anthony's College, Shillong	MCA
2019	10	UG Honours	Economics	NEHU, Shillong	MA (Economics)

ANNEXURE XVIII

[Student Progression to Higher Education]

2019	1	UG Honours	Economics	NEHU, Shillong	MA (Folkloristics)
2019	1	UG Honours	Economics	USTM, Meghalaya	MA (Economics)
2019	1	UG Honours	Economics	USTM, Meghalaya	MBA
2019	1	UG Honours	Economics	Symbiosis Institute, Pune	MA (Economics)
2019	2	UG Honours	Economics	St. Joseph College, Bangalore	MA (Economics)
2019	1	UG Honours	Electronics	Central University of Rajasthan, Rajasthan	MSc (Electronics)
2019	2	UG Honours	Electronics	Calcutta University, Kolkata	MSc (Electronics)
2019	14	UG Honours	Environmental Science	NEHU, Shillong	MSc (Environmental Science)
2019	2	UG Honours	Environmental Science	Manipur University, Manipur	MSc (Environment & Forestry)
2019	4	UG Honours	Environmental Science	Mizoram University, Mizoram	MSc (Environmental Science)
2019	1	UG Honours	Environmental Science	Pune University, Maharashtra	MSc (Environmental Science)
2019	1	UG Honours	Geography	JIS University, Kolkata	MSc (GIS)
2019	7	UG Honours	Physics	NEHU, Shillong	MSc (Physics)
2019	6	UG Honours	Physics	Don Bosco University, Assam	MSc (Physics)
2019	1	UG Honours	Physics	Miranda House, New Delhi	MSc (Physics)
2019	1	UG Honours	Physics	Pondicherry University, Pondicherry	MSc (Physics)
2019	1	UG Honours	Physics	NIT Manipur	MSc (Physics)
2019	1	UG Honours	Physics	Assam University, Silchar	MSc (Physics)
2019	1	UG Honours	Physics	D M College of Science, Manipur	MSc (Physics)
2019	7	UG Honours	Political Science	NEHU, Shillong	MA (Political Science)
2019	3	UG Honours	Political Science	St. Joseph College, Bangalore	MA (Political Science)
2019	1	UG Honours	Political Science	Tripura University	MA (Political Science)
2019	1	UG Honours	Political Science	Tezpur University, Assam	MA (Cultural Studies)
2019	1	UG Honours	Political Science	Jadavpur University, Kolkata	MA (International Relation)
2019	3	UG Honours	Political Science	IGNOU	MA (Political Science)
2019	1	UG Honours	Political Science	Synod College, Shillong	MA (Political Science)
2019	7	UG Honours	Sociology	NEHU, Shillong	MA (Sociology)
2019	4	UG Honours	Sociology	Tata Institute of Social Sciences, Guwahati	MA (Social Work)
2019	1	UG Honours	Sociology	William Carey University, Meghalaya	MA (Rural Development)
2019	1	UG Honours	Sociology	ICFAI University, Tripura	MA (Education)
2019	1	UG Honours	Sociology	Tezpur University, Assam	MA (Sociology)
2019	1	UG Honours	Sociology	Eastern Institute for Integrated Learning in Management, Kolkata	MBA
2019	1	UG Honours	Sociology	Gauhati University, Assam	MA (Sociology)
2019	1	UG Honours	Sociology	Jadavpur University, Kolkata	MA (Sociology)
2019	1	UG Honours	Sociology	Christ University, Bangalore	MS (Applied Sociology)
2019	4	UG Honours	Zoology	NEHU, Shillong	MSc (Zoology)
2019	4	UG Honours	Zoology	Don Bosco University, Assam	MSc (Zoology)
2019	1	UG Honours	Zoology	Krupanishi Degree College, Kerala	MSc (Microbiology)

ANNEXURE XVIII [Student Progression to Higher Education]

