

Rector's Message

Dear Friends,

With immense joy I read the College Annual 2018-19. I write these few lines to appreciate the editorial team for presenting the enormous activities of the year in a concise format. An annual report is the sum total of the life of the College in a year. From day one, we see Sacred Heart College sparkling with life. The curriculum is so well designed to give appropriate time for research, academics, non-academic, extension, sports and psycho-spiritual activities. Every activity is planned well and carried out to the full satisfaction of the staff and students.

The high light of the year is the Peer team visit of NAAC. The visit has been an enriching experience for the management, staff and students. The IQAC of the College has done a great work of consolidating all the achievements of the College for the past 5 years. I congratulate the Salesians, Principal, Additional Principal, Administrator, IQAC Co-ordinator, Vice Principals, Deans, Heads of the Departments, faculty members and all the students for their fine cooperation in getting the A+ status.

It is wonderful to see the Salesian Higher Education at Sacred Heart, Tirupattur reaching such a high standard. Keeping to the original aim of the College, it has grown in every way in order to give a quality education to the rural students. The vast number of our alumni has proved to be great human resource for the development of the country. As I thank the almighty for His benevolence, I appreciate every one of the great Sacred Heart Family. Let us imbibe the spirit of Don Bosco and grow in holiness.

Rev.Dr.C.Antonyraj, SDB
Rector

Principal's Message

Dear Readers,

Warm greetings to you.

“Satisfaction lies in the effort, not in the attainment, full effort is full victory” says Mahatma Gandhi. Looking back at the year that has passed, I surely wonder at how God has lead us in this journey of exciting endeavours. This year was quite eventful and significant because of some notable occasions we had. The most significant one was the 4th Cycle visit of National Accreditation and Assessment Council (NAAC) to our College on 28th and 29th of January 2019. I am happy and proud to state that our College has been accredited with ‘A+’ grade with a CGPA of 3.31/4 under Revised Assessment Frame Work. This accreditation amply justifies all the hard work that has been put in the past for the growth of the institution by the management, faculty, students and alumni and hence I take this opportunity to thank them all whole heartedly.

I would like to also mention that our College has been in the forefront among some of the top institutions in India. In the IT survey of India Today magazine that was conducted last year 2018, our institution stands at 73rd place in Arts and Science Colleges India level.

Dear friends, we continue to make steady progress in the field of higher education, so that our service to our young people meet the qualitative and quantitative demands of today’s job market. The growth of the College is multidimensional as we aim at the holistic development of the students. In this regard, lot of infrastructural developments had to be put in place to cope up to the dreams of demands of the stake holders.

To mention a few are, completion of new sports indoor stadium, Savio sports hostel, construction of new ATM etc., which stand as tall witness for our growth and development. “Excellence is an never ending pursuit” goes a saying and it is very obvious that we can never become complacent about what we have accomplished so far and hence we continue to move on.

I heartily congratulate the entire Sacred Heart family for their unstinted support in the life and growth of this great institution. I am proud to mention that every stake holder of this College has contributed their level best to the growth of it and I whole heartedly thank them. The significant feet achieved by the faculty members and the Departments as whole are recorded in this annual magazine and I am happy that the editorial team has done a remarkable job in bringing out this edition on time. I also appreciate my beloved faculty members and students for contributing articles to make this magazine colourful and interesting.

As we complete this academic year, let us be grateful to our God, our Blessed Mother and our dear Father and Founder St. John Bosco for their benevolence and blessings. May we grow in their Grace so that we may be continually inspired to reach the unreachable.

May God Bless Sacred Hearts!

With regards and Prayers.

Rev.Dr.D.Maria Antony Raj, SDB
Principal

Additional Principal's Message

Dear member of the staff and students,

I am very glad to greet you through this College Magazine, 2018 - 2019 Message!

The academic year 2018-2019 has been a very special year for us at Sacred Heart College (Autonomous), Tirupattur - 635 601. We have had the visit of the NAAC Peer Team for the 4th Cycle of Reaccreditation. We have been preparing diligently for the last five years, more specifically, for the last two years. Everyone has been part of this grand and painstaking exercise. Though hectic, it was a great learning experience. Congratulations to the Principal and the IQAC team.

Higher education in India is focusing on OUTCOME-BASED EDUCATION (OBE). Outcome-based education is student-centered instruction model that focuses on measuring student performance through outcomes. Outcomes include knowledge, skills and attitudes. Its focus remains on evaluation of outcomes of the programme by stating the knowledge, skill and behaviour a graduate is expected to attain upon completion of a programme. In the OBE model, the required knowledge and skill sets for a particular degree is predetermined and the students are evaluated for all the required parameters (Outcomes) during the course of the programme.

Accountability in education is emphasized through OBE. It's the right step in the right direction. This mind-set is called seeing things from end-in-view.

Looking back on the preparation stages of this NAAC Peer Team visit, it is clear that excellence in Higher Education demands proper systems and meticulous documentation processes in place. Such a detailed preparation is part of the OBE. In our college, we are involved in so many activities on a daily basis. Along with showcasing of our noble activities, let's get into a quality documenting process and mind-set.

I wish and pray that our Country, in general and in our college, in particular, OBE bears much fruit and scales up the quality of our students.

All the best.

Rev. Dr. K.A.Maria Arokiaraj, SDB
Additional Principal

Editor's Message

Dear Readers,

The Editorial Board of the College Annual is doubly delighted to bring out the annual of 2018-2019. The academic year 2018-2019 should be etched in gold for many reasons: the visit of the NAAC Peer Team for the 4th cycle, fortification of world class infrastructure and signing new MoUs. True to the stark realities of life, the academic year has been a judicious blend of gleeful moments and moments evoking 'saddest thought'. The unprecedented downpour leading to the unforeseen deluge in Kerala, the ferocity of the Kaja cyclone and the subsequent damages in Tamil Nadu and the painful demise of one of the pious Salesians in Sacred Heart College have certainly dampened our exuberance and moistened our eyes. However the college has proved its Christian Humanism once again by assuaging the tears of the people of Kerala and Tamil Nadu by way of munificent contributions in kind and relief works. The college community very meaningfully and prayerfully bade adieu to Rev.Fr.Kuriakose Enchylil, SDB.

The Editorial Board is genuinely pleased to appreciate the creative acumen of the staff and the taught as they contributed many poems and essays on the marvels of science, medicine and commerce. Even the poems in Tamil, are richly embedded with values of motherhood, patriotism and the significance of perseverance, determinations and goal setting. The abstracts of doctoral degrees also manifest the inexhaustible quest of the staff towards research. The annual report by the Principal and the reports of the various associations and outreach programmes sincerely treasure the activities of the college to savour in the future years.

A careful study of the report reflects a point that almost all the departments have taken painstaking efforts to render psychological counselling to the students to guide them which is indeed, the need of the hour.

As the chief editor I would like to whole heartedly thank the fellow editors and magazine committee members for willingly walking hand in hand with me. Rev.Dr.G.Theophil Anand, Vice Principal (Administration) Shift-2 shouldered the responsibility of collecting the articles and poems from all the contributors. His role in helping us to bring out this magazine is gratefully acknowledged. The support rendered by Mr.G.Sounder and Mr.J.Antony Amalraj deserves special appreciation and rich gratitude.

Each and every year reminds us that we have 'miles to go' and there isn't any limit to perfection. We shall aim at scaling greater heights of perfection in the years ahead.

Prof. N.Arul Doss
Editor

Editorial Board

1. Prof. N. Arul Doss
2. Prof. V. Madhan Kumar
3. Dr. G. Mohan Gandhi
4. Dr. A. Dhayal Raj
5. Dr. V. Collins Arun Praksah
6. Mr. J. Antony Amalraj
7. Mr. G. Sounder



Sacred Heart College, Tirupattur - 635 601,

68th College Day

Annual Report 2018 - 19

Pleasant evening to one and all present here.

I deem it a great privilege to stand before you on this joyous occasion of 68th College Day celebrations of Sacred Heart College and I take this opportunity to welcome our Respected Rev.Fr.Rector, Dr.C.Antonyraj, SDB, our distinguished Chief Guest, Prof. Dr.K.Murugan, Vice Chancellor, Thiruvalluvar University, Serkadu, Vellore, Additional Principal Rev.Dr.K.A.Maria Arokiaraj, SDB, Vice Principals of Shift-1 & 2, Deans, HODs, faculty members, parents, friends, well-wishers, members of the Press & Media and my dear students.

It has been a great and satisfying year for all of us and thanks be to God almighty and to our Blessed Mother, who through their benevolence and blessings have made this year a remarkable and memorable one.

“You will be blessed and you will be a blessing” promised our God and yes, true to His promises and blessings, we witnessed a year full of fruitful activities and meaningful accomplishments that make me stand before you with a sense of satisfaction and gratitude for all that has happened in our College.

In a special way, I thank Rev.Fr.K.M.Jose, SDB, the chairman of this college for his unstinted support for the growth and development of the College. He never wants the second, but always suggests the best for the institution and I whole heartedly thank him for his guidance and support for the development of this institution.

Rev.Dr.C.Antonyraj, SDB, the Rector and Secretary of this institution has been the motivating force for all our successes in our journey of excellence. Setting high standards in principles and practices of the College, he guides, motivates and inspires us every single moment and I profoundly thank him for his presence and help.

The services rendered by Rev.Dr.K.A.Maria Arokiaraj, SDB, as the Additional Principal of Shift – II are praiseworthy. Known for his exceptional leadership qualities and exquisite administrative abilities, he enhances the administration of the College and I thank him for his services.

My special thanks to Rev.Dr.Praveen Peter, SDB, who holds the office of Controller of Examinations along with that of Vice Principal - Administration for his tireless and noble support in conducting the examinations and also looking into the overall programmes of the College.

I take this opportunity to thank Rev.Dr.G.Theophil Anand, SDB, for his able administration as Vice Principal (Administration Shift-2).

My heartfelt thanks are due also to the Vice Principals (Academics) of both Shifts, Dr.S.R.Xavier Rajarathinam and Mrs.A.Josephine Sagaya Mala for their wonderful cooperation and help. I express my gratitude to the Deans of both the shifts, heads of the departments and all the faculty members across the shifts for making this year a remarkable one. The supportive role played by the non-teaching and support staff is noteworthy and I thank each and every one of them for their contribution to the growth of the College. It is my duty to thank the students along with their parents, well-wishers of the College for making it count on their part for the growth of this institution.

New Initiatives

Sacred Heart Research Day

Research being the advancement of human intelligence and knowledge moulds society in all dimensions. Sacred Heart College being one of the pioneers of imparting quality education has added another feather to its cap by strengthening its research cell and extending it vigorously in all dimensions. To mark this glorious achievement of dedicated research from staff and students, a maiden effort has been made to honour and show case to the world the research carried out by the college thus making it a red-letter day in the history of the college.

Sacred Heart College celebrated its first Research Day on 15th December 2018. The Resource Person for the day was Dr.D.Ravi Shankaran, Centre for Nano Sciences and Technology, University of Madras. Cash awards were given to the staff and students from arts and science departments. The best department for research was awarded to both arts and science departments. The best research award for faculty of arts was given to Dr.K.Parthibaraja, Department of Tamil. The best research award for faculty of science was given to Dr.S.A.Britto Antony Xavier, Department of Mathematics. The best research award to scholars was given to Rev.Fr.S.John Borg, Department of Mathematics. The best department of research for arts was awarded to Tamil. The best department of research for science was awarded to the Department of Biochemistry.

Fellowships (DB & SHC)

The Salesian System of Education has a unique way of mentoring and providing opportunities for staff and students to hone their talents and skills. One such initiative is the Don Bosco Research Fellowship and the Sacred Heart College Fellowship. During the academic year 2018-2019, 5 faculty members received a grant of Rs.2,73,200/- as part of the Don Bosco Research Fellowship Programme and 22 students received a grant of Rs.1,65,200/- as part of the Sacred Heart College Fellowship Programmes for the pursuit of research.

A Fresh Thrust on MOODLE Platform of Learning

Teaching and Learning Process is undergoing significant changes with the use of technology and Internet. The Learning Management System MOODLE (Modular Object Oriented Dynamic Learning Environment) has changed the process of knowledge dissemination in our College.

Sacred Heart College (Autonomous) has taken the initiative to promote online learning among students and staff members. As the future focus of Higher Education involves the complete digitalization with the aid of e-Learning platforms like MOODLE and MOOCs, I am proud to state that Sacred Heart College has incorporated the same and every department now has adopted MOODLE platform for its courses that enable vivid learning and interactions between staff and students via the internet.

Emphasis on online courses, SWAYAM etc.,

This year witnessed a surge in the online learning attitude of students and faculty members. Coming to terms with the technology based learning, many students and faculty members have shown a great interest in registering for various online courses offered under the auspices of NPTEL, SWAYAM etc. This year as many as 55 students have come out successful in the NPTEL courses.

Green Initiatives and Alternate Energy Generation

Mother Nature has the power to please, to comfort, to calm and to nurture one's soul. Sacred Heart College has always been very concerned and conservation minded towards Mother Nature. As part of its green initiatives the college conducts 'A No Drive Day' where all staff and students are asked to commute to college via the public mode of transport. This practice is continually being followed on every Monday.

New Curriculum

Progress is impossible without change, and those who cannot change their mind sets cannot change anything. Change is the end result of all true learning. In view of the same Sacred Heart College, has restructured its entire curriculum to meet the growing demands of the job market. The revised curriculum is now being meticulously implemented and is being followed by all departments.

Staff and Student Achievement

"Obstacles are the raw materials of great accomplishments. It always seems impossible until it's done" says Nelson Mandela. I take this opportunity to congratulate my fellow staff and students who have dreamed it, believed it and achieved it.

Staff Achievements

- Rev. Dr.K.A.Maria Arokia Raj, Additional Principal visited Sri Lanka from 17th October 2018 to 21st November 2018 and served as a resource person in English language training.
- Rev.Dr.G.Theophil Anand has been a visiting scientist to the Brunel University, London, United Kingdom.
- Dr.K.Parthibaraja was invited to London to represent Tamil Theatre carnival held from 7th to 15th October 2018.
- Dr.K.Parthibaraja was also invited to Sri Lanka to be a resource person at the conference held from 09th to 11th November, 2018.
- Dr.P.Bala Subramaniyan, Asst. Prof., in the Dept., of Tamil has been awarded the Best Researcher by the Govt. of Tamil Nadu.
- Dr.S.R.Xavier Rajarathinam, Head, Dept. of Chemistry was invited as the question paper setter and scrutinizer by the TNPSC, Chennai.
- Dr.D.Leslin, Head, Dept. of History was invited as the question paper setter and scrutinizer by the TNPSC, Chennai.
- Dr.S.Paul Raj, Head, Dept. of Social Work was invited as the question paper setter and scrutinizer by the TNPSC, Chennai

Students' Achievements

Between stimulus and response there is a space. In that space is the power to choose our response. In our response lies our growth and our freedom. Sacred Heart College always strives to be the stimulus and students in response to the stimulus continually work for growth, progress and perfection in every single way. The following students are duly mentioned for their noteworthy achievements.

- **V.Mahendran, II B.Sc. Mathematics** was selected as the students' Secretary of Tamil Nadu AICUF.

- **A.Premkumar, II MA Economics** successfully completed the Internship Programme offered by Institute for Social and Economic Change and worked on the topic entitled “Protected Area Management in View Point of Conservation and Local Livelihood Development - A Case study from MM Hills, Karnataka” in Centre for Ecological Economics and Natural Resources (CEENR), New Delhi.
- **Mr.Jarald Pushparaj** has been selected as the Assistant Coordinator for Tamil Nadu Jesus Youth Campus Ministry for the period from 2 years (2018 - 2020).
- The NCC Cadets **R.Shasmitha and N.Monisha (II B.Sc. Mathematics)** of 12 TNBN, Coimbatore Division won Gold and Silver Medal in the State Level Rifle Shooting Competition held in Madurai.
- **Certificate Course in Psychotherapy (University of Madras)** - 21 students participated in the Niraivagam Award Function held on 12th November 2018 and 11 students completed the course from the PG Department of Counselling Psychology.
- **Masters.Rajkumar and M.Sakthivel** of Commerce department were selected by National Management College, Peruindurai, in Auditors Exam CMA intermediate Examination organized by ICAI Kolkotta, held in June 2018.
- **Mr.Mohammed Wasil**, Project Assistant was selected to attend a two day workshop and three day conference on multi scale simulation and mathematical modelling held at Jawaharlal Nehru University, New Delhi on 28th January to 1st February 2019.

IGNOU Best Student Support Service Award 2018 for Chennai Region

IGNOU centre (SC2509) has been functioning at Sacred Heart College, Tirupattur, for the past 26 years and serving rural students in their pursuit of higher education. Every year around 600 students graduate through this centre. Nearly 8,000 students have completed their courses so far in our study centre.

Sacred Heart College, (IGNOU SC2509) was awarded the “**Best Student Support Service Award**” in the year 2018 for its novel endeavours and for the meritorious achievements of the student community. This prestigious award was received by Mr.R.Veerappan, Coordinator of IGNOU centre, on behalf of the College.

This award was announced for the first time and awarded to our IGNOU centre (SC2509), Tirupattur. We are also proud to announce that Miss Kavitha from our centre has been awarded the gold medal for the M.A. English Programme in the academic year 2016-2018.

Kerala Relief Flood

Charity originates from the heart as you feel. The urge of giving begins with the inward recognition of a need to show compassion to others and in this process some people ignore their own pains to relieve the pain of others. A deep sense of humanity was seen springing forth, when the neighbouring state of Kerala was devastated in the month of October 2018. The management, staff and students of our College donated generously towards the flood relief fund and a total of Rs.7,07,499/- was donated to the reconstruction of flood affected areas.

Cyclone Gaja Relief Flood

The greatest gift to our community would be when we contribute to making lives better; when we touch lives by dint of donations we spread light to the most needy and enlighten our souls in the process. When Tamil Nadu faced a severe cyclonic storm 'Gaja' on the night of November 15 and the early hours of November 16, 12 districts of the state were severely

affected. The members of Sacred Heart College once again rose to the occasion and contributed magnanimously Rs.7,07,355/- towards this cause. I am happy to mention that a total of 500 solar powered lanterns costing around Rs. 14 lakhs were purchased with the help of participation of IVDP which offered a matching grant and as a result of this a whole village glittered in the midst of their dark moments.

Online Payment of Fees

In order to facilitate hassle free and quick transaction of payments, Sacred Heart College has moved forward with introducing online payment platforms for many of the courses. This helps the students to pay their fees instantly without wasting their time.

College Web Site & University

Our College, under the initiation of Rev.Dr.D.Maria Antony Raj, who is the elected member of syndicate, has triggered the process of online University Seniority list preparation in the portals of Thiruvalluvar University. Our College has rendered its technical help to update the details of seniority list. This significant step would enable the staff to undertake University duties with much ease and comfort.

E-News Letter

The power of communication is enormously enhanced with the advent of technology and e-communication and has conquered every domain of mass communication. Our College has made a significant progress in bringing out the events of the College in the form an e-newsletter “Sacred Heart Times” published once in two months. This colourful and informative edition chronicles the important events of every department and the institution as a whole. The same version is also sent to the emails of all the staff members and students as a soft copy.

Examination Reforms

Promotion of quality and excellence in higher education justifies the reforms made in every sphere of its organisation. The office of examinations under the able leadership of the Controller of Examinations Rev.Dr.Praveen Peter and his associates has taken keen steps in bringing out quality results and helping the students to achieve better grades by way of transparent evaluation process. I take this opportunity to congratulate the Controller of Examinations Rev.Dr.Praveen Peter and his team.

The examination wing has also taken up a series of audits like question paper audit and audit of evaluation with the help of IQAC of the College.

Internal Quality Assurance Cell (IQAC)

The IQAC plays a significant role in ensuring the quality by decentralizing the roles and responsibilities, quality check mechanisms and participatory management in Administration. It also reviews the teaching-learning process at periodical intervals. This year the entire college geared up in the preparation and submission of Self-Study Report of 4th Cycle to NAAC. The SSR document was prepared based on seven criteria teams drawing faculty from various departments. Numerous meetings were conducted to prepare Institutional Information for Quality Assessment (IIQA) and SSR with 15,546 pages of supportive documents. The entire SSR is also available in the college portal.

Significant Activities and Contributions made by IQAC:

- Steps have been taken towards Renewable energy generation.