2019	1	UG Honours	Zoology	Central University of Kerala, Kerala	MSc (Zoology)
2019	1	UG Honours	Zoology	Christ University, Bangalore	MSc (Zoology)
2019	1	UG Honours	Zoology	Gauhati University, Assam	MSc (Wildlife Science)
2019	1	UG Honours	Zoology	Rajiv University, Itanagar	MSc (Zoology)
2019	1	UG Honours	Zoology	Pondicherry University, Pondicherry	MSc (Ecology & Environment)
2019	3	UG Honours	Geography	NEHU, Shillong	M A (Geography)
2019	1	UG Honours	Geography	Royal Global University, Guwahati	MA (Geography)
2019	1	UG Honours	Geography	USTM, Meghalaya	MA (Geography)
2019	1	UG Honours	Geography	Middle Sex University, USA	MA (Environmental Science)
2019	1	UG Honours	Geography	Calcutta University, Kolkata	MBA
2019	1	UG Honours	Geography	Don Bosco University. Assam	MSW (Social Work)
2019	5	UG Honours	English	NEHU, Shillong	M A (English)
2019	1	UG Honours	English	IGNOU, Shillong	MA English
2019	1	UG Honours	English	St. Joseph College, Bangalore	MA (English)
2019	1	UG Honours	English	Gauhati University, Assam	MA (LELT)
2019	1	UG Honours	English	The English & Foreign Language University, Hyderabad	MA (Linguistic)
2019	1	UG Honours	English	BHU, Varanasi	MA (English)
2019	2	UG Honours	English	University of Delhi, New Delhi	MA (English)
2019	2	UG Honours	English	Shillong College	MA (English)
2019	1	UG Honours	English	St Aloysius College, Mangalore	MA (English Literature)
2019	3	UG Honours	English	Christ College, Bangalore	MA (English Language Teacher)
2019	1	UG Honours	English	EFLU, Shillong	MA (Linguistic)
2019	1	UG Honours	English	Pondicherry University, Pondicherry	MA (Mass Communication)
2019	1	UG Honours	English	Union Biblical Seminary, Pune	BA (Divinity)
2019	17	UG Honours	Social Work	St. Edmund's College, Shillong	MSW (Social Work)
2019	1	UG Honours	Social Work	Don Bosco University. Assam	MSW (Social Work)
2019	1	UG Honours	Social Work	Central University of Himachal Pradesh	MSW (Social Work)
2019	3	UG Honours	Khasi	NEHU, Shillong	MA (Khasi)
2019	1	UG Honours	Khasi	NEHU, Shillong	MA (Folkloristic)
2019	1	UG Honours	Khasi	NEHU, Shillong	MA (Tourism)

ANNEXURE XIX
[Sports and Cultural activities organized]

Sl No	Activity	Level	No of Participants
1	Cycling	Intra College	200
2	Debate	Intra College	16
3	Dumb Charades	Intra College	23
4	Extempore Speech	Intra College	18
5	Food-Fest	Intra College	36
6	Football (Boys/Girls)	Intra College	175
7	Inter College Badminton, Table Tennis and Chess Tournament	University	96
8		Intra College	56
9	Marathon	Intra College	14
10	Mobile photography	Intra College	73
11	Oriental Music	Intra College	18
12	Quiz	Intra College	16
13	Rangoli	Intra College	35
14	Strongest Edmundian Arm Wrestling (Boys/Girls)	Intra College	28
15	Table Tennis (Boys/Girls)	Intra College	15
16	Traditional Archery	Intra College	48
17	Treasure Hunt	Intra College	42
18	Tug-of-War (Boys/Girls)	Intra College	33
19	Two Wheels Balancing	Intra College	73
20	Volleyball (Boys/Girls)	Intra College	112
21	Western Music	Intra College	23
22	What's The Good Word	Intra College	34
23	YTT Oriental	Intra College	66
	YTT Western	Intra College	

ANNEXURE XXIII
[Faculty Empowerment Strategies]

No. of teachers attending professional development programmes, viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programmes during the year