- The college has stepped into digital transaction and has facilitated the payment of fees by the students online.
- The college has published four e-News Letters 'Sacred Heart Times' to showcase the college activities.
- Annual Evaluation of the departments was conducted in April 2018 and October 2018.
- Physical Education Audit was conducted.
- Question Paper Analysis Level - I was conducted on 28th September 2018.
- Audit on Evaluation and Valuation system was carried out on 24th October 2018.
- A two day animation programme was conducted for the newly recruited faculty on 4th and 5th June 2018.
- A two day animation programme was conducted for junior faculty below 13 years of experience on 6th and 7th June 2018.
- A two day workshop on Leadership Training Programme was organized for the Heads of the Departments on 11th and 12th June 2018.
- All the faculty members drafted their annual development plan, teaching plan and updated their online personal profile in the college website.
- The teaching plan of all the faculty is made available on the college portal for the students to view.
- SHAPE is being conducted every month.
- CQC has paved the way for peer learning.
- SHELTERS has sensitized the students to cater to the social needs.
- IQAC reviewed the report of AQAR 2017-18 and submitted to the NAAC.
- IQAC organized Faculty Evaluation by the Students at the end of each semester. The analysis of the feedback was communicated to the faculty members by the Principal in April 2018 and November 2018 respectively.
- Applied for NAAC sponsored conferences entitled 'Opportunities and Challenges in Revised Assessment and Accreditation Framework for HEIs'.
- Applied for NIRF 2018.
- Applied for ASIHE 2018.
- The activities of the Non - Academic Associations are evaluated.
- Hard copies of the faculty publications are documented.
- Activities organized through MoU's are documented.
- Details of faculty members attending ON DUTY are collected and documented department wise.
- Activities organized through MoUs are documented.
- System for obtaining documents from various Departments is created.

Strengthening of the Data Centre

While knowledge dissemination is taken care of by the academicians of this institution, data dissemination of huge repository of entries is meticulously carried out by the data centre of the College. This year the entire unit is powered by a central IBM server with the inclusion of 15 support systems dedicated to digital learning to enhance the efficacy of e-learning.

New HODs

To be a leader in many ways means paving the way for pioneering efforts that will have an impact on our community and nation.

I congratulate Rev.Sr.Rosali Arulnathan, Life Education, Dr.J.Jacob Stanley Inbaraj, UG Economics, Dr.A.Xavier Susairaj, PG Economics, Mr.A.Arockia Nepolen Raj, UG Chemistry, Dr.V.Collins Arun Prakash, PG Chemistry and Rev.Dr.IJoe Sanjay OFM Cap, Counselling Psychology on accepting new portfolios as Heads of the Department and taking up the responsibility of leaderships to enable the smooth functioning of the departments.

Congratulations to you dear HODs.

New Teaching and Administrative Staff

The achievements of the College do not come easy. The drive for excellence permeates deeply in to the culture of the College and I take this opportunity to sincerely thank the entire staff for their professionalism and commitment in building up the college. Here are the new staff who joined us this year and I wish them all a great success in their career.

Mr.A.Arockia Selvan, Mr.R.Picasso, Mr.P.Sakthi Vendan, Mrs.M.Ananthi, Mr.V.Gopinath of Life Education, Mr.A.Augustine of English, Mr.M.Thanigajalam, Mr.D.Arun, Miss D.Saraswathi of Mathematics, Mrs.K.Kalaiarasi of Physics, Mrs.V.M.Divya, Mrs.A.P.Angeline Mary of Chemistry, Dr.M.Veeraragavan, Dr.K.Amala of Microbiology, Mr.S.Praveen Kumar of Management Studies, Mr.P.J.Naveen of Communicative English, Mr.T.Joseph Vinoth Kumar, Placement Officer and Administrative staff Mr.K.Seenu, Mr.M.Giftson Arthur.

New Doctorates

This is one of the sweetest things one's life. Yes a doctoral degree after the tireless efforts of an individual in his field of interest and research. I have immense pleasure in congratulating the new doctorates, who successfully defended their theses this year.

1. Dr.T.Selvam - Dept. of Social Work
2. Dr.P.Manoharan - Dept. of Mathematics
3. Dr.M.Manigandan - Dept. of Microbiology
4. Dr.S.Kalaiarasi - Dept. of Mathematics
5. Dr.J.Sasiganth - Dept. of Management Studies
6. Dr.M.Fernandus Durai - Dept. of Biochemistry
7. Dr.S.John Sundaram - Dept. of Physics
8. Dr.S.U.Vasanthkumar - Dept. of Mathematics
9. Dr.K.Kalaiarasi - Dept. of Physics
10. Dr.A.George Louis Raja - Dept. of Computer Applications

Farewell

It was such an exciting opportunity to have great people who made footprints in the annals of our College and in our hearts that we are never, ever the same. With much gratitude and due emotions we bid adieu to our dear senior members of our Sacred Heart College.

- ❖ Dr.A.Periyanayagasamy, Associate Professor, Dept. of Economics
- ❖ Mr.S.Jayaraju, Office Superintendent
- ❖ Mr.M.Danapal, Assistant

On behalf of the management and staff, I wish them a very happy and healthy retired life. May God richly reward their services to this institution.

Publication of Articles in Books and Journals

Research and publication complement teaching and training. Hence this institution of higher learning is striving to encourage all the faculty members and students to actively engage in research and duly publish their findings in reputed journals. I heartily congratulate the staff members and students who have successfully published many articles in national and international journals. This year alone a phenomenal number of 35 articles were published in Scopus Indexed journals and another 166 articles in UGC approved and other journals. Record number of 25 books were published by our faculty members during this academic year.

Projects

Award of FIST Funding

I feel proud and happy to announce the release of Rs.52,50,000/- as the first instalment of Fund for the improvement of S&T infrastructure in universities & higher educational institutions (FIST).

Besides, our staff members have successfully obtained funding from national funding agencies. I whole heartedly congratulate them on their success and wish them many more in the days to come.

Conferences & Seminars

Convergence of light brings illumination and so does convergence of excellence bring forth enlightenment. Conferences and seminars are such an enlightening experience for academicians and researchers and hence I congratulate all those who convened seminar or conference for a better dissemination of knowledge in their own field of interest.

- **Mr.D.Daniel Lawrence**, Asst. Professor of Physics has been awarded a grant of Rs.1,00,000/- from Tamil Nadu State Council for Science and Technology (TNSCST), Chennai, towards conducting a training programme.
- **Dr.S.Anbu**, Asst. Professor of Biochemistry obtained funding of Rs.10,000/- to organize a national level seminar on Adolescent Obesity funded by Tamil Nadu State Council for Science and Technology, (TNSCST) Chennai.
- First Seminar on Skill Enhancement Programme for Academicians and Researchers in Computer Science (SEPARC 2018) was held on August 24, 2018.
- **Dr.G.Mohan Gandhi**, Asst. Professor of Tamil has obtained a grant of Rs.75,000/- by Indian Council of Historical Research (ICHR), New Delhi for a two day seminar.

Memorandum of Understanding

- Sacred Heart College, Tirupattur, Vellore Dist., has signed MoUs with Nine Technical Universities and a Polytechnic from Ghana. Rev.Dr.D.Maria Antony Raj, SDB, Principal signed the MoUs along with his Ghanaian Counterparts on 25th August, 2018, Saturday at Chennai. The Collaboration was an outcome of the Delegations by the State of Ghana to explore the possibilities of Ghanaian students to take up higher studies in India. The Delegation from the Ghanaian government was led by Prof. Kwado Adinkrah Appiah, Interim Vice Chancellor, Sunyani Technical University, Ghana.
- An agreement was signed between Sacred Heart College and Sunyani Technical University, Koforidua Technical University, Kumasi Technical University, Kwame Nkrumah University of Science and Technology, Cape Coast Technical University, Accra Technical University, Takoradi Technical University and Bolgatanga Polytechnic. The agreement between Sacred Heart College and the Ghanaian universities is to jointly collaborate for student and faculty exchanges, organize study tours, conduct summer school programmes and venture in joint research in areas relevant to both Ghana and India.
- Rev.Dr.D.Maria Antony Raj, SDB noted that “Sacred Heart College is the only Arts and Science College signing up with the Ghanaian delegations, and we would like to carry forward in progressive engagements with them in terms of collaboration specifically in Student and Staff Exchange Programmes and joint Research initiatives”.
- The Ghanaian Universities were represented by Prof. Kwado Adinkrah Appiah, Sunyani Technical University, Dr. Nicholas Apreh Siaw, Koforidua Technical University, Dr. George Asumadu, Kumasi Technical University, Prof. Eric Kwabena Forkuo, Kwame Nkrumah University of Science and Technology, Prof. Sarah Darkwa, Cape Coast Technical University, Prof. Edmund Enyonam Kwaku Ameko, Accra Technical University, Rev. Prof. John Frank Eshun, Takoradi Technical University and Prof. Samuel Erasmus Alnaa, Bolgatanga Polytechnic.
- A memorandum of understanding was signed between Sacred Heart College and Don Bosco Civil Engineering institute, Metiyagane, Sri Lanka on 18th August 2018.
- A memorandum of understanding was signed between Sacred Heart College and Don Bosco Technical centre, Murunkan, Mannar, Sri Lanka on 17th August 2018.
- A memorandum of understanding was signed between Sacred Heart College and Salesian Province of St. Joseph, Thalahena, Sri Lanka on 16th August 2018.
- The Department of Biochemistry has signed an MoU with AWECARE Analytical & Research, Erode.
- The Department of Microbiology has signed an MoU with AWECARE Analytical & Research Laboratories, Erode.
- The Department of Tamil has signed an MoU with Government College for Women (Autonomous), Kumbakonam.

Infrastructural Developments

Renovation of Chemistry Labs.

Ask a scientist what he conceives the scientific method to be, and he will tell you without laboratories men of science are soldiers without arms. Our students now have an opportunity to excel in studies because of new state-of-the-art laboratories in our college.

The renovated lab offers a bright, new, clean, safe and well-equipped infrastructure. This allows each student to have up-close personal interaction with faculty members and gain hands-on experience in the use of sophisticated equipment. It facilitates the integration of activities that promote scientific writing and oral presentation skills being developed in a research-like atmosphere.

Motivated students have the unique opportunity to greatly expand their knowledge of organic chemistry, especially those who wish to pursue further studies in organic chemistry or to prepare for careers as synthetic organic chemists in the pharmaceutical industry.

Centre for Competitive Examinations

The Centre for Competitive Examinations was initiated in September 2018, under the leadership of Mr.S.Joseph, Associate Professor, Dept. of Mathematics, Sacred Heart College. Online Applications were received till 12th December 2018, for all the classes. Total number of students enrolled for various course is 379. Classes for bank coaching commenced on 22nd November 2018. Classes are conducted every day from 2.30 p.m. to 4.30 p.m. in Don Bosco Center. Qualified Teachers from Sacred Heart College and other colleges train the students. TNPSC, TET, PGTRB and Postal Service coaching classes will commence shortly.

Savio Sports Hostel and Guest Rooms

Every success achieved by a human being in this world is not a sign of individual thinking, but that of team work and collective efforts. Similarly, the rise of an Indian sportsman or team stems from its grass roots to stardom. Embedding the same our new sports hostel serves as the initial catalyst to sportsmen in the grooming of their love and passion for sports. In this same block, fully furnished guest rooms, sixteen in number, have also been built to house guests who come for various events and functions

New Sports Indoor Stadium

Sacred Heart College has always encouraged students to take up sports seriously; not just as an extracurricular activity but as a career choice.

As champions need motivation to soar high, our college has now gone one step beyond in the development of the new state-of-the-art indoor stadium.

As the number of students taking up sports is on the increase over the past few years, the College has decided to build a facility for the benefit of the staff and students. The stadium will provide a good platform for the aspiring sportspersons to enhance their skills and raise the levels to match international standards.

New Canteen Outlet

“There is no love more sincere than the love of food.”

- George Bernard Shaw

To cater to the expectations of our students, a new cafeteria distribution point was established. The food served at this station is carefully and thoughtfully prepared by our culinary team.

New Generator and Renovation of Power Panel

Electricity can transform people's lives, not just economically but also socially. Throughout the academic year, our college campus operates to full capacity. Classrooms and administrative facilities are full, and everyone relies on power every day. Undisrupted research and effective teaching with ICT requires emergency power during power outages. Power related problems like complete power outages, burnouts, voltage spikes, and other issues such as low voltage can cause downtime and substantial losses.

To offer more effective solutions and to meet the ever rising power demands of the campus, the college has now installed a new generator of 320kv capacity along with 240kv old generator. A state of art renovated power panel for optimum output has also been established.

Renovation of Presentation Hall – Silver Jubilee Building

Rapid and continuing advances in Information and Communication Technologies (ICT) are changing the way people share, use, develop and process information and technology. It is essential that the contemporary teacher has good ICT skills and is able to integrate ICT into the teaching and learning processes. Understanding the above need, the Presentation Hall of the Silver Jubilee Building has now been renovated with robust infrastructure and facilities to offer better learning dissemination.

Renovation of DMT Hall

Change is the end result of all true learning. The DMT Hall known for its infrastructure and outlook has also been renovated to offer new world ambience. It is now equipped with the latest technology which serves as a perfect venue for any college gathering.

Equipped with an inbuilt audio-visual system, the fully air-conditioned seminar hall offers good seating capacity. These facilities make it an ideal place to conduct meetings, workshops, seminars and presentations.

Additional Toilet for Women

Student's strength at Sacred Heart College has grown by leaps and bounds with the increase in the enrolment of women students. The college has understood that good health and hygiene are two of life's greatest blessings. In view of the same additional restrooms for women students have been constructed to ensure comfort, hygiene and cleanliness.

Construction of ATM counters

To facilitate payment of fees and other monetary transactions of the students and staff members, two new ATM counters one for Catholic Syrian Bank and another one for Indian Bank have been set up near the main gate.

Rinaldi Hostel Painting

Hostel is an integral part of every college. Life in a college hostel is full of pleasures and amusements. Hostel life makes a student self-dependent. It makes him smart, active and disciplined. It gives all the students an ample chance to learn how to lead an independent and responsible life. It plays a vital role in the development of the personality of the students. To ensure all this painting and infrastructure renovation project for Rinaldi Hostel was undertaken. The hostel now provides a better ambience with brighter, cleaner, safer and more refreshing space of stay for all our boys.

Laying Paver Block Lanes

The walking lanes of the College have received a new outlook with the laying of paver block stones on the ways that lead to canteen, college shops near the Carreno Hall etc.

Installation of Lift Facility

Facilitating the ease of users especially the differently abled and faculty members, in the Bicentenary Building a new lift facility was installed this year.

Installation of RO Water Plants

The College stands second to none in assuring healthy environment and life. In view of this, in addition to the existing systems, an additional RO purification unit was installed to supply quality drinking water to the students in MSW block and hostel inmates in Amalagam hostel.

The other significant infrastructure added to the College this year include

- ❖ Installation of server worth Rs.7 lakhs and 15 computers for networking.
- ❖ Construction of stores near the volley ball court.
- ❖ Installation of security cameras in all the hostels.
- ❖ Enhancement of green cover for silver jubilee and golden jubilee buildings.

Students' Services

Mid-day Meals Scheme

Our College is committed to the holistic development of the students especially catering to their physical and social needs. In view of this, the College offers mid-day meals scheme to the deserving students every day at a subsidized rate of Rs.10/- per meal. Thanks are due to the generous contribution from the management and Dr.D.Daniel Thomas, B.E., CEO of NEIHOFFF of India, Hyderabad who has contributed Rs.3 lakhs towards this noble cause.

Work Scholarship

In our College students are taught about dignity of labour too. Yes, students opting for work scholarship are given an opportunity to earn while they learn. Under the able guidance of Rev.Fr.Rector, 60 students have availed this scholarship and were helped to meet their financial needs.

Counselling Centre

The Seeding Hope Counselling Centre of Sacred Heart College provides a safe haven for all students enabling them to foster emotional intelligence, courage and self-determination in facing life with all its challenges.

In this academic year, about 403 students received help through our dedicated counselling centre. The department is headed by Ms.Latha Munswamy, our College Counsellor, who attends to the emotional needs of the students on a regular basis.

Placement Activities

“Success doesn't come to you. You go to it”. The Training and Placement Cell of Sacred Heart College has worked hammer and tongs in enabling students achieve their dreams with a number of Campus Recruitment Drives and Tailor Made Training Programmes. In the academic year 2018 -2019, a significant number of students was placed in reputed companies.

I congratulate and thank the placement office and the entire team headed by Rev.Fr.Selvaraj Varaprasadham for their unstinted support, cooperation and achievements.

Significant Events

“Find somebody to be successful for. Raise their hopes. Think of their needs, for success is never accidental” – says Barak Obama. I take great pride in presenting the list of notable events that have taken place in this academic year.

NAAC Peer Team Visit

The three member team from National Assessment and Accreditation Council (NAAC) visited our College on 28th and 29th January 2019. The following was the composition of the PEER Team: **Prof. Manimala Das, Chairperson, Prof. J.P.Pachauri, Member Co-ordinator, Dr.G.Valan Arasu, Member.**

SHC – Institute Lemonnier Collaboration

Thanks to the existing MoU with **Institute Lemonnier, Cean, France**, a team of 7 students visited our College under the student exchange programme and completed a 6 week course offered by the PG & Research Department of Computer Applications, Sacred Heart College.

Ranking by India Today

- ❖ As yet another feather in its cap, Sacred Heart College took part in IT survey conducted by **India Today** magazine during this year and was ranked **73rd place** among the Colleges in India.
- ❖ Rev.Dr.D.Maria Antony Raj, the Principal was selected as one of the two persons in whole of Tamil Nadu state to attend the Assessment Orientation Programme conducted by NAAC in the 11th Batch.
- ❖ I am happy to announce to you that our College has been selected as a recognized nodal centre for **Intellectual Property Rights** by the Government of Tamil Nadu and Dr.S.A.Martin Britto Dhas has been appointed as the nodal officer of this centre.
- ❖ The Graduation Day was held on 7th April 2018 and 1120 young graduates received their diplomas from Dr.K.Murugan, Vice Chancellor of Thiruvalluvar University when gave away the diplomas to the students.
- ❖ The college Annual Sports Meet was held on 28th July 2018. It was most encouraging where brave and genuine sportsmen and women battled for their honours. COL MP Peter Celestine and Mr. LT.COL S Pathak were invited as Chief guest and guest of honour respectively. Rev.Bro.Meril Rodrigo,SDB was invited as the special guest for this event.
- ❖ The chairman of the college, Rev.Fr. K.M.Jose, SDB inspected the college from 14th August 2018 to 17th August 2018 and gave his appreciation and suggestions for better progress of the Institution.
- ❖ The Parents meeting for students was conducted year wise which facilitated the interaction between the key stake holders of the College.
- ❖ Independence Day celebrations on 15th August 2018 echoed celebrating a world founded upon essential human freedoms.
- ❖ With gratitude, Teacher’s Day was celebrated on 5th September 2018 and the students generously appreciated the staff for their services.
- ❖ Colourful celebration of Cultural Fest known as HEARTBEAT - 2018 was conducted on 30th November 2018 and 1st December 2018.

- ❖ “We are a family” – was the key phrase that echoed as our institution celebrated the Community Day on 22nd December 2018.
- ❖ All the departments had their Board of Studies meeting during the month of December 2018 and diligently reviewed and updated their syllabi.
- ❖ Traditional celebration of Pongal festival was organized on 12th January 2019.
- ❖ Republic Day celebration and parade were conducted on 26th January 2019. Dr.A.Periyanayagasamy, the retiring Associate Professor, Dept., of Economics delivered the Republic Day address.
- ❖ The feast of our Father and Founder St.John Bosco was celebrated on 31st January 2019 with all pomp and grandeur.

Staff Development Activities

Orientation Course

During every moment of one’s existence, one is growing into more. You cannot dream yourself into a character; you must hammer and forge yourself into one. The following faculty members of Sacred Heart College have gone through various orientation programmes offered by top-notch institutions and universities across the country to update themselves into better instruments of teaching and learning:

1. Mr.V.Madhan Kumar - 24.05.2018 to 20.06.2018
2. Dr.R.Jude Vimal Micheal - 24.05.2018 to 20.06.2018
3. Dr.M.Maria Dominic - 18.05.2018 to 14.06.2018
4. Dr.G.Prakashraj - 17.05.2018 to 13.06.2018
5. Dr.S.Hariharan - 17.05.2018 to 13.06.2018
6. Rev.Fr.J.Andrews Raja - 24.05.2018 to 20.06.2018
7. Dr.K.Arockiaraj - 24.05.2018 to 20.06.2018
8. Dr.G.Mohan Gandhi - 16.08.2018 to 12.09.2018

Refresher Course

Personal development is a major time-saver. The better you become, the less time it takes you to achieve your goals. The refresher course is one such programme that offers faculty opportunities to hone their knowledge and skills to better achieve their goals. During the academic year 2018-2019 the following faculty members have undertaken the refresher course:

1. Mr.F.Julian Xercies Rigley - 19.06.2018 to 09.07.2018
2. Dr.V.Collins Arun Prakash - 08.06.2018 to 28.06.2018
3. Rev.Dr.Praveen Peter - 23.08.2018 to 12.09.2018
4. Dr.M.Anthony Arockiasamy - 16.11.2018 to 06.12.2018
5. Dr.S.A.Martin Britto Dhas - 23.11.2018 to 13.12.2018
6. Mr.D.Daniel Lawrence - 23.11.2018 to 13.12.2018

7. Dr.K.Sivakumar - 23.11.2018 to 13.12.2018
8. Dr.A.Royal Edward Williams - 23.11.2018 to 13.12.2018
9. Dr.C.R.Christi Anandan - 23.11.2018 to 13.12.2018
10. Mr.R.Sankaran - 28.01.2019 to 16.02.2019

Training Programmes

Personal development is a journey, not a destination. Dream big, develop yourself, unleash your potential, play well with others, play to your strengths, enjoy the process, and share your unique gifts with the world.