Title of the professional development programme	Number of teachers who attended	From Date	To date	Duration in day
Orientation Programme UGC-HRDC, NEHU, Shillong	Mr. Baristar Lyngkhohi	21 January 2019	17 February 2019	21
Orientation Programme UGC-HRDC, NEHU, Shillong	Mr. Khrawborlang Nongsiej	21 January 2019	17 February 2019	21
Orientation Programme, UGC-HRDC, NEHU, Shillong	Mr. Navin Chettri	4 July 2018	31 July 2018	21
Orientation Programme, UGC-HRDC, NEHU, Shillong	Ms Labet Phylla Phanbuh	4 July 2018	31 July 2018	21
Orientation Programme, UGC-HRDC, NEHU, Shillong	Dr Wandaia Syngkon	18 February 2019	17 March 2019	21
Orientation Programme, UGC-HRDC, NEHU, Shillong	Ms. Edaneolla Kynta	4 July 2018	31 July 2018	21
Orientation Course , UGC-HRDC, NEHU, Shillong	Dr. Iadesishisha Kharbangar	2 February 2018	26 February 2018	21
Orientation Course , UGC-HRDC, NEHU, Shillong	Dr Rituparna Rajendra	18 February 2019	17 March 2019	21
Orientation Course , UGC-HRDC, NEHU, Shillong	Dr Gopesh Paul	2 February 2018	26 February 2018	21
Refresher Course in Disaster Management (Interdisciplinary), UGC-HRDC, NEHU, Shillong	Dr. Iadesishisha Kharbangar	12 November 2018	2 December 2018	21
Refresher Course in Disaster Management (Interdisciplinary), UGC-HRDC, NEHU, Shillong	Dr. Rosa M Mawlong	12 November 2018	2 December 2018	21
Refresher Course (Interdisciplinary), UGC-HRDC, NEHU, Shillong	Mr Wanphli Kharmawlong	20 October 2018	18 November 2018	21
Refresher Course, Academic Staff College, Gauhati University	Dr Rituparna Rajendra	3 February 2018	25 February 2018	21
Winter School, UGC-HRDC, NEHU, Shillong	Dr D. F War	11 March 2019	11 April 2019	30
Winter School, UGC-HRDC, NEHU, Shillong	Dr R K L Tron	11 March 2019	11 April 2019	30
Summer School in Basic Sciences, UGC-HRDC, NEHU, Shillong	Mr Koben John Nongkynrih	4 July 2018	24 July 2018	20
Course on Machine Learning for Engineering & Science Applications, NPTEL online programme	Ms Reema Joshi	1 January 2019	30 April 2019	120

ANNEXURE XXIII
[Faculty Empowerment Strategies]

Course on Phyton for Data Science, IBM, Online Platform	Ms Rajni Khryiem	1 December 2018	31 December 2018	30
Course on Data Analysis with Phyton, IBM, Online Platform	Ms Rajni Khryiem	1 January 2019	31 January 2019	30
Short Term Course in SPSS	Mr P. Wankitlang Shangpliang	29 October 2018	3 November 2018	6

ANNEXURE XXI [Best Practices]



St. Edmund's College

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BEST PRACTICES IN ST. EDMUND'S COLLEGE, SHILLONG

1..

Title of the practice:

Financial Empowerment of Individual Departments: a Decentralised Exercise/Practice.

The context that required the initiation of the practice

An institution thrives when all the stake holders work diligently and with full commitment towards one common goal of attaining the vision of the institution. As far as St. Edmund's College is concerned it is noteworthy that right from the President of the Governing Body to the staff and students, all the stakeholders have played their role well in building of the college. The academic programmes, other than classroom activities, undertaken by various departments, often require financial support by the Management. If the departments are allowed to organize programmes with the knowledge that there is a very supportive Management behind them taking care of the financial implications, it becomes very easy for them to plan and organise any such activity.

Objectives of the practice

Financial Empowerment of individual departments: The Departments feel confident that the Management is behind them in support.