“Man’s life is independent. He is born not for the development of the society alone, but for the development of his self.” - Dr.B.R.Ambedkar.

The following faculty members have participated and undertaken various training programmes and have added feathers to their caps and new found knowledge to Sacred Heart College.

Date	Organizing Agency	Programme	Participants/Members
07.09.2018 to 14.09.2018	MHRD, Govt. of India and organized by UGC HRDC, Aligarh Muslim University held at Islamiah College, Vaniyambadi	Six day Training Programme on Academic Leadership under the scheme of Pandit Madan Mohan Malaviya National Mission on Teachers and Training	Dr.D.Leslin, Dr.K.A.Maria John Joseph, Mr.M.Arvinthraj and Mr.A.Peter Conisious Prabu.
08.09.2018 to 17.11.2018	Don Bosco Vocational Center, Murunkan, Mannar Dt., Sri Lanka	Three MoUs have been signed at Sri Lanka.	Rev.Dr.K.A.Maria Arokiaraj
22.09.2018 to 23.09.2018	St. Xavier’s Board, AIACHE meeting at Christ University, Hosur Road, Bangalore 560029	National Workshop and Annual General body meeting	Rev. Dr.G.Theophil Anand
13.10.2018 to 20.10.2018 Phase II	United Board for Christian Higher Education in Asia, Chennai	Help at Hand - Strengthening Faculty in Counselling Techniques to Facilitate Gen Z	Mr.J.Maria Leo Joseph, Miss M.Latha Munusamy and Miss M.Merlin Florence

27.11.2018 & 28.11.2018	Principal, Member of Autonomy Extension Committee to St. Joseph's College, Cuddalore, Tamil Nadu, Constituted by UGC	Autonomy Extension Committee	Rev.Dr.D.Maria Antony Raj
29.11.2018 30.11.2018 & 01.12.2018	Don Bosco School Campus, Riverbelt Colony, Dimapur, Nagaland.	DBHEI Annual General Body Meeting and Conference on "Progress of a Nation in Constitutional Way"	Rev.Dr.D.Maria Antony Raj
04.03.2019 to 05.03.2019	St.Joseph's College (Autonomous) Tiruchirappalli	"Autonomous Insitutions Marching towards University Status"	Dr.V.Collins Arun Prakash Rev. Dr.G.Theophil Anand
05.03.2019 to 06.03.2019	Govt. Degree College Shahpur Dist Kangra - 176 206 Himachal Pradesh	NAAC Peer Team Member	Rev.Dr.D.Maria Antony Raj
05.03.2019 to 06.03.2019	Department of Social Work Don Bosco College Panaji,Goa St Joseph Vaz Spiritual Renewal Centre, Ella, Old Goa	National Seminar on The Development of Indian Constitution and The Contemporary Challenges to Modern India	Dr.S.Sagayaraj Rev.Fr.J. Andrews Raja

Apart from the above mentioned programmes, the following meetings were organized to enhance faculty quality and commitment.

- A Four day animation programme for staff under 2 years of teaching experience from 4th to 7th June 2018.
- Two day leadership training programme for HoD's on 11th and 12th of June 2018.
- Two day staff animation programme for all the teaching staff on 13th and 14th June 2018.
- Annual retreat for two days for all the staff members on 29th and 30th October 2018.
- Monthly Mass for catholic staff is celebrated on the First Friday of every month.

Student Development Activities

Institutions offering higher education can become innovation hubs with students with creative and effective thinking to lead this country in future. Keeping this noble goal in mind, Sacred

Heart College encourages students to participate in various programmes conducted across the country to mould them and empower them. Here is the list of students who attended such programmes during this academic year.

- Four students attended the Leadership training programme (LEAD 2018) held at Don Bosco College, Yelagiri Hills from 21st May to 26th May 2018.
- The Cultural exchange programme was held in Kerala from 15th December to 31st December. 136 participants from all over the north east had attended. From our College, 3 students took part in this cultural exchange programme.
- To strengthen student mentoring, the SHAPE programme is conducted every month and all the I year students receive help from their mentors.
- The class quality circles functioning in each class serve as centres for peer learning and pave chance for the students to grow as a group.
- Soft skills training continues to be another flagship programme of our college and a weeklong bridge course programme was conducted for the newly admitted students to introduce them to the culture of the campus and to provide a smooth academic transition from school learning to college level learning.
- To improve Communicative Skills in English, language training was offered to the I year students by the department of Communicative English, throughout the year.

To emphasize and teach importance of faith in their lives annual retreat was conducted for all the catholic students from 6th July to 8th July 2018.

Women Empowerment Programmes

Our institution is very keen in bringing about an inclusive growth that encompasses the participation of women in all our endeavours by empowering them. To this end, the following programmes were conducted for the women staff and students.

- A special programme on ‘The Role of Women in Society and their Importance was organised on 12th July 2018.
- A Programme on “Psychological Problems for Women Students and their Management” was conducted for the girl students of UG II and III years on 28th August 2018.
- Women Students Meet was organized on 8th September 2018 for the UG students of the college.

A programme on “Dynamics in Relationships and their Management” was conducted for the girl students of UG II years on 25th September 2018.

Scholarships

Not letting socio-economic background of the students to be an impediment for learning, our institution has made keen efforts to obtain scholarships from government and non-governmental agencies for the deserving students. I am happy to present to you the details of the same.

- Government Scholarships: 2659 students benefited by an amount of Rs.2,03,18,485/-
- Universal Higher Education Trust Scholarship for the academic year 2018-2019 64 students benefited by an amount of Rs.3,46,000/-

- IVDP (Integrated Village Development Project) Scholarship provides assistance to orphan and semi-orphan students with a total No. of 151 students benefiting from the same and Rs.7,80,000/- being spent.

Students Strength

I am very proud to state that Sacred Hear College opens its services, care and enduring efforts of providing quality education to 4570 students in making them academically competent and better citizens.

The strength of each department is displayed below:

U.G. Students Strength (Shift - 1 & 2)

Courses	I Year		II Year		III Year		Total	
	M	F	M	F	M	F	M	F
B.A. Economics	65	12	54	17	41	13	160	42
Commerce	95	53	99	46	100	42	294	141
Mathematics	79	76	67	81	68	77	214	234
Physics	62	47	64	43	56	47	182	137
Chemistry	62	48	53	53	53	48	171	149
Computer Science	76	33	72	32	68	39	216	104
B.B.A.	58	18	53	13	52	13	163	44
Biochemistry	23	30	17	31	21	29	61	90
B.A. English	78	71	66	76	47	84	191	231
B.C.A.	44	10	42	12	33	20	119	42
B.Com (CA)	58	19	53	21	51	22	162	62
B.A. Tamil	39	38	30	29	18	45	87	112
Microbiology	28	27	18	29	-	-	46	56
Total	767	482	688	483	608	479	2063	1444

P.G. Students Strength (Shift - 1 & 2)

Courses	I Year		II Year		III Year		Total	
	M	F	M	F	M	F	M	F
M.Sc. Mathematics	24	66	24	61	-	-	48	127
M.S.W	27	17	19	24	-	-	79	110
M.Com.	9	12	7	10	-	-	16	22
M.A. Tamil	2	5	1	9	-	-	3	14
M.A. English	12	32	14	30	-	-	26	62
M.Sc. Physics	11	18	9	18	-	-	20	36
M.Sc. Chemistry	18	11	17	11	-	-	35	22
M.A. Economics	5	3	2	2	-	-	7	5
M.Sc. (CS)	12	14	7	18	-	-	19	32
M.Sc. Biochemistry	8	9	2	15	-	-	10	24
M.Sc. Counselling Psychology	10	8	6	14	-	-	16	22
M.C.A.	0	0	7	6	10	11	17	17
M.C.A. Lateral Entry	0	0	26	21	27	22	53	43

Courses	I Year		II Year		III Year		Total	
	M	F	M	F	M	F	M	F
M.B.A.	32	27	28	31	-	-	60	58
PGDHRM	18	16	-	-	-	-	18	16
PGDIEM	6	3	-	-	-	-	6	3
PGDLM	9	9	-	-	-	-	9	9
PGDMLT	3	13	-	-	-	-	3	13
Total	206	263	169	270	37	33	445	635

M.Phil. Scholars

Courses	M	F	Total
M. Phil Tamil	1	5	6
M. Phil English	2	5	7
M. Phil Economics	4	0	4
M. Phil Commerce	1	5	6
M. Phil Mathematics	6	10	16
M. Phil Physics	0	7	7
M. Phil Chemistry	2	2	4
M. Phil Computer Science	1	2	3
M. Phil Social Work	4	1	5
M. Phil Management	0	2	2
M. Phil Computer Applications	0	1	1
Total	21	40	61

Ph.D. Scholars

Courses	Total
Ph.D. Tamil	3
Ph.D. Management (MBA)	2
Ph.D. Commerce	1
Ph.D. Mathematics	8
Ph.D. Physics	1
Ph.D. Chemistry	1
Ph.D. Computer Science	3
Ph.D. Biochemistry	2
Total	21

Total Students - 4570

Male Students - UG: 2063 PG: 445 M.Phil. : 21 Ph.D.: 21

Female Students - UG: 1444 PG: 635 M.Phil. : 40

Teaching Staff Strength

Total Staff Members	-	200
Aided Staff	-	47
Management Staff	-	153

Administrative Staff Strength

Total Administrative Staff - 90

Aided Administrative Staff - 18

Management Administrative Staff - 72

Results

In our pursuit of excellence, we are determined and committed to achieve the results that our efforts deserve. Here are the details of the examination results for both the semesters of this academic year.

April 2018 Semester Examination Results

S.No	UG Courses	Year	Sentup	Passed	%
1	B.Sc. Mathematics	I	151	65	43.05
		II	147	100	68.03
		III	150	120	80.00
2	B.Sc. Physics	I	109	60	55.05
		II	103	73	70.87
		III	104	85	81.73
3	B.Sc. Chemistry	I	109	79	72.48
		II	106	92	86.79
		III	105	81	77.14
4	B.Sc. Computer Science	I	110	48	43.64
		II	105	72	68.57
		III	99	82	82.83
5	B.Sc. Biochemistry	I	52	30	57.69
		II	51	40	78.43
		III	48	45	93.75
6	B.C.A.	I	55	26	47.27
		II	53	39	73.58
		III	51	41	80.39
7	B.Sc. Microbiology	I	48	22	45.83
8	B.A. Economics	I	74	13	17.57
		II	57	17	29.82
		III	16	12	75.00
9	B.Com.	I	151	62	41.06
		II	143	48	33.57
		III	128	82	64.06
10	B.B.A.	I	76	10	13.16
		II	64	28	43.75
		III	57	39	68.42

S.No	UG Courses	Year	Sentup	Passed	%
11	B.A. Tamil	I	61	25	40.92
		II	64	05	07.81
		III	39	28	71.79
12	B.A. English	I	149	66	44.30
		II	131	77	58.78
		III	120	90	75.00
13	B.Com. (CA)	I	75	30	40.00
		II	75	49	65.33
		III	41	24	58.54

S.No	PG Courses	Year	Sentup	Passed	%
1	M.Sc. Mathematics	I	85	68	80.00
		II	83	78	93.98
2	M.Sc. Physics	I	27	22	81.48
		II	25	18	72.00
3	M.Sc. Chemistry	I	28	19	67.86
		II	27	22	81.48
4	M.Sc. Computer Science	I	25	18	72.00
		II	26	25	96.15
5	M.Sc. Biochemistry	I	16	16	100.00
		II	17	17	100.00
6	M.C.A.	I	13	10	76.92
		II	71	44	61.97
		III	64	64	100.00
7	M.Sc. Software Technology	II	12	11	91.67
8	M.Sc. Counselling Psychology	I	21	18	85.71
		II	20	17	85.00
9	M.A. Economics	I	05	03	60.00
		II	11	11	100.00
10	M.Com.	I	17	16	94.12
		II	17	10	58.82
11	M.S.W.	I	43	39	90.70
		II	43	43	100.00
12	M.B.A.	I	60	52	86.67
		II	57	49	85.96
13	PGDHRM	I	17	17	100.00
14	PGDLM	I	08	08	100.00

S.No	PG Courses	Year	Sentup	Passed	%
15	PGDIEM	I	12	12	100.00
16	M.A. Tamil	I	10	10	100.00
		II	02	01	50.00
17	M.A. English	I	44	41	93.18
		II	41	38	92.68

November 2018 Semester Examination Results

S.No	UG Courses	Year	Sentup	Passed	%
1	B.Sc. Mathematics	I	153	97	63.40
		II	148	94	63.51
		III	145	95	65.52
2	B.Sc. Physics	I	110	61	55.45
		II	107	79	73.83
		III	103	73	70.87
3	B.Sc. Chemistry	I	110	71	64.55
		II	105	70	66.67
		III	103	61	59.22
4	B.Sc. Computer Science	I	110	56	50.91
		II	105	56	53.33
		III	104	60	57.69
5	B.Sc. Biochemistry	I	53	37	69.81
		II	46	38	82.61
		III	50	42	84.00
6	B.C.A.	I	54	22	40.74
		II	54	25	46.30
		III	52	38	73.08
7	B.Sc. Microbiology	I	55	28	50.91
		II	44	25	56.82
8	B.A. Economics	I	76	11	14.47
		II	66	15	22.73
		III	54	14	25.93
9	B.Com.	I	146	64	43.84
		II	144	53	36.81
		III	140	52	37.14

S.No	UG Courses	Year	Sentup	Passed	%
10	B.B.A.	I	76	14	18.42
		II	66	25	37.88
		III	61	36	59.02
11	B.A. Tamil	I	76	22	28.95
		II	58	09	15.52
		III	61	37	60.66
12	B.A. English	I	145	45	31.03
		II	137	32	23.36
		III	128	61	47.66
13	B.Com. (CA)	I	77	15	19.48
		II	74	32	43.24
		III	74	46	62.16

S.No	PG Courses	Year	Sentup	Passed	%
1	M.Sc. Mathematics	I	90	75	83.33
		II	83	75	90.36
2	M.Sc. Physics	I	29	27	93.10
		II	27	26	96.30
3	M.Sc. Chemistry	I	29	27	93.10
		II	28	24	85.71
4	M.Sc. Computer Science	I	26	25	96.15
		II	25	20	80.00
5	M.Sc. Biochemistry	I	17	15	88.24
		II	16	14	87.50
6	PGDMLT	I	15	15	100.00
7	M.C.A.	II	60	36	60.00
		III	71	57	80.28
8	M.Sc. Counselling Psychology	I	18	16	88.89
		II	20	18	90.00
9	M.A. Economics	I	07	05	71.43
		II	04	04	100.00
10	M.Com.	I	20	10	50.00
		II	17	16	94.12
11	M.S.W.	I	39	38	97.44
		II	43	43	100.00

S.No	PG Courses	Year	Sentup	Passed	%
12	M.B.A.	I	59	40	67.80
		II	59	57	96.61
13	PGDHRM	I	32	31	96.88
14	PGDLM	I	18	18	100.00
15	PGDIEM	I	09	08	88.89
16	M.A. Tamil	I	06	06	100.00
		II	10	10	100.00
17	M.A. English	I	44	44	100.00
		II	44	38	86.36

Library

One of the many benefits of going to the library is an environment that instils the love for reading which leads to improved reading. We are very fortunate to have a wonderful library with a unique collection of books and journals and here is the list of events and achievements done through the library unit of our College.

- ❖ 2780 new Books and 7 new Journals were added to the library collections.
- ❖ 724 books published by McGraw Hill Publications were donated by Don Bosco Higher Education India (DBHEI) and the books are kept in Lending Section for Ready Reference.
- ❖ 7 Ph.D. dissertations and 85 UG & PG projects were added to the Research Cell.
- ❖ 800 published articles from peer reviewed journals were updated in the Library Software for PG and Research Scholars.
- ❖ 150 CDs / DVDs (Non-Book Materials) were added to the Library Collections.
- ❖ The library provides online literary collections from British Council Library-Chennai and American library – Chennai.
- ❖ A Library Tour was conducted for the newcomers (UG, PG & M.Phil.).
- ❖ 15 new computers with internet connection were added in Cybrary and Research Cell section.
- ❖ An Institutional Repository was developed to access NPTEL Video contents, e-books and Open Access Articles.
- ❖ An Archaeological Antique Gallery was placed in the Reading Room to exhibit the sources used by ancient people.
- ❖ Staff and students Library visit report is updated periodically in the college website.

Sports

I feel confident to mention that this institution offers adequate opportunities to all our students so that they realize their true potential and get ready to face the outer world to

perform and excel. Here are the students who had done notable achievements in sports and games and made their College proud.

1. R.Dinakaran, III B.A. Economics represented **Thiruvalluvar University Cross Country Team** participating in the All India Inter University Cross Country competition held at Gulbarga University, Karnataka.

2. M.Madhan, III B.Com represented **Thiruvalluvar University Athletic Team** participating in the All India Inter University Athletic competition held at Mangalore University, Karnataka.

3. A.Keerthivaran, III B.A. English represented **Thiruvalluvar University Best Physique Team** participating in the All India Inter University **Best Physique** competition held at University of Calicut, Kerala.

Extension Services

The extension services of the College aim at nurturing innovation and talent in science, technology and development that cater to rural development.

Staff Details

The centre functions under the able leadership of Rev.Fr.S.Henry Daniel Ambrose along with his team of dedicated staff members. Mr.P.Nicola Prakash coordinates the programmes in the capacity of project officer.

Projects Overview



Women Empowerment Self Help Groups (SHGs)

The women empowerment programmes of The Sacred Heart College Society focuses on bringing women together for creating a common platform for mutual trust and support. They borrow small loans from their SHGs which help overcome their dependency on traditional money lenders for petty credit needs. The SHG also allows women to set up small business for earning some income. Besides the financial autonomy, the SHG extends a platform for

these women to discuss social issues. It strengthens their solidarity, builds their confidence and allows them a space to unload trade and deliver solutions. Presently we run this programme in partnership with NABFINS (NABARD Financial Services Pvt. Ltd) and Indian Bank. Our SHG's have been engaged in enterprises like Coir Yarn Making, Coir Mat, Small Millets Value Additions, Masala Powder Making, Milk Value Additions, Vermi composting and Leaf Plate Making etc.

S.No	Particulars	Total
1	Total No. of Groups	611
2	Total No of New Group Formed	161
3	No. of Women	8554
4	Loan Linked Groups	102
5	No of Differently Abled SHGs	4
6	No. of Differently Abled Members	34

Joint Liability Group

We are assisting Joint Liability Group (JLG) in Vellore District with the support of NABARD. This is an informal group comprising 5 to 7 individuals coming together for the purpose of availing bank loan either singly or through the group mechanism against mutual guarantee. JLGs

can be formed primarily consisting of tenant farmers and small farmers cultivating land without possessing proper title of their land and women who wish to own any business or business activity of their own.

Name of the Block	No of JLG	Male	Female	Total
Tirupattur	33	39	139	178
Jolarpettai	21	27	83	110
Kandhili	13	7	64	71
Natrampalli	8	5	37	42
Total	75	78	323	401

Economic Assistance to SHGs and JLGs

The Sacred Heart College Society has been working as a catalyst in promoting and linking more and more SHGs to the banking system. We have close associated with NABARD Financial Services Pvt. Ltd. (NABFINS) and Indian Bank for credit linkage of the SHGs. The economic assistance provided by NABFINS and Indian Bank with regard to microcredit presented in the following Table reveals that 179 SHGs and JLGs as on 31.12.2018 were credit linked. The cumulative credit disbursed by them is Rs. 9.09 crores as on 31.12.2018.

S. No	Month	NABFINS		Indian Bank		Total	
		Total Groups Graded	Total Amt Disbursed	Total Groups Graded	Total Amt Disbursed	Total Groups	Total Amount
Self Help Groups (SHGs)							
1	April	4	30,85,000	-	-	4	79,75,000
2	May	13	61,73,000	11	48,90,000	24	80,43,000
3	June	12	59,24,000	6	18,70,000	18	1,13,69,000
4	July	15	65,65,000	11	54,45,000	26	65,65,000
5	August	10	42,20,000	7	32,40,000	17	74,60,000
6	September	20	1,44,05,000	2	11,85,000	22	1,55,90,000
7	October	17	1,04,85,000	5	18,40,000	20	1,23,25,000
8	November	15	1,09,60,000	4	17,60,000	19	1,27,20,000
9	December	14	66,30,000	8	41,80,000	22	1,08,10,000
Joint Liability Groups (JLGs)							
1	April to December	Nil	Nil	11	20,90,000	11	20,90,000
Total		116	6,84,47,000	66	2,44,10,000	179	9,07,67,000

Evening Study Centres

The Sacred Heart College Society runs 5 evening tuition centres in remote villages and slum settlements. These centers have been fairly effective in increasing the pass rates for the government examinations held in 10th and other grades, and in ensuring that children stay in school and not drop out. Children benefit from more individual attention and sensitivity to their community problems in these after school tuition centers.

S.No	Particulars	No of Students
1	DB Centre	32
2	Sivarajpettai	35
3	Sagaya Nagar	27
4	Anandapatti	56
5	Idaya Nagar	43
TOTAL		193

Family Counselling Centre (FCC)

The Sacred Heart College Society runs a Family Counselling Centre under the Bosco Institute of Social Work with the support of Central Welfare Board, Ministry of Women and

Child Development, Government of India, New Delhi. The Family Counsellors offer psychological, legal, economic, medical and educational support to women and children in need, primarily those who have been victims of domestic violence and family disputes. In all 390 clients and their families benefited during 2018-19.

Child Development

Creche Programme

The Sacred Heart College Society has been running two crèche centres funded by Central Social Welfare Board, Ministry of Women and Child Development, Government of India, New Delhi under the scheme of Rajiv Gandhi National Creche Scheme since 1986. Totally 90 children got benefited out of this programme. Supplementary nutritious food was given to the children for 25 days in a month. Emergency medicines were also given to the children. Play materials and educational aid were provided to the crèche children. Four safe cooking gas cylinder with cooking stove and vessels were provided to the both centres.

S.No	Name of the Place	No of Children
1	Sagaya Nagar	42
2	Sivarajpettai	48
Total		90

Entrepreneurship Development

Micro Entrepreneurship Development Programme (MEDP) on Designer Blouse

The Micro Entrepreneurship Development Programme (MEDP) on Designer Blouse was organized from 4th October 2018 to 31st October 2018. The valediction of the training programme and project album exhibition were held on 1st November, 2018 at 11.00 am at BISW Hall, Sacred Heart College, Tirupattur. The Chief Guest of the programme was Mr.Pradheep Kumar, Branch Manager, Indian Bank Microsate Branch, Tirupattur and the Guest of Honour was Ms.Divya, Assistant Professor, Queen Mary's College, Chennai. The Director Rev.Fr.S.Henry Daniel Ambrose welcomed the gathering and oriented about overall programme. The participants shared their feedback and thanked NABARD and Sacred Heart College for giving this opportunity. Mr.Pradheep Kumar and Ms.Divya distributed the certificates to the participants.

Entrepreneurship Awareness Programme for School Children

A six day camp was organised which allowed children to explore entrepreneurship, business concepts and ideas and to learn the value of money through a collection of interactive lessons. The school children had a hands on experience of running a business. The programme objective is to create awareness about entrepreneurship among the young children, to inspire and motivate them to take up entrepreneurship as a profession in the future.

The six day camp for the school students of IX to XI was inaugurated on Monday, 24th September, 2018 at BISW Hall, Sacred Heart College (Autonomous), Tirupattur. As part of

the programme, games, business activities and exposure visits were conducted to nurture young minds and to encourage them to be entrepreneurs.

Rev.Dr.D.Maria Antony Raj, Principal, Sacred Heart College delivered the key note address and commented, “There is a strong need to encourage job creators and catch them early, citing examples of many of successful entrepreneurs who had started off at a very young age. The important point here is that Department of Extension Education and Services is starting right at the school level and will go on to support them as they grow up to become entrepreneurs in the future.”

Entrepreneurship Awareness Camp (EAC) for Science Graduates

With a view to exposing students as well as faculty of academic institutions, offering degree/diploma courses in S&T, to entrepreneurship as an alternative career, Entrepreneurship Awareness Camps (EACs) were conducted by the Department of Extension Education and Services in Sacred Heart College. The camp was of 3 days duration and was conducted in the premises of Sacred Heart College and aimed at creating awareness among students about various facets of entrepreneurship while highlighting the merits of pursuing such a career option. In EAC, about 150 students were exposed to different aspects of entrepreneurship, including opportunity guidance, services offered by agencies of support system etc. A visit to the industries located in Kandhili was arranged to bring the students in direct touch with practising entrepreneurs.

Capacity Building for Adaptation of Technology (CAT) on Azolla Cultivation

The Capacity Building for Adaptation of Technology (CAT) on Azolla Cultivation training programme sponsored by NABARD was inaugurated on 21st November 2018 at Natham and Subamangalam Villages respectively. Mr.Azolla Balakrishnan from Katpadi, Vellore and his team presided over the function. Mr.P.Nicola Prakash, Project Officer, Extension Education and Services, Sacred Heart College (Autonomous), Tirupattur welcomed the gathering. Fr. S. Henry Daniel Ambrose, Director, Extension Education and Services, Sacred Heart College (Autonomous), Tirupattur delivered his keynote address and motivated the women to take-up Azolla as cattle feed to get more income for their livelihood. He also thanked NABARD for having given this opportunity to conduct the training for the rural women.

One Day Entrepreneurship Awareness Programme for Farmers on Aromatic Crop Cultivation and Oil Extraction

The Entrepreneurship Development and Innovation Institute (EDII), Govt. of Tamil Nadu, Guindy in association with Department of Extension Education and Services, Sacred Heart College (Autonomous), Tirupattur has organized a one day entrepreneurship awareness programme for farmers on Aromatic Crop Cultivation and Oil Extraction on 7th December 2018 at Community Hall, Madapalli. Mr. Sridhar Babu, Agri Scientist and Consultant shared his new insights about aromatic crops, cultivation, its uses and importance. A complete idea about crops, profits out of cultivation, benefits was given to the farmers with live samples of crop saplings.

Rev.Fr.S.Henry Daniel Ambrose, Director, Extension Education and Services, Sacred Heart College motivated the farmers to continue their agricultural practices and requested them to make use of the infrastructure of the college for their development. He also assured continuous support to farmers in the form of credit linkage and institutional tie-up arrangements. Around 40 farmers and 15 student volunteers took part in the programme.

Rural Mart for Gypsy Community

The National Bank for Agriculture and Rural Development (NABARD) has extended financial assistance to the Kurathi Women Self Help Group (SHG) to set up a rural mart, a first of its kind in the state for gypsy community, to provide a direct market – link for the products manufactured by them. The Department of Extension Education and Services, Sacred Heart College (Autonomous), Tirupattur facilitated the Rural Mart. The mart will be functioning as common outlet to promote and market the products of those SHG members and other community members.

Dr.C.Antonyraj, Rector and Secretary, Sacred Heart College delivered presidential address and spoke about student's institutional social responsibility (ISR) towards the development of gypsy community. With the students contribution, we were able to give economic assistance loan of Rs.19,80,000 for the 45 members. They are making very good products out of this loan. To market their products, we approached the NABARD under the scheme of Rural Mart and started the Mart in the Municipality Shopping Complex, Tirupattur. Rev.Dr.C.Antonyraj wished all the community members to benefit from rural mart by selling their products.

Participation in the Regional Workshop on Planning of UBA Activities in Village Clusters Adopted by Participating Institutes (PIs)

The regional level workshop was organized by IIT Madras in coordination with IIT Delhi for the planning of UBA activities in the village clusters adopted by the Participating Institutes (PI) on 06th December 2018 at Raman Hall, IITM Research Park.

Prof.V.Kalyanaraman and Dr.K.Sriram presented their initiatives for the rural farmer. They started online grocery store namely Land to Kitchen in Chennai. The objective of Land to Kitchen is to deliver farm fresh vegetables to customers like us, making online shopping for vegetables (and in time, more fruits) at an affordable price.

Unnat Bharat Abhiyan (UBA)

Unnat Bharat Abhiyan is flagship programme of the Ministry of Human Resource Development with the intention of enriching rural India. As of now 750 higher education institutes have been selected for this programme and Sacred Heart College is also one among them. Sacred Heart College has adopted five villages in three blocks namely Kethandapatti, Periyagaram, A.K. Mottur, Chinnakasinayakanpatti and Mookanur. We have started the village survey and individual household survey to find the areas of collaboration in these villages.

Networking Partners

- Central Social Welfare Board, Ministry of Women and Child Development, Govt. of India, New Delhi.
- State Social Welfare Board, Govt. of Tamil Nadu.
- NABARD, Chennai.
- Entrepreneurship Development Institute of India (EDII), Ahmadabad
- Department of Science and Technology
- National Commission for Women

- IIT, Delhi
- IIT, Madras
- NABFINS, Vellore.
- Tamil Nadu Corporation for Women Development, Govt. of Tamil Nadu.
- Indian Bank Zonal Office, Vellore
- Vellore District Central Cooperative Bank, Vellore.
- Don Bosco Foundation, Chennai.
- SURABI-Chennai.
- Vazhikatti, Chennai.
- Manitha Neya Maiyam, Tirupattur.
- Integrated Village Development Project (IVDP)

Concluding Remarks

Dear Friends,

A Year's end, is neither an end nor a beginning, but a process of going on with all the wisdom that experience can instill in us. For, great things are not done by impulse but by a series of small things brought together. And, as we continue to grow, we will attempt to be creative and innovative offering best possible learning experiences to our students. We will strive to create an environment of excellence and deliver superior services to achieve outstanding teaching and learning inside the campus. Each and every day in the life of this College, moments of accomplishments, moments of increasing demands, struggles and experiences have given more room to pause and give thanks for all that God has done in and through this great institution. When we see lives transformed, empowered and enlightened, we cannot but realize that the dream of our dear father and founder St. John Bosco is being fulfilled through this College in a big way. I pray to Our Blessed Mother Mary, Mother of all and our Father St. John Bosco to bless this Institution in all its future actions and decisions so that we will be contributing to the ethical, intellectual and economic prosperity of our communities and our nation. At this juncture, I place on record my sincere thanks to all the collaborators of Sacred Heart College for making this academic year a grand success.

Thank You and May God Bless Sacred Hearts!

Ph.D. Abstracts

Employability Skills of Postgraduate Students In Vellore District of Tamil Nadu

Employability skills refer to those basic skills necessary for getting, keeping, and doing well on a job (Robinson, 2000). A set of skills is required by graduates to get an employment. It is also named as generic skills, soft skills, foundational skills, job-readiness skills or career readiness skills. Employability skills are the ability to survive in a job (Rothwell & Arnold, 2007). Employment skills are the necessary skills required to perform any job effectively (Gravells, 2010). Based on these and many other such definitions and discussions, the researcher had operationally defined employability skills and its eight dimensions for the purpose of studying the variable. The dimensions are Written Communication, Verbal Communication, Planning and Organizing, Teamwork, Numeracy, Adaptability, Continuously Learning, and Technology Using Skill.

The problem of this research was to find whether the postgraduate students had employability skills. If yes, at what level they were? In which skills were they strong and weak? What were the factors associated with employability skills? Were employability skills predicted? If yes, what were those predictors? What promoted employability skills? What obstructed in acquiring employability skills? What could be the role of social workers in enhancing employability skills? Descriptive design and quantitative method had been followed in the study. 507 students were selected through systematic random sampling method. Questionnaire was used to collect data. Statistical tests such as 't' test, One-way ANOVA, correlation, and regression were applied to draw conclusions.

Overall employability skills score began from 73 to 352. The mean was 256.47 with the standard deviation of 40.723. 16%, 69% and 15% of the respondents had high, moderate and low level of employability skills respectively. Employability skills were significantly related to participation in co-curricular and career developmental activities, leadership experiences, first generation graduates and parents' education. Participation in career developmental activities and parents' education of the respondents significantly predicted employability skills of the respondents. The employability skills did not associate with gender, discipline of study, type of colleges and nativity of the students. Participation in competitions (essay writing, speeches, exhibitions, seminars and conferences), reading books, taking initiatives and responsibilities, participating in co-curricular activities, undertaking a special trainings and guidance (of parents, teachers and peers) were promoting factors of the employability skills. Negative self-belief about their ability, family conditions, unavailability of services such as mentoring, counselling, career guidance etc., lack of internal and external motivations were the obstacles in gaining and improving employability skills. Suggested roles of social worker to enhance the employability skills, are case worker, group worker, researcher, trainer, organizer, and educator.

Dr.T.Selvam
Asst. Prof., Dept. of Social Work

“Studies on Bioactive Potential of 1, 2 Benzenedicarboxylic Acid Compound Isolated from the Plant *Elytraria Acaulis* (Acanthaceae)”

In the present study the bioactive potential of the indigenous plant variety *Elytraria acaulis* from the family of Acanthaceae collected in Cuddalore District of Tamil Nadu, India. Antimicrobial activity of the crude extracts was tested against seven species of bacterial cultures (*Escherichia coli*, *Proteus vulgaris*, *Pseudomonas aeruginosa*, *Shigella flexneri*,

Klebsiella pneumoniae, *Enterococcus faecalis*, *Staphylococcus aureus*) and fungal cultures (*Aspergillus flavus*, *Aspergillus fumigatus*, *Aspergillus niger*, *Candida albicans*, *Candida krusei*, *Candida tropicalis* and *Candida glabrata*) by disc diffusion method and MIC was studied using macro broth dilution method. All the extracts showed maximum antimicrobial activity against all the tested especially the methanol extract showed maximum zone of inhibition against *E. coli* in bacteria and *C. albicans* in fungi. Phytochemical analysis showed the presence of phenols, flavonoids, tannins, alkaloids, saponins, steroids and carotenoids. Bioactive compound was isolated by using TLC, Column chromatography and identified by GCMS, FTIR and NMR techniques. 1, 2-benzenedicarboxylic acid was identified and its antimicrobial, antioxidant, anticancer and larvicidal efficacy was studied under *in vitro* conditions. The antimicrobial activity of the compound showed maximum activity against all the tested bacterial and fungal cultures. *In vitro* antioxidant activities possess maximum antioxidant capacity when compared with control agents. Human breast cancer (MCF-7) cell lines were used for the analysis of anticancer activity. The bioactive compound showed maximum activity against the MCF-7 cells with an IC₅₀ of 18.16 µg/ml at which 50% of the cancer cell death occurred. The larvicidal activity of 1, 2 benzenedicarboxylic acid at various concentrations was tested against the third instar larvae of three mosquito species with different time intervals of exposure viz., 24, 36 and 48 hours. The LC₅₀ values were observed in the ranges from 9-125 ppm against *Culex quinquefasciatus* and for *Ae. aegypti* it ranged from 33-120 ppm and 59-107 ppm for *An. stephensi*. From this research, it was observed that *E. acaulis* has natural therapeutic compounds. The abundantly available 1, 2-benzenedicarboxylic acid compound may be responsible for bioactive potential against all tested activities.

Keywords: antimicrobial, antioxidant, larvicidal and anticancer activities.

Dr.M.Manigandan
Asst. Prof., Dept. of Microbiology

Contributions to the Study of Stochastic Models in Inventory Theory

This study reveals the various factors that are related to the type of inventory. In inventory management or control, several models have been developed only with the prime objective of finding the optimal solution in the sense that it is cost effective.

In this dissertation, some new models of interest have been developed, namely:

- The inventory system with defective supplies and financial support for customers.
- Inventory Systems with SCBZ arrivals and randomly varying environment with defective supplies are treated.
- Probabilistic study on manufacture and sale of products with thresholds on running time and production size.
- Inventory systems with sales time depending on production time and size.
- Inventory system with threshold.

Based on these models the optimal solutions have been derived. These solutions are of practical use and importance, since they provide the optimal size of the inventory to be maintained and the following conclusions are drawn from the numerical illustrations worked out.

The study of probabilistic or stochastic models of Inventory systems is very much essential to study the problems which occur in real life situations. It is also observed that,

- As the finance rate increases the sale rate increases and the inventory level decreases.
- For SCBZ model, if expected time to change from season 1 to 2 decreases then expected stock level also decreases.
- As machine running time increases, expected value of sale time increases and when threshold of machine running time increases expected value of sale time decreases.

Dr.S.Kalaiarasi
Asst. Prof., Dept. of Mathematics (Shift-1)

Promotional Strategies and Patients' Satisfaction on Health Care Services of Private Hospitals in Chennai

Health care industry is growing at a tremendous pace owing to its skilled professionals, infrastructure, updated technology, various services and increasing expenditure by public as well private players. The private multi-specialty hospitals at Chennai have witnessed a tremendous growth in the last few decades. With an increasing demand for best treatment and best facilities, the private multi-specialty hospitals at Chennai have established with world class quality treatments, hi-tech equipment, expert and experienced professionals and sophisticated environment. Due to increased competition and inadequate funding the increased expectations of patients health care marketing is undergo a transition from service providers' dominance to service seekers preference.

Researchers in health care services are now directing their efforts to understand the perception on customers towards quality services which satisfy their needs and expectations. The study elicit the perception of the patients towards promotional strategies namely advertising, sales promotion, public relations and publicity, direct marketing and personal selling, effectiveness of sales promotional tools and the satisfaction of the patients towards health care services. The research design applied for the study is descriptive and analytical in nature. The study was conducted with 660 respondents and the sampling technique adopted for this study was convenience sampling technique.

The following major findings are given below: It was observed that,

- i) The Eta squared statistics value which indicates the difference between patients' perception on promotional strategies and effectiveness of promotional strategies has a large effect size.
- ii) The Eta squared statistics value which indicates the difference between patients' perception on promotional strategies and their satisfaction on health care services has a large effect size.
- iii) It was found that the effect of patients' perception on promotional strategies towards their satisfaction on health care services mediated by their opinion regarding its effectiveness promotional strategies are statistically significant.

The study concluded that the perception of the patients towards promotional strategies was at moderate level for all the select hospitals. The patients have low level of opinion regarding effectiveness of promotional strategies. The patients have very minimal satisfaction towards health care services. The hospitals have to adopt distinctive and attractive promotional strategies which make the patients perceive positively towards health care services. Thus, the multi-specialty hospitals should follow fair and adoptable promotional strategies to improve

the confidential level of the patients and to attract more patients to avail then services. Consequently, required care and concerted effort should be taken to improve the health care services to enhance the level of patients' satisfaction towards health care services.

Dr.J.Sasiganth
Asst. Prof., Dept., of Management Studies

“Studies on Protein Recovery from Tannery Biowaste and its Reuse in Leather Processing after Graft Copolymerization”

The Ph.D. topic aimed to exploit the proteinaceous byproduct of tanning industry for recovery of soluble protein product and its reuse in leather processing itself. The effort of the candidate to address this environmentally important and much needed issue, both basic as well as applied nature, has been carried out to establish the fact that the Chrome-laden biological solid waste generated as byproduct in the tanning sector can be used as a potential source for protein recovery which could be eventually recycled in leather making to improve the aesthetic value of finished leather.

The soluble protein products from the insoluble chrome-tanned collagenous waste, generated from the tanning industry. Prior to that, the physico-chemical properties of the tannery biowaste have been studied, in order to apply these parameters in the following studies.

The protein product extracted by thermo-chemical coupled the process for breaking the chromium-collagen bond and also to destabilise the collagen macrostructure. Further treatment of the biowaste by a protease, produced by using a *Bacillus* sp., resulted in protein hydrolysate. This protein product was characterised for its molecular, physico-chemical and thermal properties before and after graft co-polymerization with polymethacrylic acid. The grafted protein product was evaluated for its application as retanning agent in leather processing.

The presence of Cr at varying levels in samples subjected to different treatments was well established by X-ray diffraction technique, is highly impressive. Through this study, the conversion of Cr III into Cr VI was also confirmed. Overall the results brought out and the interpretations made thereof are very scientific.

Overall work adds weightage to the wastes generated in the tanning industry by demonstrating the recycling of the waste (of course, after converting into a product) in leather processing, to solve the problem of waste disposal faced by the tanneries. It is therefore a significant contribution by which the scientific communities of leather science/ technology, environmental science/ technology as well as the tanning industry would be enlightened.