Flexibility in organizing student oriented programmes: To ensure this happens, the Management of the College allows the individual departments take initiative to organise programmes that benefit the students at departmental/inter departmental level.

Minimum interference from the Management: Certain amount of autonomy at the departmental level

The Practice

The Management gives sufficient freedom to the Principal, who is the academic head of the institution to function in order to fulfil the vision and mission of the institution. Academic responsibilities are fairly divided among all the Heads of Departments, who in turn, delegate responsibilities to their departmental colleagues. Committees are appointed for the various academic and co-curricular

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ANNEXURE XXI

[Best Practices]



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activities to be conducted in the course of the academic year. The list of committees is displayed at the beginning of the year on the staff notice-board. This ensures transparency in policy execution. The responsibilities are communicated to the faculty members through staff meetings. Various co-curricular and extra-curricular activities are conducted through student committees having a teacher(s)-in-charge. The Principal of the College holds regular meetings with the teaching and nonteaching staff. In these meetings, various issues are taken up for discussion before arriving at a final decision. The Heads of Departments monitor the functioning of the various activities' committees. The students are given enough freedom to work without any pressure and they enjoy their freedom with restraint and responsibility. The departments are given the financial freedom to spend the small-time expenses through simple requisition or through elaborate budgeting. The participative decision-making ensures total participation of all the people concerned. The office administration of the College is headed by the Secretary of the Governing Body under whom there are Office Administrator, Head Assistant, Senior Office Assistants, Assistants and a host of other Support Staffs and Associates. Besides, the IQAC Coordinator is responsible for the overall quality sustenance of the initiatives taken by the Management in consultation with the Principal who co-ordinates the day-to-day activities along with the Vice Principal. For the Self-Financed Courses, the designated Academic Dean along with the Vice Principal takes care of the academic part. Thus, the decentralization of department activities and identifying the engagement of personnel of the institution for carrying out all such activities, in addition to financial empowerment, helps in improving the quality of its educational provisions.

Obstacles faced, if any and strategies adopted to overcome them

Notable among the obstacles was the initial confusion over the individual responsibilities assigned to different administrators. Students had been unsure for some time about the fresh administrative arrangement. However, right kind of information dissemination system (through Website, Notice Boards, Class Representatives, department Meetings et al) had ensured that such difficulties never created any alarms.

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**ANNEXURE XXI
[Best Practices]****St. Edmund's College**

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With the introduction of GST, procuring small time bills/vouchers with GST registration number had been difficult for the departments engaged in various activities. This, however, was a temporary phenomenon and got sorted out in quick time.

There had been no other obstacles faced worth mentioning.

Impact of the practice

The practice has impacted the day to day functioning of the college in a very positive way. It has made planning and execution of extracurricular and co-curricular activities hassle free, with hassle-free financial support and support provided by the Management.

The practice has also allowed the departments to organise research activities involving students without being unduly constrained by financial requirements to set the ball rolling. Further, financial empowerment has also added a newfound zeal to the faculty and students to plan/organise programmes involving students/faculty of other institutions as well.

The biggest impact, however, has been the mutual trust and respect shared between the Management and the staff.

Resources required

- Dedicated office assistant to assist the departments
- Requisition slips for small time financial requirements

2...

Title of the practice:

Student Empowerment: A Holistic Approach

The context that required the initiation of the practice:

St Edmund's College is well known for transforming and empowering students who come from diverse ethnic, socio cultural and linguistic backgrounds representing the under-privileged as well as the affluent section of the society. We feel, as educators, it is our responsibility to nurture the untapped potential lurking inside the students. One of the best practices of our college is thus the

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empowerment of students and their all-round growth. This practice helps to facilitate self-growth, self-esteem and actualization of potential of the students through various ways of empowerment and competence building. Further, it's also recognized by the Management that a significant contribution is made through this practice to the national cause in the form of good human capital.