Dr.M.Fernandus Durai
Asst. Prof., Dept., of Biochemistry

Development of Highly Efficient and Environmentally Stable π - Conjugated and Extended π - Conjugated Organic Stilbazolium Single Crystals for NLO Applications

Description

Nonlinear optics is the study of interaction of light with matter where some of the astounding phenomena like higher harmonic generation, up & down conversion and

two photon absorption are encountered. Applications that arise from these effects have made an impact in diverse fields such as photonics, bio-imaging, astronomy, defence and NLO spectroscopy. Among the organic NLO crystals, there has been considerable interest in the ionic D- π -A (electron donor and electron acceptor connected by a π -conjugated spacer) chromophores with large second order optical nonlinearities due to their potential applications, especially in the field of THz technology. Considering the importance of organic stilbazolium family crystals, which has major application in the field of nonlinear optical (NLO) and terahertz (THz) generation, the thesis centered on the synthesis, growth and characterization of π -conjugated organic single crystals of 4-N,N-dimethylamino-4-N'-methylstilbazolium 4-aminotoluene-3-sulfonate (DAAS), 4-N,N-dimethylamino-4-N'-methylstilbazolium p-chlorobenzene sulfonate (DASC) and 4-N,N-dimethylamino-4-N'-methylstilbazolium 3-carboxy 4-hydroxybenzenesulfonate (DSCHS) along with extended π -conjugated organic single crystal of 4-[4-(4-dimethylamino-phenyl)buta-1,3-dienyl]-1-methyl pyridinium p-chlorobenzene sulfonate (DACSC). These π -conjugated, highly efficient and environmentally stable crystals were grown as bulk crystals and their physicochemical properties were explored. These organic materials have comparable NLO efficiency to DAST and could not be so far crystallized in reasonable crystal size with good quality required for possible application. Therefore the growth of high quality crystals of the above mentioned organic materials remains as a challenge.

Dr.S.John Sundaram
Asst. Prof., Dept. of Physics (Shift-2)

Laplace - Fibonacci Transform by Second Order Generalized Difference Equations in Digital Signal Processing

A difference equation is an equation that contains sequence differences. There are various types of difference equations namely ordinary, delay, advanced, neutral, quasilinear, half linear, etc. These equations occur in numerous settings and forms, both in mathematics itself and its applications to Biology, Computer Science, Digital Signal Processing, Economics, Statistics and other fields.

The theory of difference equations, the methods used and their wide applications have advanced beyond their adolescent stage to occupy a central position in applicable analysis. In fact, in the last 15 years, the proliferation of the subject has been witnessed by hundreds of research articles, several monographs, many international conferences and numerous special sessions.

In numerical integration of differential equations a standard approach is to replace it by a suitable difference equation whose solution can be obtained in a stable manner and without troubles from round-off errors. However, the qualitative properties of solutions of the difference equations are quite different from the solutions of the corresponding differential equations. Solutions of several well-known difference equations like Clairaut's, Euler's, Riccati's, Bernoulli's, Verhulst's, Duffing's, Mathieu's and Volterra's difference equations preserve most of the properties of the corresponding differential equations.

The basic theory of difference equations is based on the difference operator Δ defined as, $\Delta u(k) = u(k + 1) - u(k)$; where $\{u(k)\}$ is a sequence of numbers. Many authors have suggested the definition of generalized difference operator Δ_l on $u(k)$, for real valued function defined on \mathbb{R} , as

$$\Delta_l u(k) = u(k+l) - u(k); \quad k \in \mathbb{R}; \quad l > 0$$

By defining the inverse Δ^{-1} , many interesting results on sum of partial sums of higher power of arithmetic and geometric functions and applications in numerical methods were obtained.

With the definition of Δ^{-1} , Discrete gamma function, Discrete beta function and generalized Laplace transforms are introduced. We derived general partial summation formula and by which we obtained summation formula of certain series on gamma function, gamma factorial function and the value of discrete beta series in terms of discrete gamma factorial function in the field of finite difference methods by getting closed and summation form solution to the higher order generalized difference equation.

We investigated the numerical-complete solution to certain type of generalized higher order difference equation and obtained sum of m-series and multi-series to circular and hyperbolic functions in the field of difference equation.

As a special case of multi-series, we introduced and discussed the Discrete Laplace Time Tuning Transform (LTTT) in the field of Digital Signal Processing (DSP). From the outcomes of our findings, we observed that LTTT gives innumerable outcomes by varying the Time Tuning Factor 'l' for the given input signal and this enables us to make a choice for an optimal one in DSP.

We introduced second order generalized difference equation with two parameters a_1 and a_2 and its inverse by which we obtained two parameter Fibonacci sequence and its sum. We also established a new type Laplace-Fibonacci Transform (*LFt*) by using inverse of second order generalized difference operator with two parameters. We discussed the outcomes of *LFt* on certain input functions (signals) by deriving several results on sum of two parameter Fibonacci series. From the outcome of our findings we observed that Generalized Laplace Transform (GLT) and Laplace-Fibonacci Transform (*LFt*) unlike Laplace Transform (LT) and Discrete Laplace Transform (DLT) gives innumerable outcomes for the given input signal and this enables us to make a choice for an optimal one.

For further research, one can generalize the two parameter Fibonacci sequence and its sum to n^{th} order and also can expand the generalized Laplace transform and Laplace-Fibonacci transform for fractional difference operator.

Dr. S.U.Vasantha Kumar
UG Head, Dept. of Mathematics (Shift-2)

Synthesis of Stable State Titanium Oxide Nanostructures, Properties and Applications

Research contributions in the recent past have magnified the applicability of TiO_2 at nanoregime, including its synthesis and applications. Despite ample investigations on the structures, mechanical and thermodynamic properties of TiO_2 NPs, inconsistencies and even contradictory results are not uncommon with regard to the stability of pure polymorphic phase of TiO_2 . This work is an exponent of the synthesis of highly stable Anatase phase TiO_2 NPs by utilizing controlled hydrolysis, hydrothermal, sol gel technique assisted biotemplated techniques by using Titanium isopropoxide and α - hydroxy carboxylato complex water soluble titanium precursors without the influence of additives and atmospheric conditions. The prepared samples were characterized by Powder X-ray diffraction, FT-Raman

Spectroscopy, Fourier Transform Infrared Spectroscopy, Thermogravimetry analysis, Differential Thermal analyses, Scanning electron microscopy, Transmission Electron Microscopy (TEM), Impedance spectroscopy and antibacterial test. Shock wave influenced phase transition in TiO₂ NPs was also experimentally demonstrated. Isothermal Johnson and Mehl and Avrami (JMA) and isoconversional Friedman's models were employed to comprehend the conclusive evidence of decomposition and crystallization kinetics of TiO₂ NPs.

Also this work demonstrates the effectiveness of anatase phase TiO₂ loaded with streptomycin for antibacterial activity against human pathogens causing Urinary Tract Infection. Interpretation from the antimicrobial activity of Gram positive and Gram negative pathogens that causes urinary tract infection loaded with streptomycin drug shows that TiO₂ assisted by aloe vera can be an effective antibacterial agent for practical applications.

Dr.S.Kalaiarasi
Asst. Prof., Dept. of Physics (Shift-2)

Construction of Lexicons from Semantically Clustered Text Documents and their Partial Order

The process of *Text Clustering* ensures the categorization of files into groups and thus augments their accessibility. Moreover, the text files which are clustered could be used more efficiently compared to the un-clustered pool of text files. The existing text clustering methods can be broadly classified into *statistical* and *semantic clustering*. The statistical clustering methods tend to group the text documents based on the statistical distance measures and the Semantic methods by measuring the semantic distances among the terms of the documents.

The semantic clustering methods are proven to produce better cluster quality compared to statistical methods. Through an elaborate literature survey, the premise of the research is focused on the study and improvement over the *technique*, *approach*, and *applications* of semantic document clustering. Over the several perspectives identifiable, the following were classified for improvement:

- (i) The *technique* of the semantic clustering methods group the documents by estimating the semantic similarity among the words by referring to a globally standardized *ontology* or *lexical* or *knowledge* bases. However, referring to an *ontological* or *lexical* or *knowledge* base results in finding the linguistic similarity among the terms instead of semantic similarity, an algorithm is proposed to cluster the documents based on Normalized Google Distance measure on abridged texts.
- (ii) The *approach* of the semantic clustering methods deploy all the terms inclusive of the *contextually significant* and *divergent* terms to cluster. An Algorithm is devised to perform clustering on the abridged text by including only the contextually significant terms.
- (iii) The *policy* of the semantic clustering methods perform re-clustering when a new document arrives into the system. An algorithm is designed to construct and apply lexicons from the documents to deny re-clustering.
- (iv) The *application* of clustering is limited to information retrieval. An algorithm is designed to construct the partial order of documents and to extend the application of clustering in Plagiarism detection and File De-duplication.

The proposed algorithms and methods were conceived, implemented and tested with suitable test corpus. The outputs were compared with the existing methods and analyzed for the performance. The results signify that the proposed methods yield improved outputs and have ensured the objectives. The constraints are identified and presented for future enhancements.

Dr.A.George Louis Raja
Head, PG & Resarch Dept. of Computer Applications

Academic Association Reports (Shift-1)

1. வீரமாமுனிவர் தமிழ் மன்றம்

வீரமாமுனிவர் தமிழ் மன்றத்தின் மூலமாக மாணவர்களிடையே கட்டுரைப் போட்டி, பேச்சுப் போட்டி, ஓவியப் போட்டி, வினாடிவினா போன்ற பல்வேறு விதமான போட்டிகள் நடத்துதல், மாணவர்களிடையே இலக்கியச் சுவையை வளர்க்கும் விதத்தில் கருத்தரங்கம், உரையரங்கம், சொற்பொழிவுகள், பட்டிமண்டபம் போன்றவற்றை நடத்துதல். தமிழுணர்வை வளர்ப்பதிலும், தமிழ்ப்பற்றை மேம்படுத்துவதிலும் மாணவர்கள் சிறந்து விளங்குவதற்கான செயல்பாடுகளை முன்னெடுப்பது. தாய் மொழிப் பற்று, சமூகம், கல்வி முதலிய பொருண்மையின் அடிப்படையில், திறமையுடன் மேடையமர்ந்து விவாதிக்கவும் இம்மன்றம் செயல்படுகிறது.

English Association (Foundation Course)

The Department of English conducted an invited talk on Developing Listening, Speaking, Reading, and Writing Skills on 04.09.2018. The Resource Person was Dr.X.John Paul, Department of English, VIT, Vellore. The talk was organized specifically for the language students. 80 students who are members of the association participated in the programme. The students of B.A. English, shift I coordinated the programme by singing the prayer song, performing the Master of ceremony and delivering the Vote of Thanks.

The Resource person was interactive during the session posing various questions on language. He displayed videos and pictures making it lively. Towards the end of the session he involved the students in a role play activity followed by group discussion. He addressed some of the major reasons for the lack of LSRW skills. The programme was organized by Mr.F.Julian Xercies Rigley, Association President for Language Students. An invited talk was organized on 12.11.2018. Mr.Shaik Kadar Nawaz spoke on the Topic Technology for learning English. The language students from shift I attended the talk. Mr.N.Arul Doss, Head, Department of English, felicitated and introduced Mr.Kadar Nawaz, the resource person. He spoke on the need for technology and how technology has developed recently by quoting examples of useful softwares and websites.

Department of English (B.A.English)

One Day National Symposium

A one day National Symposium was conducted by the English Literary Association.

The programme was held on 14th August 2018. The title of the Symposium was “The Growth of English Literary Studies.” The Resource person was Dr.Bennet, Asst. Professor of National College, Trichy.

A great number of 700 students and 100 faculties and research scholars from various colleges, participated in the Symposium. The resource person kept the session very lively and carried out the task in a well-organized manner.

Invited talk on Psychoanalytical Theory

An invited talk was conducted on 6th December 2018 on the theme “Psychoanalytical Theory”, Rev.Fr.Stanislaus, Professor of Fountain College, Krishnagiri, was the Resource Person.

Invited talk on Humour in Literature

An invited talk was conducted on 18th December 2018 on “Humour in Literature”. Rev.Fr.A.M.Matthew, Coordinator, Dept. of Management Studies, Sacred Heart College, Tirupattur, was the resource person. The resource person handled the session with a sense of humour. This created the awareness on the usages of humour in various walks of life. Examples were drawn from the field of English Literature.

Department of Economics (UG & PG)

The fresher’s day for the first year students was held on 27.06.2018 in Mother Theresa Hall at 12.40 p.m. Dr.A.Xavier Susairaj, PG Head and Dr.J.Jacob Stanley Inbaraj, UG Head, Dept. of Economics addressed the students. An invited talk on ‘Career is a Choice not a Chance’ was organized by Dr.U.Ramesh along with the association president on 20.08.2018 at Mother Theresa Hall. Mr.Piccaso, Asst. Prof., Dept. of Life Education gave an inspirational talk to the UG first year students.

The PG & Research Department of Economics conducted the 54th A.D. Shroff Memorial Elocution Competition sponsored by Forum of Free Enterprise, Mumbai. Adhering and abiding to the norms of the Elocution competition on 30th August 2018.

An invited talk on “Multiple Intelligence for Fresher’s” was organized on 12.12.2018 at Mother Theresa Hall. Rev.Dr.I.Joe Sanjay was the resource person.

He mentioned the importance of self-esteem and self-confidence. He introduced the terms attention, appreciation and love in the form of action. He also elaborated on confidence, concentration and motivation to the students. He insisted the students to say positive words of appreciation in front of the mirror daily to boost their self-esteem. The talk concluded with eight types of intelligence such as linguistics, mathematics and science, sports and dance, group activity, interpersonal and naturalistic respectively.

An Economic Quiz was conducted for first year students by the Association president along with the heads of the department on 11.01.2019 at Mother Theresa Hall. Totally seven teams of students participated and showcased their talents. Students eagerly participated and answered the questions brilliantly. Cash prizes for the winners were distributed during Econ Fest 2019.

Department of Commerce

The Commerce association started its events for the Academic year 2018-19 with the fresher’s welcome function on 7th June 2018 in which the first year students were given a warm welcome by the senior students. On 12th September 2018 a workshop on ‘Personality Development’ was organized for the 3rd year students. Dr.K.A.Agalya, from Sri Vasavi College, Erode, animated and trained the students on equipping them for their future. An Intra-Commerce Competition for the Department students was organized on 17th December 2018 in which six on stage competitions and six off stage events were conducted. The students actively participated and the programme was helpful in knowing the talents of the students. ‘WIZARDCOM’ the commerce club was inaugurated on 27th August 2018 with student volunteers who want to improve their job related skills like group discussions, aptitude, personal interview etc. an awareness programme on various competitive government exams was conducted on 4th February 2019. COMMITS 2K19 an Inter-collegiate

academic event was held on 19th February 2019 in which, around 150 students from the Commerce Departments of various colleges participated and exhibited their talents.

Department of Mathematics (UG & PG)

The Department of Mathematics conducted many association activities for the benefit of staff and students comprising curricular and co-curricular activities.

The association activities were inaugurated with fresher's day celebrations on 27th June 2018 for UG students participants enthusiasm made the activities rattling. For PG students fresher's day was conducted on 13th July 2018, and also an invited talk was organized on Q-Fibonacci sequence from Q-Difference Equation for PG students. Such activities made the students learn more about Q-Difference Equation. For this event resource the person was Dr.T.G.Gerly, Asst. Prof., Dept. of Mathematics (Shift-2), Sacred Heart College.

The PG and M.Phil students got benefited by another invited talk organized on 29th August 2018 on the topic "How to Start Research". The students were proud to have an eminent chief guest Dr.D.Ezhilmaran, Asst. Prof., VIT University, Vellore. On 5th September 2018, Teacher's Day was celebrated and the students expressed their gratitude to their teachers for their invaluable teaching and care.

The department organized an invited talk on 28th September 2018, by an eminent person from VIT University Dr.R.Sivaraj, Asst. Prof., Department of Mathematics, about some Applications on Calculus for III B.Sc. Mathematics and Research Forum students. On 29th September 2018, the department invited Dr.Duraisami, Asst. Prof., Department of Computer Applications of Tiruvalluvar University Constituent College of Arts and Science, to present, open office (Word Processing and Presentation) for II and III year UG students.

A fine demonstration session on MATLAB was given by Mr.Muthukumar, Asst. Prof., VIT, Vellore, for UG and PG Research forum students on 10th December 2018 to gain knowledge regarding MATLAB. An Introduction to Software Reliability was given to PG students by Dr.K.Karthikeyan Asst. Prof., Dept. of Mathematics, VIT, Vellore on 12th December 2018.

The department celebrated Ramanujan's Day on 19th December 2018. During this occasion the students actively participated in several events and expressed their enthusiasm. The department organized an invited talk on 9th January, 2019. The resource person was Dr.M.Pichaimani, Asst. Prof., University of Madras. It was organized for II Year PG students on "Mathematical Biology and its Scope". For learning Mathematics with Geogebra a software Demo was given by Mr.D.Vignesh (Ph.D. Research Scholar) for the PG students on 11th January, 2019.

In view of enriching the knowledge of the students a two days National Conference on "Applied Mathematics and Its Applications" was conducted on 5th and 6th February, 2019.

On 29th February 2019 National Science Day was celebrated. During this celebration an Intercollegiate Competition was conducted. About 15 colleges in and around the locality participated in the programme.

Department of Physics

UG Physics Department in its usual fashion had conducted many programmes like students' seminars, invited talks, competitions and outreach programmes during this academic year.

On 27th June 2018, the 3rd year students welcomed their fresher's in a friendly atmosphere. There were few ice breaking games, introducing of the staff members by the Head, Dr.A.Albert Irudayaraj.

The 1st year students went on an Industrial Visit to Visvesvaraya Industrial and Technological Museum, Bangalore, on 20th July 2018.

The annual sports meet was held on 27th July 2018. All the students participated with great zeal and cheer.

On 10th August 2018, ten students from the department visited Kavaloor Observatory. They participated in various competitions and won the overall championship.

The first invited motivational talk by Rev.Dr.I.Joe Sanjay, on the psychological theme, "Life Spirit" was held on 13th August 2018. The students appreciated it very much and benefitted a lot from the programme.

From 9th to 11th July 2018, the 2nd year students had gone for the outreach programme to Sundarampalli Village, Higher Secondary School. Dr.A.Dhayal Raj was in charge of the programme. The students had the opportunity to connect with school students by demonstrating physics experiments and to the people of the locality by way of visit and social awareness programmes in the evening.

Mr.D.Daniel Lawrence organized an Intra-departmental quiz competition on 30th August 2018. There was a great focus on the "Basic Physics and its related subjects". All the students who took part in the programme showed much enthusiasm.

The 2nd year students went on an industrial visit to Tenneco Automotive India Private Limited, Hosur, on 15th November 2018.

There was a student seminar on 23rd August 2018. Master.V.Vimalesh, Miss.S.Hemavathi, Miss.S.Suruthi, Miss.N.Fowsiya Begum, Miss.F.Sagaya Francy and Miss.N.Neethiarasi gave talk on the topics like INO (India Based Neutrino Observatory), Virtual reality, Carbon nanotubes, Pill camera, Gravity, and Driverless car. At the end of every presentation there was an interactive session. There was a learning atmosphere, and all the students who gave the presentation were much appreciated.

Teachers' Day celebration was organized by students' representatives on 5th September 2018. All the teachers were much appreciated and honoured for their dedicated service.

The 3rd year students went on an Industrial visit to Integral Coach Factory, Chennai, on 23rd November 2018. The students had the opportunity to see for themselves the manufacturing unit of light weight, all steel and welded integral railway passenger coaches.

The annual Cultural Fest was held on 1st December 2018. All the students participated with great zeal and enthusiasm.

In the month of February 2019, the department has organized 5 days seminar on, "Applications of Science and Technology for Rural Areas" sponsored by TNSCST. Also the department organized few scheduled programmes such as, intra-departmental sports and debate, two students' seminar, and two invited talks before the valedictory of academic associations on 22nd February 2019.

Department of Chemistry

Under the auspices of Chemistry association, the following programmes like fresher's day, invited talk and industrial visit were organized. The fresher's day was conducted on

27.06.2018 to welcome the first year undergraduate students. Followed by this, a session on career orientation for the first year students was organized on 21.07.2018. Another programme on interview skills and CV preparation was organized for III year students on 21.07.2018. A one-day industrial visit was organized on 17.09.2018 in order to provide a firsthand exposure to students. A programme on MOODLE training was conducted on 26.09.2018. In order to address the psychological needs of the students, a programme on emotional maturity was conducted on 18.01.2019. A special talk on eco-friendly approach to chemical methods was conducted on 20.02.2019.

Department of Computer Science (UG)

Fresher's Day for I B.Sc. Computer Science was conducted on 27.06.2018 organized by the III B.Sc. Computer Science Students. IT Quiz-I (Intra Departmental Competition) was conducted on 11.07.2018 at Pope Francis Hall. There were six teams with two members in each team. The Programme was organized by III B.Sc. Computer Science students. Workshop on Content Management System was conducted on 13.08.2018 at Pope Francis Hall. Mr.T.Prabakaran from the Dept. of Computer Applications was the resource person. It was very helpful for the students. IT Quiz - II (Intra Departmental Competition) was conducted on 14.07.2018 at Pope Francis Hall. Hands on training on Moodle was conducted on 28.08.2018 at Pope Francis Hall in which all the students participated actively. Mr.C.Sathishkumar from the Dept. of Computer Science was the resource person. Workshop on Online Softwares was conducted on 30.08.2018 at Oasis. Mr.C.Sathishkumar from the Dept. of Computer Science was the resource person. This workshop helped the students to acquire knowledge on the Online Softwares like photofunia photo editing tool, MSN online office tools (Word, Power point and Excel) and Google applications. The 10th State Level Inter Collegiate IT Fest SPACE 2K18 was Organized on 18.09.2018 at DBIS. Totally 247 students from various colleges participated. Mr.Joseph Velantine, Service Manager, Atos GITSS Pvt. Ltd, Chennai was the Chief Guest for the inaugural programme. Mr.S.S.Balaji, Product Manager, Bristlecone (A Mahindra Company), Bengaluru was the Chief Guest of the valedictory programme. Project Methodology-I was conducted on 10.12.2018. Mr.T.Prabakaran from the Dept. of Life Education was the Resource Person. It was very useful for the final year students to write project reports. Project Methodology-II was conducted on 14.12.2018. Mr.C.Sathishkumar from the Dept. of Computer Science handled the session. He started his session with the templates of Project Proposal, Project Plan and System Study with sample. The intra departmental IT Fest Commune 2K19 was organized on 15.02.2019 at Carreno Hall. The III Year students actively participated in various inter collegiate and intra collegiate competitions which gave them vast exposure and won prizes. A workshop on multimedia tools was conducted on 18.02.2019. It inspired the students to work and edit videos. Farewell for III year students was conducted on 30.03.2019 with preplanned entertainment shows by the II & I year students. The thanks giving day was organized by the department on the last day of the college working day with Holy Mass in order to thank God, for the blessing throughout the academic year.

Department of Business Administration

“Ethical Leadership” - 11.07.2018

The young leaders need to know how to manage and lead people through ethical practice. Keeping this as an objective, the association of Business Administration organized an

animation on ethical leadership. Rev.Fr.Joseph Leo SDB, Director- Anbu Illam led the animation program along with Mr.Jayaprakash the coordinator of Anbu Illam.

Management Lesson through Movie: Money Ball – 17.07.2018

A business today is focused on driving productivity. By watching money ball, students can explore the concept of behavioural economics extensively. It also shows students how our behavioural biases, observational biases and decision making limitations lead them to make systematically bad decisions.

“Artificial Intelligence in Management” by Mr.S.John Bosco, Asst. Prof., Dept. of Computer Science, Sacred Heart College – 19.07.2018

How the artificial intelligence can influence the present managers with the latest technology made the students to be aware of the new trend in management.

“Techniques on SPSS” by Dr.K.Anbalagan, Head, Dept. of Commerce (PG) Sacred Heart College – 06.09.2018

Dr.K.Anbalagan taught techniques in SPSS which influenced the participants to learn and apply them in their research activities.

National Conference: “Managing People in Digital Era”- 15.09.2018

The national conference on Managing People in Digital Era in collaboration with NHRD, Hosur chapter, made the participants to be courageous in managing people in digital era in organizations around the world. The insight of this seminar made the participants to be aware of verity of industries that ever focus on “people first” will lead to innovative thinking and dynamic results.

Department of Biochemistry (UG) and Microbiology

UG fresher’s day celebration was held on 27.06.2018. The newcomers introduced themselves one by one to the students and staff members of the department. The UG association Inauguration of the department was organized on 16.07.2018. The department of Biochemistry and Microbiology conducted its department level selection of paper and poster presentations for BIOZONE 2018. The participants brilliantly showcased their talents in the competition. Three prizes for the paper presentations and three prizes for the poster presentations were selected for BIOZONE 2018, and were distributed by the judges. The Department of Biochemistry and Microbiology organized its first International Conference on “Current Trends in Cancer Research and Therapeutics” (CTCRT-2018) in the 9th edition of BIOZONE on 29.08.2018. He thanked the resource persons for making themselves available for the international conference. The resource person Dr.J.Dinesh Kumar, Post-Doctoral Research Scientist, School of Physics and Astronomy, University of St Andrews, St. Andrews, UK delivered his talk on “The Role of Tumour Microenvironment in Cancer development and Progression”. Another resource person Dr.Poornima Paramasivan, Post-Doctoral Research Scientist, Molecular and Cellular Pharmacology Laboratory, School of Science, Engineering and Technology, University of Abertay Dundee, UK, delivered her talk on “Role of NRF2 in Drug Resistance and Cancer Therapy”. The valedictory function was presided over by Dr. S.R.Xavier Rajarathinam, Vice Principal for Academics, Shift-1.

The UG and PG associations of the department organized BIOCHAMP-18, CROWN OF GLORY, a talent hunt event for the department students. All classes from first year to final year PG competed in various events.

About 48 III year students visited Sri Ramachandra Institute of Higher Education and Research, Porur, Chennai on 24.09.2018. Dr.A.Jayaprakash and their class teacher Dr.V.Durga Devi accompanied the students. First they visited the Department of Human genetics and listened to the introductory lecture delivered by the Head of the Department, Dr.Soloman Paul. Second year Biochemistry and Microbiology students visited EXONN Biosciences, Taramani, Chennai as part of their industrial visit on 28.09.2018. Students were given explanation on PCR, flame photometer, MALTI-TOF, Fluorescent microscope, PCR and large scale fermenter by the Director Dr.S.Subburaj, EXONN Biosciences, Chennai. Students were very much impressed by this visit and learnt the expertise on the instruments in detail. Overall the industrial visit was a fruitful one and students were very much satisfied with the visit. The UG association of the Department of Biochemistry & Microbiology conducted Intra-Departmental JUDITH VOET Throw Ball tournament (2018-19) for girl students on 03.12.2018. The UG and PG Associations of the Department of Biochemistry and Microbiology organized a two days National seminar on “Adolescent Obesity: Physical fitness and dietary approach to weight loss” on 13th and 14th December 2018, catalyzed and financially supported by Tamil Nadu State Council for Science and Technology, Department of Higher Education, Govt. of Tamil Nadu.

An invited talk on the Applications of Biosensors was organized the resource person Dr.C.Jayakumar, Asst. Prof., Department of Chemistry, Sacred Heart College. The resource person delivered his talk on biomarkers and bio-indicators which help us to predetermine the diseases and environmental contamination stage and help us to act accordingly. A short film contest on Environment was organized students showcased their short films one by one. All the short films were in accord with the theme “Environment”. The short film of I year students won the first place and II year students won the second place respectively.

Department of Social Work

On 5th July 2018, ‘Induction Program’ was organized by the department for first year post graduate students of Social Work Department; aim of this program was to introduce the fresher’s to the course and the activities carried out in the department. As a sign of a good start the academic year of the department started with a ‘Holy Mass’ on 6th July 2018 celebrated by Rev.Fr.J.Andrews Raja and Rev.Fr.S.Henry Daniel Ambrose and they blessed the Department Staff and Students. As said ‘Welcoming is an art’, the second MSW students welcomed the first MSW students with a meaningful program and made the fresher’s feel one among the family in the Department.

The Department celebrated International Youth Day with an invited talk in August. ‘The Best Donation is to donate Blood’, being social workers, to inculcate this idea, the department organized a one day ‘Blood Donation Camp’ on 23rd August 2018 in collaboration with Christian Medical College (CMC), Vellore. A team of Doctors, nurses and technicians with all proper equipments came and collected blood from the students. Nearly 200 Donors from Sacred Heart College donated their blood willing by and the donors were rewarded by a certificate as a token of appreciation by CMC. As “Go Green” initiative the department started ‘Planting Saplings’. These saplings will be grown in the department by students and it will be planted and donated in and around Tirupattur.

On 10th September 2018 the students organized an awareness programme among the nearby village people as part of “Suicide Prevention Day”. On 11th October 2018 the Department organized a one day awareness programme for both I MSW and II MSW girls. The

programme was on “Handling Relationships”. Ms.M.Latha Munuswamy was the resource person and she took over the session as an interactive programme.

On 11th September 2018 Rev.Fr.Gandhi from Japan was invited to give a talk for the students. It was about the cultural difference between India and Japan and practices to be learned from Japanese. As part of physical development for the students the department organized a two day ‘Intradepartmental Games’ on 20th and 21st September 2018. For boys football and cricket was conducted and for girls throw ball and Shuttle cork was conducted. On 23rd November 2018 there was a one day awareness programme for students and teachers of a nearby school. It was on preventing “Child Sexual Abuse” by Dr. Louis from Germany. In the month of December the department organized a ‘Meaningful Christmas Day’ by sharing gifts and love to the people nearby.

We also organized a one day training program on ‘Attending Interview and Interview Skills’ and a one day seminar on ‘Rural Development’ in the month of February, ‘Women’s Day and Farewell Celebration’ in the month of March 2019.

Department of Computer Science (PG)

Fresher’s day for the First year students was celebrated on 13.07.2018 to welcome them to the department. In the month of July, 10 days bridge course on communication was conducted for both the first and the second year students to increase their speaking skills. Second year M.Sc., Computer Science students took various seminars on New Trends in Information Technology in the association activities during the odd semester which was held on every Tuesday afternoon. On 05.09.2018 Teachers Day was celebrated by the department to greet the faculties. State level Intercollegiate IT Competition SHARP’18 was organized successfully by the department on 06.09.2018. Around 10 students from nearby college actively participated in SHARP’18 and various events were conducted on that day in which the students exhibited their talents in the field of computer science. Students from II M.Sc., Computer Science participated in the IT Quiz Competition Tech Mania’18 organized by Islamiah Womens College, Vaniyambadi and won the second prize in the web spider event. Interdepartmental certificate course was conducted by the department for 5 days to enhance the students’ knowledge in the trend of programming with python.

Department of Biochemistry (PG)

PG fresher’s day celebration was held on 13.07.2018. The PG association inauguration of the department was organized on 16-07-2018. The PG and Research department of Biochemistry conducted its department level selection of Paper and Poster Presentations for BIOZONE 2018.

The participants brilliantly showcased their talents in the competition. Three prizes for the paper and poster presentations were selected for BIOZONE 2018, and were distributed by the judges. The Department of Biochemistry and Microbiology organized its first International Conference on “Current Trends in Cancer Research and Therapeutics (CTCRT-2018) in the 9th edition of BIOZONE on 29.08.2018. The resource person Dr.J.Dinesh Kumar, Post-Doctoral Research Scientist, School of Physics and Astronomy, University of St Andrews, St. Andrews, UK delivered his talk on “The Role of Tumour Microenvironment in Cancer development and Progression”. Another resource person Dr.Poornima Paramasivan, Post-Doctoral Research Scientist, Molecular and Cellular Pharmacology Laboratory, School of Science, Engineering and Technology, University of Abertay Dundee, UK delivered her talk on “Role of NRF2 in Drug Resistance and Cancer Therapy”. The valedictory function was

presided over and prizes were distributed and certificates were given by Dr.S.R.Xavier Rajarathinam, Vice Principal for Academics, Shift-1.

The UG and PG associations of the department organized 'BIOCHAMP 18-CROWN OF GLORY' on 07.09.2018 a talent hunt event for the department students. All the classes from B.Sc. first year to final year PG competed in the various events. The I year PG Biochemistry students visited Ideal Analytical and Research Institution, Puducherry on 20.09.2018. They gained knowledge about analytical techniques such as HPTLC, FTIR and AAS. The II year PG Biochemistry students went for an industrial visit to Centre for Laboratory Animal Technology and Research (CLATR), Sathyabama Institute of Science and Technology Jeppiaar Nagar, Chennai on 20.09.2018. This visit was useful to our students to know the importance and benefits of Animals in Biomedical Research. Also they learned about animal tissue culture, CPCSEA, IAEL and SCLA approval testing of animals.

The UG and PG Associations of the Department of Biochemistry and Microbiology has organized a two day national seminar on "Adolescent Obesity: Physical Fitness and Dietary Approach to Weight Loss" on 13th and 14th December 2018, catalyzed and financially supported by Tamil Nadu State Council for Science and Technology, Department of Higher Education, Govt. of Tamil Nadu. An invited talk on "Current Psychological Challenges among College Students" by Rev.Dr.IJoe Sanjay was organized on 10.12.2018. He explained imprinting, facilitating healthy life style, prenatal influences and unfulfilled prenatal stage.

Department of Counselling Psychology

On 19th June 2018, the Department of Counselling Psychology invited Mr.R.Picasso, Asst. Prof., Dept. of Life Education, to speak about "English for Employability" to the second year students. Rev.Fr.Mani Lazar on 27th June 2018 gave an animation skill class to the second year students and he mentioned the skills needed to develop to handle students. Fresher's Induction Programme was held on 3rd July 2018. The fresher's day was arranged by 2nd year students on 13th July 2018, in order to welcome the first year students and to build up friendly rapport among all the students.

On 21st July 2018 the department arranged Parents meeting and the staff members explained to the parents, the activities, rules and regulations, of the college and the department and the career opportunity. We celebrated Teacher's Day on 5th September 2018. We conducted Learning Disabilities course on 7th, 8th, 14th, and 15th September 2018, the resource persons were Rev.Fr.Paulraj, Mrs.Janat Christopher and Mr.Thaddeus Alphonso from Niraivagam, Chennai. The department had taken a significant effort to promote a campaign on Prolife in view of "World Suicide Prevention Day" on 10th September 2018.

The department conducted a national seminar on "Parapsychology" on 10th and 11th September 2018. Rev.Fr.Wilson OFM, Cap, Director of Anugrah a Institute of Counselling, Dinigul was the resource person of this seminar. There were 204 participants mainly, students, professors and counsellors from 13 educational institutions.

On 21st September 2018 we conducted seminar on "Love and Intimacy", the resource person was Rev.Dr.IJoe Sanjay. The Department had made a significant effort to promote the 'World Mental Health day' on 27th September 2018, which was universally celebrated on 10th October 2018. The Department is happy to report on the seminar conducted on Mental Disorders on 15th December 2018. The resource person was Mr. Kulandaisamy MSW, PSM, from Appa Mental Health Facility, Tiruvannamalai.

Department of Computer Applications (PG)

SHINE (Sacred Heart Informatics Network for Enterprises) provides a platform to showcase the students' talents and technical skills in the field of Computer Science and Information Technology. The association activities are conducted in every 6th day order during the last hour. The students are grouped into 10 teams with a staff in-charge. The teams were given schedule for presentation. Each team delivered a presentation on Current Technologies, Tools, etc. They conducted Quiz, Discussion, Interview Techniques, etc., in between the session and the team which performed well was awarded. Thus the students are motivated and given chance to improve their personal skill and technical skills.

SHINE association organized an intercollegiate symposium where 65 students from 10 colleges took part and exhibited their skills. Government Engineering College, Barugur won the overall championship. During this academic year, SHINE organized 4 invited talks by the alumni of our department. Annual workshop is scheduled for the month of February 2019.

Department of Management Studies

The young and aspiring PG & Research Department of Management nestled under the realm of Salesian convictions and practices always works with the motto 'to make things happen'. Inspired by the thoughts of Don Bosco the Department strives to nurture and develop socially responsible and committed students in every functional aspects. With this thought provocation the Department in the academic year has infused itself into commencing and organizing numerous events that sheds light on the core voices of the Department. In the beginning of the year the students were motivated to take up an Institutional visit to Siloam in Shillong, this was of profound use to the rural students in getting exposed to the international learning system and style. It was followed by the "Management Week" celebrations imbibing blood donation camp, rural visit, helping out the under privileged school children, supporting the homeless, aged persons and orphans with mutual support and concern etc., motivated the students to be socially responsible. Also the communicative skill training programme for the budding MBA students catalyzed to break their communication barriers and helped them emerge into better professionals.

Along with this an English communication programme in collaboration with VIT- Social Language Department to elicit the importance of English language to students was conducted. The Department also found the necessity of providing Placement induction training for final year students which was also done at the start of the final semester with experts with industrial experiences. With a need for inculcating Entrepreneurship exposure, the students were provided a workshop in which they were exposed to the current trends in market, the ways they should develop themselves for meeting the challenges of business and how artificial intelligence plays an important role in advancement in every field, this programme also met its core goal.

Academic Association Reports (Shift-2)

தமிழ் மன்றத்தின் சார்பாக

25.06.2018 அன்று நடைபெற்ற தமிழ்நாடு பெயர் சூட்டல் 50 ஆம் ஆண்டு பொன்விழா நிகழ்வை முன்னிட்டு நடத்திய போட்டிகளில் பங்குபெற்ற பரிசு பெற்று மாணவர்கள் சிறப்பிக்கப்பட்டனர்.

28.06.2018 அன்று தமிழ்த்துறை மாணவர்களின் படைப்புகளை வெளிக்கொணரும் வகையில் எழுதுகோல் சிறப்பு தனிச்சுற்று இதழ் வெளியிடப்பட்டது.

04.07.2018 கரெனோ அரங்கத்தில் காலை 10.00 மணியளவில் “சிறப்புத் தமிழும் அரசுப் போட்டித் தேர்வும்” என்னும் தலைப்பில் சிறப்பு பயிற்சி வகுப்பு நடைபெற்றது. இந்த நிகழ்வில் திரு ம.சாமிதுரை, செயல் அலுவலர், இந்து சமய அறநிலையத்துறை கிருஷ்ணகிரி அவர்கள் கலந்துகொண்டு சிறப்பு செய்தார்.

11.07.2018 போப் பிரான்ஸிஸ் அரங்கத்தில் காலை 9.30 மணியளவில் துறை பேராசிரியர்களும் மாணவர்களும் நூல் அறிமுகம், விமர்சனம் என்கிற அளவில் தேடல் ஆய்வரங்கம் நடைபெற்றது.

14.07.2018 அன்று இளங்கலை மாணவர்கள் அருகில் உள்ள ஏலகிரி மலைக்குக் கள ஆய்விற்காக அழைத்துச் செல்லப்பட்டனர்.

17.07.2018 கரெனோ அரங்கத்தில் காலை 10.00 மணியளவில் காமராஜ் என்கிற திரைப்படம் துறை பேராசிரியர்களும் மாணவர்களும் காணும் வகையில் திரையிடப்பட்டது.

20.07.2018 அன்று மண்டல கலைப் பண்பாட்டு மையம் நடத்திய போட்டிகளில் தமிழ்த்துறை மாணவர்கள் பங்குபெற்று வெற்றிபெற்று வந்துள்ளனர்.

11.08.2018 அன்று இளங்கலை மற்றும் முதுகலை மாணவர்கள் ஈரோடு புத்தகத் திருவிழாவிற்கு அழைத்துச் செல்லப்பட்டனர்.

13.08.2018 முதல் 17.08.2018 வரை ஐந்து நாட்கள் மாணவர்களுக்கு நாட்டுப்புற ஆடல் கலைகள் பயிற்சி அளிக்கப்பட்டது. இதில் திரு. சாமு திருப்பத்தூர், திரு. அபிசேக் ராஜ், சென்னை ஆகிய இருவரும் கலந்துகொண்டு பயிற்சி அளித்தனர்.

27.08.2018 கரெனோ அரங்கத்தில் காலை 9.30 மணியளவில் துறை பேராசிரியர்களும் மாணவர்களும் நூல் அறிமுகம், விமர்சனம் என்கிற அளவில் தேடல் ஆய்வரங்கம் நடைபெற்றது.

29.08.2018 அன்று தமிழ்த்துறை மாணவர்கள் மேற்குத்தொடர்ச்சி மலை திரைப்படத்திற்கு அழைத்துச் செல்லப்பட்டனர்.

30.08.2018 அன்று கவியரசர் கலைத் தமிழ்ச்சங்கம் நடத்தும் மாணவ, மாணவியருக்கான கவிதை, கட்டுரை, ஓவியம் ஆகிய போட்டிகளுக்கு மாணவர்களின் படைப்புகள் அனுப்பி வைக்கப்பட்டது.

எழுதுகோள் தெய்வம் (செப்டம்பர்-நவம்பர்) மாணவர்களின் இதழ் வெளியிடப்பட்டது.