Objectives of the practice

- To create individuals rather than dishing out directionless graduates
- To equip students with a sense of responsibility, accountability
- To create creative minds
- Encourage independence of thought and action
- Facilitate decision making process
- Contribute to National cause of building a significant and performing human capital
- Flexibility in organising student oriented programmes: To ensure this happens, the Management of the College allows the individual departments take initiative to organise programmes that benefit the students at departmental/inter departmental level.
- Minimum interference from the Management: Certain amount of autonomy at the departmental level

The Practice

The students are given the right kind of opportunity to provide feedback on teaching-learning and evaluation process. Influence of Social Media in our lives in recent times has made it almost mandatory that every institution is open to address the grievances of all the stake holders, the students being the most important ones. The College allows space for students to imbibe in them decision-making power in various aspects of functioning of College affairs, particularly in extra and co-curricular areas.

This might seem like an unrealistic idea in an age of common core standards and high-stakes tests - what if students veer drastically off the roadmap chosen by the College? However, this is actually entirely possible in an atmosphere of trust and openness and a

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healthy teacher-student bonding. The teachers in St. Edmund's are always ready to Jump in to work with students. In the process, the students get the required impetus to express their individual ideas in a more casual environment often outside the confines of a rather formal looking classroom. Some of the areas that the students are allowed to work on independently are the Annual College Magazine (THE EDMUNDIAN), departmental journals/magazines/newsletters, formation and management of various clubs, staging of annual plays/musicals, organization of college Fests and other significant calendar events of the College. The practice ensures that the idea of all-round development of a student, as enshrined in the vision and mission of the College, is given a concrete shape.

Obstacles faced, if any

No real obstacle was noticed or detected with the students showing great enthusiasm in absorbing the idea of independent work. Some students, however, had been slow in responding to the invitations made by various clubs or even departments. Also, some ethnic groups seemed to be comfortable only in their chosen company. But, as the college encouraged a cultural blending in organising various programmes, the students understood the value of participation cutting across ethnic, linguistic and cultural backgrounds, thus ensuring the success of the various projects/programmes.

Impact of the practice

- Instant impact on the students' participation: almost 100% change
- Increased motivational level of the students
- Emergence of student clubs
- Renewed interest shown by students in identifying areas of action
- Tutor-ward relationship has hit an all-time high with the students taking lead roles
- Academic performance of the students showed signs of all-round improvement
- The entire practice was aimed at reinforcement of quality practices already in place in St. Edmund's College, and the all-round impact has been extremely positive

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Resources required

- Infra structure support: rooms with audio visual facility
- Budgetary provision
- Refreshment for participants
- Resource persons



Dr Sylvanus Lamare
Principal

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ANNEXURE XXII [Institute Distinctiveness]



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INSTITUTIONAL DISTINCTIVENESS: Distinct to its vision, priority and thrust

VISION and MISSION:

St. Edmund's College, Shillong has a vision that is enshrined in the motto of the College: "Facta Non Verba" which translates "Deeds Not Words". It aims at imparting equitable quality education grounded on the core values of excellence, competition and ideals. The College also stands on the principles advocated by Edmund Ignatius Rice, the Founder of the Institution.

The College endeavors to create a stimulating environment in the Campus through various academic programmes and co-curricular activities in order to develop character, shape personality and build in a sense of social responsibility among our young men and women. As the college prioritizes learning, teaching and sharing of knowledge, education is therefore perceived as a potent vehicle that works towards transforming attitudes and mind-sets for the good of one and all in the society in particular and the world at large.

In St. Edmund's College, we believe that education is critical to building inclusive societies that are resilient to fear and hate. Equipping learners to engage positively with difference is an urgent global challenge. The first step towards achieving this inclusiveness and plurality is to admit students from diverse cultural, ethnic, religious, social and linguistic background and the college does that on a regular basis. Even a cursory glance at the overall student profile of the college will confirm that ours has never been an exclusive institution. Despite the fact that the College is being managed by the Congregation of Christian Brothers in India (CCBI), a catholic organization, St. Edmund's has always maintained this identity, without ever compromising on its quest for excellence.



Dr Sylvanus Lamare
Principal

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How do we foster a positive understanding of and engagement with diversity?

Through our education programme we:

- Equip teachers with the knowledge, skills and confidence to address issues related to diversity in and out of the classroom.
- Empower education leaders to develop strategies to strengthen inclusion in colleges.
- Collaborate on projects and resources that support the integration of pluralism across different contexts.
- Celebrate inter faith and cross-cultural activities through celebration of significant religious and cultural festivals.
- Enthuse students and teachers to attend programmes that celebrate pluralism and inclusiveness.

Our Learning Framework responds to the opportunities and challenges of a changing, diverse and connected world. The framework supports learners by identifying the knowledge, skills and attitudes that enable them to:

- Reflect on and think critically about how historical narratives and interpretations of current events impact views of identity and ideas about who belongs.
- Recognize and analyze how “hardware” (policies and institutions) and “software” (norms and attitudes) can reinforce systems of power and privilege or challenge group-based inequalities.
- Engage in dialogue which includes multiple perspectives, marginalized viewpoints and different forms of expression to widen practices of belonging.
- Apply a pluralism lens to social and political issues in order to collaborate on and advance inclusion, recognition and respect for diversity, locally and globally.



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Principal

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snippets of Activities



Lecture on Microcontroller, IT's Application & Embedded System



By Prof. P. Mudoi, Dept. of
ECE, NEHU on the 16th of
March 2019



Organized by
Department of Electronics, St.
Edmund's College, Shillong
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International Yoga Day

21st of June 2019





Orientation Program for 1st Semester students of BSW,
BCA & BCOM

28th of June 2019

Sensitization Programme on Psychosocial care and Disaster Risk Reduction



Organized by Department
of Social work on the 18th of
July 2019

7 days Workshop on “Bioinformatics-Tools and Techniques”

Organized by Bioinformatics
Facility, Department of
Biotechnology from 28th -5th of
July 2019.



BSW in Action

Organized by the
Department of Social
Work, on the 2nd of
August 2019





Orientation Program for 1st Semester
Students of BSc & BA

29th of July 2019





Talk on Agripreneurship

Organized by Department of Sociology, on the
13th of September 2019



1-day programme on "Basic Sciences: Popularization through Interaction, Practical demonstrations and Lab exposure for rural secondary school students of East Khasi Hills District of Meghalaya"

Organized by the Department of
Biotechnology, St. Edmund's College on the
7th of September 2019



*Constitution Day celebration at St.
Edmund's College*

26th November 2019





Orientation Program for Teachers

5th February 2020



Visit to Department of Chemistry, NEHU, Shillong



Organized by Department of Chemistry
5th February 2020

PLANT NAME
(IN COLLEGE CAMPUS TODAY)
7th February 2020



Teacher Day Celebration

Organized by Department of Chemistry
5th September 2019



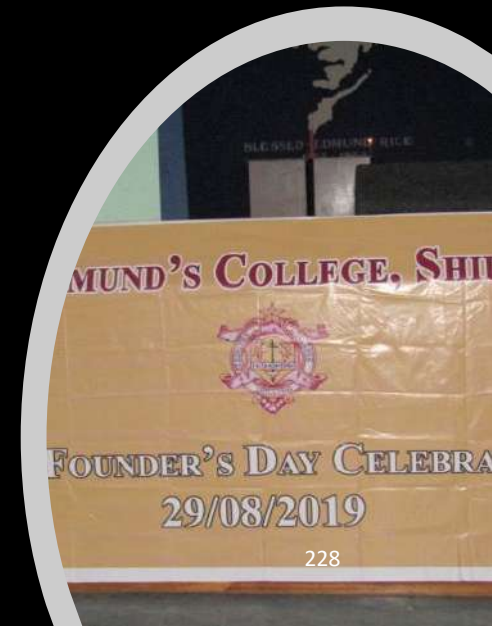


Presentation of STAR College
Progress Report at
Pondicherry University,
Pondicherry

18th – 21st July 2019



The Founder's day Celebration



29th August 2019

“Outreach Programme”