15.09.2018 அன்று இளங்கலை மற்றும் முதுகலை மாணவர்கள் வரலாற்றுத் தடயங்களைக் காண அழைத்துச் செல்லப்பட்டனர்.

13.10.2018 அன்று எழுத்தாளர் சந்திப்பு நிகழ்விற்காக எழுத்தாளர் 'அழகிய பெரியவனோடு' ஒரு கலந்துரையாடல் நிகழ்ந்தது. இதில் துறைப் பேராசிரியர்களும் மாணவர்களும் பங்குபெற்றனர்.

18.12.2018 அன்று பகிர்வு தினத்திற்காகத் தமிழ்த்துறை இளங்கலை மற்றும் முதுகலை மாணவர்கள் தருமபுரியில் உள்ள திருநங்கைகள் வசிக்கும் கிராமத்திற்கு அழைத்துச் செல்லப்பட்டனர்.

09.12.2018 அன்று வேலூரில் உள்ள ஊரிசு கல்லூரியில் மற்றும் தமுஎகச சார்பில் நடத்தப்பெற்ற கருத்தரங்கத்திற்கு இளங்கலை மற்றும் முதுகலை மாணவர்கள் அழைத்துச் செல்லப்பட்டனர்.

25.12.2018 – 30.12.2018 வரை புதுச்சேரியில் நிழல் பதியம் சார்பாக நடத்திய பயிற்சிப் பட்டறையில் இளங்கலைத் தமிழ் மாணவர்கள் பங்குபெற்றனர்.

10.01.2019 அன்று சென்னைப் புத்தக திருவிழாவிற்கு இளங்கலை மற்றும் முதுகலை மாணவர்கள் அழைத்துச் செல்லப்பட்டனர்.

Department of English (UG & PG)

Report of Workshop on Theatrics

A five day workshop on theatrics (09-13 July, 2018) was organized by the Department of English, conducted by Mattru Nadaga Iyakam and coordinated by Mr.S.Prabhakaran, Assistant Professor of English, from 09.07.2018 to 13.07.2018. The first day of the workshop started with inauguration. Dr.G.Gopi from Pondicherry University was invited as the resource person. Dr.K.Parthibaraja, Asst. Prof., Department of Tamil (Shift-1), the president, MNI, was also present. Dr.G.Gopi presented the dynamics of the workshop and its purpose. He gave a brief introduction about theatrics and skills involved in it. Dr.K.Parthibaraja gave a talk on drama. Practical exercises and tasks were given in order to develop the theatrical skills of the students.

On the second day of the workshop, games were conducted by Dr.G.Gopi. Participants were divided into groups and trained to enact mimes on the given concepts. To enhance their creative thinking, participants were divided into six groups and were trained to act based on the given themes.

On the third day, Dr.G.Gopi taught, how to use properties in a creative way. Two groups were formed and games were conducted to test the interest and attentiveness of the participants. Tasks were given to develop their vocal skills.

On the fourth day Ms.Melodi, a trainer from the National School of Drama, Delhi joined the workshop. The participants were asked to present some general information about the authors and their works from literature. Participants were divided into six groups and asked to enact dramas by using the given properties.

On the fifth day the participants were divided into two groups and given practice for the performance. They enacted Nissim Ezekiel's poem *The Night of the Scorpion* in two separate groups. Students gave their valuable feedbacks. B.V.Srinithi Jasmin from I.B.A English told that she lost her shyness and fear at the end of the workshop. At the end of the valedictory function certificates were issued to the participants by Rev.Dr.K.A.Maria Arokiaraj. The great event came to an end with the college anthem.

Report of Invited Talk on Banned Books in Literature

On 07-09-2018 an invited talk was organized on the topic "Banned books in literature". The resource person was Mr.J.Jehoson Jiresh, Assistant Professor, The American College, Madurai. The talk covered various aspects of how a book is banned, the censorship, the right to speak and write and the significant aspects of various banned books. The talk was vibrant enough to kindle the minds of the students. It was appreciated by many.

Report on ELLITES – 2018

The Department of English gloriously organized 'ELLITES 2018' on 12th September 2018. The event brought the neighbouring colleges to the realm of joy and happiness, a wide opened opportunities for the students to exhibit their talents and to develop unity among themselves.

The programme started as it had been scheduled, with the inauguration. Rev.Dr.G.Theophil Anand, Participants had come from sixteen colleges. The department planned to conduct ten programmes. Each programme was creative in its unique way.

These were the following programmes:

1. Poetry Enacting
2. Dramatic Monologue
3. Pageant Show
4. Lit Quiz
5. Block and Tackle
6. Compose and Sing
7. Improvised Skit
8. Memory Contest
9. Pen a Poem
10. Fig on Face

Six judges from different realms of arts, Rev.Fr.A.M.Mattew, Rev.Fr.Selvaraj Varaprasadham, Rev.Fr.Mani Lazar, Rev.Fr.Issac, Rev.Sr.Sobitham and Miss.Renuka Devi, have meticulously judged the participations of the students of both off and on stage events. Miss.Safrin the HR of IAC Academy presided over the function and wished the participants. The winners were awarded with prizes. Auxilium College raised the over - all championship defeating Loyola College, Vetavelam, the defender of the cup for past two years.

Report of workshop on Research Methodology

Department of English (Shift-2), Sacred Heart College (Autonomous), conducted a workshop on 'Research Methodology' on 20.09.2018. Around 80 students from PG attended the seminar. The objective of the workshop was to stress the importance of M.L.A. Handbook eight editions. **Report of Lit Week 2018**

The Department of English (Shift-2), Sacred Heart College (Autonomous), conducted "Lit Week 2018" from 10.12.2018 to 14.12.2018.

The objective of this programme was to promulgate the creative talents of students of the department. Various colourful and memorable literary events were organized successfully.

The first day started with a grand intellectual Debate by II MA students. The topic of the debate was "Who understood human better Romantics or Victorians". Two teams with seven participants each participated in the debate.

On the second day a luminous parade was presented by I BA students. They performed radiant parade on the stage which was a grand treat for our eyes.

On the third day, I MA students stormed the stage with their creative skit with literary background. Three different skits were enacted.

On the fourth day a marvelous mime show was performed on stage by III BA students. Five different groups performed in a fantastic way.

On the fifth day, the students of II BA presented a "Dramatic Monologue" from various literary pieces. The students participated and performed energetically. On the fifth day Rev.Dr.K.A.Maria Arokiaraj, Additional Principal, Head, PG, Department of English and Mrs.Mary Jenif, Head, UG, Department of English graced the occasion by their presence. Students gave their valuable feedbacks. The great event came to an end with the college anthem.

Department of Commerce (UG & PG)

An "Intra Department Competition on Paper Presentation" was conducted by the Department, for the UG Students at Mother Teresa Hall on 01.08.2018. 1st Year. Dr.A.Arockia Mary, Assistant Professor, Department of Business Administration, was the chair person in assessing and conducting the competition for the UG students. Totally 10 students (5 each from 2nd and 3rd B. Com.) had given their name for this event but only 9 of them participated.

An "Intra Department Competition on Paper Presentation" was organized by the Department, for the PG Students at Mother Teresa Hall on 01.08.2018. Mr.P.Saravanan, Head, Department of Commerce (CA) was the chair person in assessing and conducting the competition for the PG Students. 10 students (5 each from 1st and 2nd M.Com.) had given their name for this event but only 8 of them participated.

An "Inter Collegiate Competition - "CONFLUENCE 2K18" was organized and conducted by the Department in Carreno Hall on 30.08.2018. Totally 174 students participated from 10 colleges (with 16 different departments).

After the Inauguration of the programme, the on-stage events were conducted by the concerned organisers in the following order: 1. Just A Minute (by Dr.A.Sankar); 2. Logo Identification (by Mr.G.Rajkumar); 3. Business Quiz (by Mr.S. Karthik); 4. Identifying Personality (by Mr.J. Berkman); 5. Connexion (by Dr. G. Devi).

Simultaneously, the following off-stage events were also conducted by the concerned organisers in the department, viz., 6. Stress Management (Organizer - Mrs.M.Sangeetha); and 7. Movie Making (Organiser - Dr.K.Anbalagan).

Mementos were distributed to the winners of the 1st and 2nd place of the individual events. Overall Championship Trophy (Memento) was distributed to the winner colleges in the following order:

- 1stPlace - Don Bosco College, Yelagiri (BBA)
- 2nd Place - Islamiah Women's College, Vaniyambadi (BBA)
- 3rd Place - Marudhar Kesari Jain College, Vaniyambadi (B.Com (CA))

Certificates were distributed to the participants and the winners of all the individual events.

An invited talk on “Awareness on Savings with Best Investments” was organized by the Department, for the UG Students on 11.01.2019 Resource Person Talk (I) was given by Mr. N. Nagarajan, Advisory Agent for Investments, Max Life Insurance Co., Ltd., Chennai. Resource Person Talk (II) was given by Mr. J.C.Thirumurugan, CEO & Financial Planner, Wealth Creation and Management Services.

An invited talk on “Special Lecture on Research Report Writing” was organized by the Department, for the PG Students on 11.01.2019 Resource person was by Dr.M.Raguraman, Head, PG & Research Department of Commerce, Govt. Arts and Science College, Barugur. Vote of Thanks was given by Mr.B.Girish, M.Com., 2nd Year.

Department of Mathematics (UG & PG)

The Department of Mathematics commenced the association activities by conducting freshers' day for UG students on 27.07.2018 and for PG students on 13.08.2018.

We invited Dr.M.Gunasekaran, Assistant Professor, Sri.Subramaniasamy Government Arts College, Tiruttani on 01.08.2018 who gave a talk to the UG and PG Students. On 28.08.2018 a written quiz (non-verbal reasoning) was conducted for the UG and PG students for developing their Basic knowledge.

We invited Rev. Dr.I.Joe Sanjay, Head, Dept. of Counselling Psychology, Sacred Heart College, On 28.09.2018 to deliver a talk on “Healthy Boy-Girl relationship” for the UG students.

We organized a Staff Seminar on 25.09.2018 and Dr.D.Ajay, Department of Mathematics delivered a talk on “Fuzzy Logic and Its Applications” for the PG students. We conducted a Workshop on MS Office on 07.12.2018 for the UG students for which Mr.P.Karthik, Department of Computer Science was the resource person.

On 12.12.2018 a lecture was organized for the PG students by Dr.B.Chandrasekar and Dr.S.U.Vasantha Kumar for which Dr.K.Karthikeyan from VIT University was the Resource person.

We celebrated Ramanujan's Day on 18.12.2018 in which various events such as Oral Quiz, Identifying the Diagram, Math Glossary, Mute Monomial, Connexions and Poster Presentation were organized and conducted by the department. The whole department was divided into eight groups and the events were conducted. The group which won the overall was given a rolling trophy. This event was conducted in view of for building up of unity and competitive spirit among the students. We organized students seminar for the PG students on 11.01.2019.

National Conference on “Discrete Mathematics and its Applications” was conducted on 06.02.2019 & 07.02.2019 in collaboration with Shift-I. We have organized “Computational Software Mathematics” for the PG students on 28.02.2019.

In the Second week of March 2019, the department magazine Omega 2019 will be released.

Department of Physics (UG)

On 20.06.2018, the secretary and Joint secretary election took place in the Department of Physics in presence of HOD, president and class teachers. A.Dhinesh of III B.Sc. Physics was elected as the Secretary and K.Thenmozhi of III B.Sc. Physics as joint secretary of Physics Association.

The fresher’s day celebration for I year UG was organized in the department on 27.06.2018. The II and III year UG students along with the staff members formally welcomed the I year UG students. Mr.M.Aravinthraj and Mr.L.Anandaraj were in-charge of this programme.

The birth anniversary of Prof.Vainu Bappu was celebrated at Vainu Bappu Observatory, Kavalur on 12.08.2018, in which 10 students from UG and PG participated in the event. In view of this, they have organized many programmes such as Quiz, Paper presentation etc. Our students participated and won the overall championship. Mr.D.Magimai Antoni Raj was the programme co-coordinator.

A one day students seminar was organized by the department on 23.08.2018 5 students participated and gave lectures on current trends in Physics. Mr.G.Jayakumar was the programme co-coordinator.

Teacher’s day was celebrated in the Department of Physics on 05.09.2018 in APRC. All the teachers participated. Mr.G.Jayakumar was in-charge of this programme at the department level.

On 07.09.2018 the Department of Physics (Shift-II) inaugurated its Silver Jubilee celebrations, with two invited lectures. Dr.A.Stephen, Professor, University of Madras, Chennai and Mr.K.Hari, Scientist E, Gas and Turbine Research Establishment, Defence R&D Organization, Bangalore came as resource persons. Mr.R.Dhanapalan, Former Professor, Department of Physics, Sacred Heart College, Tirupattur was the chief guest for the inaugural function.

On 19.09.2018, Dr.S.Kalaiarasi, Asst. Prof., Department of Physics delivered a special lecture of her field of research.

On 28.09.2018, students from 1989-92 batches celebrated the Silver Jubilee reunion. Rev.Dr.D.Maria Antony Raj, Principal, felicitated and addressed the gathering. Following this, Dr.S.Veeraraghavan, Mr.R.Dhanapalan and Mr.K.Shanmugam felicitated and shared their experiences in the college. To help the economically weak students, the alumni provided financial support, which was the most important event of the alumni meet.

On 04.01.2019, all the students of III year B.Sc. Physics were taken to Radio Astronomy Centre, Ooty. Mr. M.Aravinthraj and Dr.S.Kalaiarasi, accompanied them.

On 12.02.2018, the Department of Physics organized a “One day National Conference on Advances in Materials Research”. The following eminent persons were the resource persons. Dr.Mythili Prakasam, CNRS-Engineer, ICMCB-CNRS, France. Dr. Alain Largetea, Head, ICMCB-CNRS, France. Dr.S.Saravanan, Principal Research Scientist, Department of

Aerospace Engineering, IISc, Bengaluru. Dr.S.Kanagesan, Senior Lecturer, University of Malaya, Malasiya.

Department of Physics (PG)

The Department of Physics organized fresher's day held on 13.07.2018 to welcome the first year PG students. It was a day filled with excitement, joy, music, enthusiasm, laughter and happiness.

As it was Vainu Bappu's birth anniversary, we were invited to participate in the programmes that were held in Kavalur observatory on 12.08.2018. From our college V.Jagadeeswar and S.Ragavendrian presented a seminar on "Aurora" and various questions were asked by the judges and the participants answered them boldly and students from other colleges also presented their seminars.

The Department of Physics never fails to motivate the students and in one such way under the guidance of Mr.G.Jayakumar and Dr.S.John Sundaram conducted a student seminar on 21.08.2018. The students made the session more interactive and each presented the seminar for 15 mins and after which there were discussions and questions for 5 mins.

We celebrated Teachers' Day on 05.09.2018. Students expressed their gratitude and appreciation towards their teachers on this day.

We have organized an invited talk on 07.09.2018 for II year PG students in DMT Hall. It was given by an eminent person Dr.A.Stephen, Department of Nuclear Physics, University of Madras, Chennai. The talk was on XRD (X-Ray Diffraction). He gave more information on material science field and particularly a note on the basics of X-ray principle and Instrumentation and Graphical representation of the Crystal and Nano materials.

The alumni from 1989-92 batches of the Department of Physics, Sacred Heart College (Autonomous), Tirupattur celebrated their Silver Jubilee Reunion on 28.09.2018. It was a memorable event. The campus came alive with their whoops of cheer and peels of laughter on meeting their old friends and professors who have special place in their hearts.

The Department of Physics, organized an invited talk on the title "Synthesis of Stable State TiO₂ NPs and Its Application" on 19.09.2018. The resource person in her talk emphasized the importance of basic science & research for the developments of NPs and especially about TiO₂ NPs and its application, the main use of titanium dioxide (TiO₂) which is a white powder pigment because of its brightness and very high refractive index.

This year our students R.Naveen Kumar, (Title of project: A Study on the NLO Property of Ammonium Carbonate Doped Potassium Pentaborate Tetra Hydrate and Pure KB₅ Unidirectional Single Crystal by Sankaranarayana Ramasamy Method), R. Sylvia Reena, (Title of project: Investigation on Dyposium substituted highly porous Zinc ferrite nanocrystals for the application of photo Fenton activity), M.Priyadharshini, (Title of project: Growth and studies of barium chloride dehydrate doped Hippuric acid crystals) applied and sanctioned for Sacred Heart Fellowship (2018-19) to do their project work. Added to this 10 different project proposals also were applied for the TNSCST funding.

Department of Chemistry (UG & PG)

Rev.Fr.P.A.Thomas memorial lecture was conducted by both UG and PG Chemistry associations on 21.07.2018.

Mr.Hari Narayanan, the resource person spoke about the resume preparation and technical skills required for the analytical laboratory. He shared his life experience and about other peoples like A.P.J.Abdul Kalam and Alysia Montano who ran eight hundred meters when she was five months pregnant and second time she ran eight hundred meters in her eighth month pregnancy in order to motivate the students. He clearly explained the expectations of interviewers from his experience as a member in the interview board. Students enjoyed his session since he has spoken from his own experience and students conversed with him. A parallel session by Mr.Nicholas Antony on “Effective Communicative Skill” to the first year UG students in DMT hall was conducted.

An invited lecture was organized on 20.08.2018 by the PG Chemistry association in which the final year UG students participated. Dr.T.M.Sridhar, Analytical Department, Madras University was the resource person.

His speech was very interesting and mostly focused on motivating the students to pursue research in reputed institutions like IISc, IIT, State Universities and Central Universities. He explained the motive of the industrial oriented and academic oriented research and stated that both are important for the nation’s growth. He said that more care should be given to certain areas of research like nuclear research and aircraft research because the survival rate is very less in case of accident. Through this he conveyed that a real time research is always a challenging one. He spoke about his area of research interest like materials to sensor application, grapheme research to biomedical applications and career opportunities for chemists in government and private sectors. As long as the human kind exists in the universe, the need of chemist is inevitable, he said.

Teacher’s day was celebrated on 05.09.2018. Books on environment and ecology were presented by the students to all the teachers of the department.

Career guidance programme was conducted by the Chemistry associations on 05.10.2018.

Mr.Infant Antony, HR. Solara Active Pharma Sciences Ltd., Cuddalore was the resource person. He spoke about the career opportunities in pharmaceutical industries for Chemists. He stressed upon the expectations of the members in the interview panel and CV is a key factor to judge a candidate. He explained how to prepare CV which helps the candidate to be short listed for the interview. Self-confidence and the ability to face the challenges are the main elements which help the employee to perform well in his working place said Mr.Infant and he shared a real story of a person who succeeded in his profession by his courage and ability to interact with the people. Students interacted with him and asked about the solara pharma. Students benefitted more through his wide knowledge and experience in the recruiting process.

Department of Computer Science (UG)

The Department of Computer Science conducted many association activities to enrich the minds of the students in the field of Computer Science and Technology.

Fresher's Day

Fresher's day was organized on 27.06.2018. Second and third year students welcomed the first year students and were motivated by the Head of the Department to take part in various events to explore their gifted talents.

Spiritual Meet

This was conducted on 19.06.2018 for the I, II, III year students to share the experience of God in one's life. The objective of this programme was to inculcate the habit of praying among the students. Rev.Fr.Mani Lazar presided over the function and spoke on 'The Life Driven Purpose' with Various Activities.

Aptitude Session

In view of Employability Skills the department conducted aptitude sessions in the month of July for the third year students in order to help the students to become logical thinkers and make the students employable in the IT sector. Mr.D.Adiyaman was the chief guest and handled the sessions in an effective way.

Big Data

An invited talk on Big Data was conducted on 13.07.2018 by Mr.N.Sakthivel from Adhiyaman College of Engineering, Hosur, for II & III year students. The objective of this programme was to expose the students to the latest technology and emerging trend in IT sector.

Project Methodology

This activity was organized on 02.08.2018 for the third year students by Mrs.C.Dharma Devi. This session helped the students to learn the importance of project experience and software process and the ways of implementation of the project.

Knowledge Sharing

In this activity 8 students from II & III year presented their papers on various topics in the field of technology on 12.10.2018 in order to share their knowledge. This programme promoted self-learning among the students.

SPACE 2K18

The Intercollegiate IT Meet was conducted on 18.09.2018 by the Department of Computer Science. It was organized by the third year students along with the faculty members of the department for the neighbouring college students to help them explore their technical skills and competitive spirit in various events. This helped our students to develop their self-confidence and leadership qualities. The students were encouraged to work as teams.

Interview Techniques

This session was organized on 19.12.2018 for the third year students to know about how to attend and answer the quires in an interview. Mr.H.Joyel was the chief guest and he motivated the students to acquire the technical skills to become employable.