Organized by
Department of Chemistry
and Botany
9th August 2019





NEHU – Inter College Badminton, Table Tennis and Chess Tournament 2019

7th - 9th August 2019

Faculty Development Programme for Science Teachers



Organized by
Department of Biotechnology & Chemistry
9th August 2019



Breakfast at Tiffany's

A Play organized by The Department of
English, St. Edmund's College, Shillong on
the 17th of September 2019

“Capacity Building, Sensitization and Awareness in Basic Science for Higher Secondary Schools of Shillong”


Programme On
Capacity Building, Sensitization and Awareness
for Higher Secondary Schools of Shillong
Organized by
Department of Biotechnology, Shillong College
Sponsored by
Venue : Biotechnology Laboratory

Organized by
Department of Biotechnology
(under DBT-Star College Scheme)
14th of September 2019



Skill Development in Biotechnology in Northeast India

Organized by Biotech Park, Lucknow &
Advanced Level Biotech Hub (Govt. of India),
St. Edmund's College

13th -16th September 2019





One_day_workshop for Headmen

Organized by
Meghalaya State Legal Services Authority
30th August 2019



"The International Year of the Periodic Table"

Celebrated by
Department of Chemistry
8th August 2019



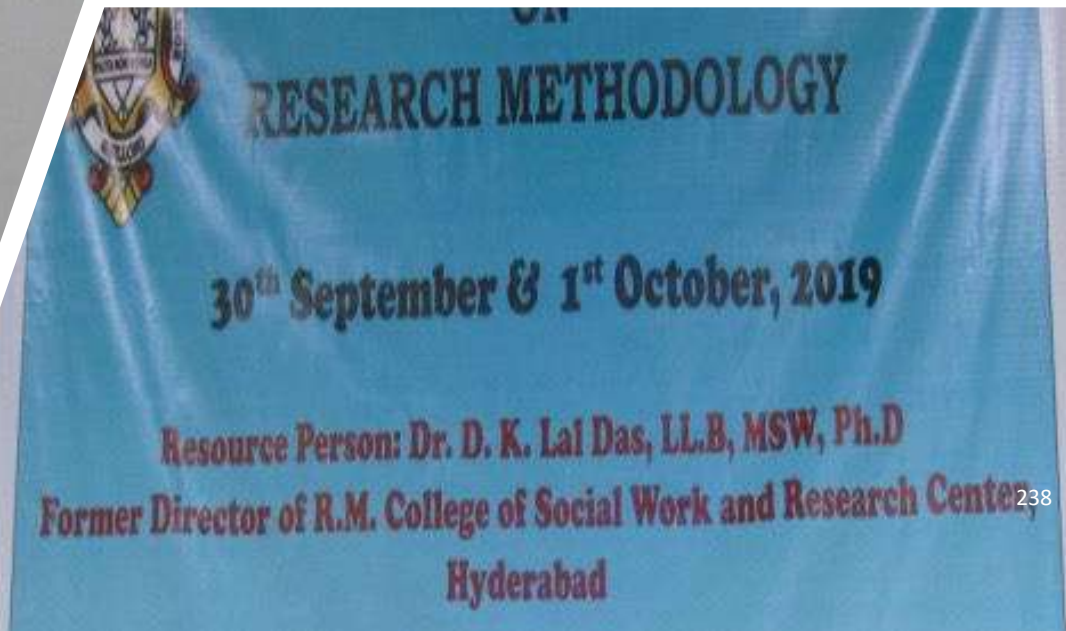
Organized by
Department of Biotechnology
12th October 2019

“Basic Sciences: Popularization through
Interaction, Practical demonstrations
and Lab exposure for rural secondary
school students of East Khasi Hills
District of Meghalaya”



Two days workshop on “Research Methodology”

Organized by
Department of Social Work (MSW)
30th September & 1st October 2019





Program on “Peer Mediation”

20th – 22nd February 2020



Release of College Magazine & Planner



17th of February 2020