Department of Computer Applications (UG)

Election of the Secretary

Mr.U.Sridhar Manikandan, a final year student was selected by BCA students as student secretary in their classroom.

Formation and Planning of the Class Quality Circle

Each class selected the CQC leader for conducting CQC programme at every end of the month.

Fresher's Day

The fresher's day was celebrated in APRC Dining Hall on 27.06.2018. III BCA students gave a video presentation about department staff members.

Mental Health Issues Affecting College Students

An invited talk on mental health issues affecting college students was conducted on 31.08.2018 Rev.Dr.I.Joe Sanjay, Head, Department of Counselling and Psychology, Sacred Heart College, Tirupattur, was the resource person. He spoke on the challenges faced by adults and the way to approach and manage the psychological issues.

Teacher's Day

The Teacher's Day was celebrated on 05.09.2018

IT Quiz – Intra Department Competition

Our department conducted IT – Quiz (Intra-Departmental Competition) on 11.09.2018. All the I, II and III year BCA students participated in this IT – Quiz programme. We were divided in six teams and each team consisted of 5 students from I and II BCA students. The whole programme was conducted by final year BCA students. All the events were well organized. A special talk was given by a BCA staff Mr.A.Selvaraj Jeyakumar and he congratulated all the participants and the prize.

Seminar on Software Documentation

The objective of this seminar was to impact ideas related to project documentation among the final year students. Mr.A.John Martin, Asst. Prof., Dept. of MCA, Sacred Heart College, Tirupattur, was the resource person. Later the resource person demonstrated the sessions with presentations. The students clarified their doubts by asking questions to the resource person.

Annual Workshop on Recent Trends

An Intercollegiate Workshop on Julia programming was organized by Department of Computer Applications (UG) on 20.07.2018 participants from more than 16 colleges participated in this workshop. Mr.V.S.Jayakumar Paul Bosco, Dr.A.Mekala, Mr.T.Prabakaran and Miss.J.Merlin Florence were the resource persons of the day. More than 300 students from in and around of Tirupattur participated in the workshop.

Seminar on Software Testing

The main objective of this seminar was to create ideas of how to test software and it was for among the final year students. Later the resource person demonstrated the sessions with presentations. The students clarified their doubts by asking questions to the resource person.

Department of B.Com (Computer Applications)

A workshop on Stress Management for boys was organized by students on 19.07.2018. Then Rev.Dr.I.Joe Sanjay, Head, Department of Counselling Psychology delivered talk on the theme.

A workshop on Counselling and Psychology for girls was organized on 19.07.2018. Ms.Latha Munuswamy, the resource person gave the presentation about the theme.

A “Workshop on Stress Management” was organized by the Department of Commerce CA on 14.08.2018. The resource person was Mr.Hari Selvam, District Resource Person (SEBI). A total of 75 students participated and benefited from this programme.

Industrial Visit – III B.Com (CA) students went to NLC, Neyveli on 17.08.2018. All the students participated actively, and gained more knowledge.

The Inter-Collegiate Competition of “COMCAP 2K18” was organized by the Department of Commerce CA. The programme consisted of 7 events like comquiz, for and against, innovative launching, Slogan Logo, Personality Identification, Master mind, Face painting and Future Directors.

Groups and Movements (Shift-1)

AICUF

AICUF for the Academic year 2018-2019 began with the selection of office bearers on 27.06.2018. The next meeting was held on 16.07.2018. Animation was given to the students about the history and purpose of AICUF. At the state level meeting held in St. Joseph's College, Trichy three of our students represented our AICUF unit for State level election of representatives. Mahendran from second Mathematics was elected as secretary for state level. Arul James from second B.Com, was elected for video editing for state level.

On 23.07.2018 Dr.A.Prabhu, Asst. Prof. Department of Tamil delivered a talk on "Media and its Impact on Society." There was a chart presentation by the students on the theme "Pollution" on 30.07.2018.

On 27.08.2018 Dr.P.Balasubramanian, Head, Department of Tamil addressed the students on how AICUFERS can be active in the society. Six students attended a four day camp in St. Joseph's College, Trichy to practice our traditional cultural dance and songs from 27th December 2018 to 01st January 2019. In January from 12.01.2019 to 16.01.2019, 10 students attended the MAGIS, a yearly Cultural programme held to show case our unique cultural traditions. Our unit has staged two street plays during Pongal one about the damage caused plastics and another about the issues of farmers.

NSS

"NOT ME BUT YOU"

The NSS activities of the academic year started with a meaningful and grand celebration of the international day of YOGA on 21st June 2018. The highlight of this function was that all the second year students of shift-1 took part actively and learned useful techniques in "Heart fullness Meditation" ably assisted by two teams led by Mr.S.Sivakumar and Mr.S.Senthilkumar from "Heart fullness Meditation". A second session of the same mediation was also given to NSS volunteers on 24th June, 2018.

In order to highlight the importance of cleanliness, campus cleaning was done on 27th July 2018 by the NSS volunteers. To give awareness on Child Protection and Women's rights a special seminar was conducted. Mrs.M.A.Sneha, Advocate from Tirupattur court conducted the sessions and enriched the NSS volunteers. In order to create awareness among the public the NSS volunteers led by POs Dr.M.Antony Arockiasamy and Dr.U.Ramesh, took up an "Awareness-March" from the college campus to Tirupattur Municipality via Rettai Malai Srinivasan Road, on 16th August, 2018, carrying placards depicting awareness slogans. In the Municipal Office, Mr.Rajarathinam - Sanitary Officer, Tirupattur Municipality gave a talk on Solid Waste Management and explained the modus operandi of functioning of Waste Management in Tirupattur Municipality. It was a great eye opener for all the NSS volunteers. The sanitary workers from Sacred Heart College also participated and benefitted.

The NSS volunteers did a marvelous job of cleaning the Government Hospital, Tirupattur on 20th August, 2018. About 40 NSS volunteers and Two POs took this noble task of helping the GH in keeping their terraces free from garbage so that the building does not develop cracks due to stagnation of water. "Clean Idaya Nagar" Awareness Programme on 10th September 2018 was one of the biggest highlight of NSS this academic year. It was of two fold. In the afternoon the gypsy village was cleaned by all the volunteers. In the evening an awareness programme was conducted to make the people aware of their responsibilities of keeping the surroundings clean. The whole programme was led by Dr.M.Antony Arockiasamy and

Mr.Aruldoss from DB- Center. This year the NSS day 24th September 2018 was celebrated with the focus on “Plastic Free India”. Rev.Dr.Praveen Peter explained about the need for eradication of plastic and distributed the NSS certificates to NSS volunteers of previous year.

In collaboration with the Government Hospital Blood Bank, the NSS organized Blood donation camp and mobilized 66 units for the Blood Bank of Tirupattur Government Hospital on 28th September 2018.The Youth Awakening day was celebrated with an interactive lecture by Dr.P.Balasubramanian Head, Dept. of Tamil (Shift-2).

To protect our Mother Nature, a special talk on “Green India” was given by Dr.M.Antony Arockiasamy PO, on 17th December 2018, with the focus on protecting and preserving Western Ghats.

Apart from these special Programmes, regular meetings were held on Mondays and the NSS of Sacred Heart College did all the Programmes instructed by the University and the Government Departments from time to time.

Media and Consumer Forum

Mr.S.Shal Win John, Secretary and Ms.G.Roshhini, Joint Secretary were elected as office bearers of Media and Consumer Forum. Volunteers of Media and Consumer forum were welcomed and animated in July, after the inauguration of Groups and Movements. The Resource persons for this academic year were, Dr.M.Sivakumar, Cancer Institute, Adyar, Chennai, Dr.P.Selvakumar, Head, Dept. of Tamil (Shift-1). Dr.S.Sasi Kumar (Head, Management Studies, Dr.P.Balasubramanian, Head, Dept. of Tamil (Shift-2) and Mr.V.Sakkan, Asst. Prof., Dept. of Tamil. Students have organised number of programmes such as Debates, group discussion etc., Students were active in recording short movies on social issues which are presented in January/ February 2019. All the volunteers regularly take part all the in events and exhibit their talents.

Fine Arts

Fine Arts, which is responsible for the preparation of backdrop and organization of programmes of the college, organized the inauguration of the academic year 2018-19 on 18th June, 2018 and the inauguration of Associations and Groups & Movements on 5th July, 2018. Inauguration of PG classes also was organized on 2nd July, 2018. Fine Arts prepared the backdrop for the Sports Day and the feast of Sacred Heart of Jesus. “Heart Beat 2018”, the Cultural Festival of our college was held on 1st December, 2018. Mr.Poo Ramu, a renowned actor in the cine field, was the chief guest. The events of the day started at 8.45 a.m. There were four events on that day namely, Mime (Girls), Group dance – Boys, Skit (Boys) and Group dance – Girls. Nine departments participated in each of these events. The number of offstage events was increased this year from ten to fifteen to give chance to more students to participate in the events and they were organized from 26th – 29th November 2018. Department of Chemistry won the championship for both girls and boys. The event management for the Community Day celebration held on 22nd December, 2018 was also done by Fine Arts.

Youth Red Cross

On 23rd July 2018, we had a motivational talk on “Youth Leadership” in Oasis Hall which was given by Mr.R.Veerappan, Head, Dept., of Business Administration during which motivational activities were conducted.

On 30th July 2018, we had an invited talk on “Influence of Media” in A.V.Hall by Mr.R.Denis, Asst. Prof., Dept. of Computer Science. During the session, videos and images were shown.

On 24th September 2018, we conducted Team building games with the support of YRC BBA students in Oasis Hall. During the session, everyone was involved and actively participated in the games.

On 15th October 2018, we had a group seminar on “Blood Group Awareness” in A.V.Hall which was given by YRC Volunteers from the department of Bio-Chemistry.

On 26th November 2018, we had student seminar on “Traffic Rules Awareness” in A.V.Hall during which the videos and images were shown.

On 17th December 2018, we had an invited talk on “Humanity” in A.V.Hall by Mr.T.Prabakaran, during the session; students were encouraged to do mediations and humanitarian activities.

On 7th Jan 2019, we had seminar on “Job Ethics” in A.V.Hall by Mr.S.John Bosco, Asst. Prof., Dept. of Computer Science, it was useful to the students.

Rovers and Rangers

The Bharat Scouts & Guides is a Voluntary, non- political, educational Movement for young people, open to all without distinction of origin, race or creed, in accordance with the purpose, principles and method conceived by the founder Lord Baden Powell in 1907.

The purpose of the Movement is to contribute to the development of young people in achieving their full physical, intellectual, social and spiritual potentials as individuals and responsible citizens and as members of the local, national and international communities.

Movement’s activities were initiated by the teachers throughout the day and especially during, Training Camps, Celebration of World Population day, Independence Day, Sadbhawna Diwas celebration by faithful prayer and different competitions, World Literacy Day celebration, Rally on AIDS day, celebration on International Day for the disabled persons, rallies on social and environmental issues like leprosy, human rights, women literacy, polio etc. were organized time to time. Community work, volunteering on the occasion of local celebrations, functions and exhibitions were also done.

Rotaract Club

The Rotaract Club-Shift-I started the academic year with the installation of office bearers on 05.07.2018. The President, secretary and treasurer were selected and honoured with medallion and batches. A special lecture on Functions and benefits of Rotaract Club was delivered by Dr.R.Jude Vimal Michael, Co-ordinator, Rotaract Club and the former president Mr.George. A Special lecture in tie-up with the Red Ribbon Club regarding the “Privacy Issues in Internet and Cyber security” was delivered by an Eminent Alumni who is currently holding a masters in Cyber security from Madras University. The lecture was an eye-opener for students regarding privacy and other issues with the usage of internet.

An another signature project of Rotaract Club was the organizing of Massive Seed throwing campaign. The programme was organized on 27th August 2018 and the seed ball preparation went on for a week by collecting native tree seeds, red soil, grains, and compost. The seed balls were made and thrown in the nearby areas where there are less trees. The tree seeds

were carefully selected according to the natural habitat and climatic conditions required. The programmes mainly focused on addressing the environmental issues that are prevalent in this region. A talk on inclusive leadership was given by Dr.K.Arockiaraj, Asst. Prof., Dept., of Social Work on 07th January 2019.

மாற்று நாடக இயக்கம்

நாடக உருவாக்கத்தின் அடிப்படைகள் குறித்த ஐந்து நாட்கள் தொடர் பயிலரங்கம் நடத்தப்பட்டது. நாடகத்துறை வல்லுநர்கள் கலந்துகொண்டு மாணவர்களுக்குப் பயிற்சியளித்தனர். எமது மாற்று நாடக இயக்கத்தின் சார்பில் 'விசாரணை' என்னும் நாடகம் அனைத்து இயக்கங்களின் மாணவர்களுக்கென நிகழ்த்தப்பட்டது. நேர நிர்வாகம், மேடை நிர்வாகம், பின்னரங்கப் பயிற்சிகள் மாணவர்களுக்கு வழங்கப்பட்டன. நாட்டுப்புற நடனங்கள் மாணவர்களுக்குப் பயிற்றுவிக்கப்பட்டன. நாடகத்துக்கான அரங்கப் பொருட்கள் உருவாக்கும் பயிற்சி, முகமூடிகள் தயாரித்தல், உருவாக்கம் மற்றும் வரைகலை ஆகிய பயிற்சிகள் மாணவர்களுக்கு அளிக்கப்பட்டன.

நிகழ்த்துகலை சார்ந்த பயிற்சிகளின் வாயிலான நல்ல ஆளுமையை உருவாக்க முடியும் என்ற கருத்துருவாக்கத்தின் அடிப்படையில் இப்பயிற்சிகள் மாணவர்களுக்கு வழங்கப்படுகின்றன. மாணவர்கள் முழுவதுமாக ஈடுபடும் வகையிலான செய்முறைப் பயிற்சிகளாக இவை அமைந்துள்ளன.

Red Ribbon Club

Getting into Zero: Ends by 2030

On 16th July 2018 a programme titled "Getting into Zero: Ends by 2030" was organized in Mother Teresa Hall for the students and Mr.S.Athisiyaroban, RRC Coordinator, Tiruvalluvar University, Vellore presided over the programme.

Cyber Safety and Social Media

On 13th August 2018 a programme titled "Cyber Safety and Social Media" was organized in Mother Teresa Hall for the students of RRC (Shift-1). Mr.Kabilesh Kumar, Department of Cyber Forensics and Information, University of Madras addressed the students.

Child Protection & Women's Rights

On 10th September 2018 a programme titled "Child Protection & Women's Rights" was organized in Carreno Hall for the students of RRC (Shift-1). Mrs.M.A.Sneha, Advocate, Tirupattur addressed the students.

Youth Responsibilities

On 15th October 2018 a programme titled "Youth Responsibilities" was organized in Oasis Hall for the students of RRC (Shift-1). Dr.S.Sivachandrakumar, Asst. Prof., Dept., of Tamil, Sacred Heart College addressed the students.

World AIDS Day

On 3rd December 2018 the student volunteers of RRC (Shift-1) created awareness by displaying slogans through placards about the disease in the premises of the campus.

Myths and Misconception

On 4th February 2019 a programme titled “Myths and Misconception” was organized in Mother Teresa Hall for the students of RRC (Shift-1). Mr.G.Shankar, Counsellor, Government Hospital, Tirupattur presided over the function.

Suicide Prevention

On 14th February 2019 a programme titled “Suicide Prevention” was organized at Mother Teresa Hall for the students of RRC (Shift-1).Miss M.Latha Munuswamy, Asst. Prof., Department of Counselling Psychology addressed the students.

Groups and Movements (Shift-2)

1. AICUF

All India Catholic University Federation, known as AICUF the oldest groups and movements in India with its inception goes back to 1923. The motto of AICUF is 'We were born in a just society, we will leave it as such, we will surely change it'. According to the motto, the students were involved in various activities conducted inside as well outside the college.

The students participated in MAGIS-2019 from 13-16 January, 2019 organized by the state AICUF in St. Joseph's College, Trichy. The theme MAGIS-2019 is 'Youths, the cause and instruments of the societal change'. The students staged a mime which won a great accolade amidst the various forums from different institutions participated from all over Tamil Nadu.

Earlier, the students went to nearby villages to create an awareness regarding the burning of plastics and tyres on Bhogi festival. The cycle rally was initiated by Rev. Dr.K.A.Maria Arokiaraj, SDB, Additional Principal, Sacred Heart College, Tirupattur. The students distributed the pamphlets all the way along and requested the people regarding the ill effects of burning plastics. They staged a street play regarding the ill effects of burning plastics and it was watched by many people.

The students were not only concerned about the environmental issues but also interested in promoting for the future generation a healthier way of life. The students participated in the seminar given by Mr. Sathish, Proprietor, Iyarkkai Angadi themed on 'Iyarkkai Vivasayam and Iyarkkai urangal thayarippu'. He explained the organic farming and preparation of organic fertilizers. The students hailing from farming background eagerly asked him questions regarding the future of organic farming.

The students were more concerned about their health, since they know that, only if they are healthy they can fight against social injustices. In order to maintain good health, they participated in the international yoga day celebration conducted on 21st June, 2018.

AICUF requires preparing the mind, heart and soul prior to the execution. Therefore, the students were sent to summer camp organized by the Tamil Nadu state AICUF during the month of May 2018. They trained the students to be good leaders and prepared them to lead the AICUF with good leadership skills throughout the year. On the whole, being an AICUFer is an individual change instilled in mind to bring about change in the society.

2. NSS

“Posture on Blood Donation, Environment and Population”

The Unit-4 of the National Service Scheme organized and conducted an event on “Creation of Posture on Environment and Population” on 10.07.2018 25 volunteers from Unit-4 of NSS participated and prepared a chart on the importance of Blood Donation, Environmental Protection, and Population. The event created an awareness among all the students about the importance of cleanliness.

“Rally on Awareness and Importance of Breast Feeding”

The National Service Scheme (Unit-4) celebrated “World Breast Feeding Week” along with the Tirupattur Town Rotary Club 88770 at Sacred Heart College with the presence and blessings of Vice Principal of Sacred Heart College, Joint Director of Health Department, President of Rotary Club and the NSS Programme Officer. The Rally began from Sacred Heart College at 10.30 a.m. and marched through the main roads of Tirupattur Town and

ended at the Government Hospital, Tirupattur. Slogans on the importance of breast feeding were displayed. 200 students participated and more than 3000 people benefited.

“Lecture on Importance of Social Service”

The “Lecture on the importance of social service and education” was organized by the Unit – 4 of National Service Scheme with the permission and blessings of our management on 21st August, 2018. The lecture was delivered by Mr.B.Seenivasan, Asst. Prof., Dept. of Commerce (CA), Sacred Heart College. He spoke about the importance of social service and importance of education. 50 volunteers from Unit-4 of NSS participated and shared their opinion. The programme ended with a group discussion and vote of thanks.

“Special Camp - Voter Identity Card Enrolment”

As per the Direction of the District Collector of Vellore and blessings of the Management of Sacred Heart College, the National Service Scheme (Unit-4) of Sacred Heart College (Autonomous), Tirupattur organized a “Voter Identity Card Enrollment Special Camp” on 28.09.2018.

The Special Tahsildar Mrs.Bhakya Lakshmi, Deputy Tahsildar (Election) Mrs.Kanchana, Revenue Inspector of Tirupattur Mr.Sivakumar, Rev.Dr.D.Maria Antony Raj, Principal, NSS Programme Officer Mr.B.Seenivasan and the members of National Service Scheme participated. The National Service Scheme has created 3 desks at various parts of the College Campus and students from both the Shifts of Sacred Heart College enrolled their name for Voter Identity Card by filling Form-6. More than 500 students applied for Voter Identity Card. At the end of the Camp, the applications of new voters (Form-6) were handed over by the Principal of Sacred Heart College to the Revenue Inspector.

“Rally - Awareness on Voter ID card Enrolment”

The National Service Scheme (Unit-4) of Sacred Heart College (Autonomous), Tirupattur had organized “Voter Identity Card Enrollment Rally” on 25.09.2018.

The Tahsildar of Tirupattur Mr. Sathyamoorthi initiated the Rally at Taluk Office of Tirupattur at 10.15 a.m. in the presence of Mr.Padmanathan Deputy Tahsildar; Mrs.Kanchana Deputy Tahsildar (Election); Mr.Sivakumar Revenue Inspector of Tirupattur; Mr.B.Seenivasan NSS Programme Officer of Sacred Heart College and members of the National Service Scheme.. The Rally moved through the main roads of Tirupattur Town and ended at Sacred Heart College, Tirupattur with the protection of Police Department. The slogans on the importance of Voter ID card and enrollment were raised by the students with placards. 200 students participated in the rally.

“Short Film on Netaji Subhas Chandra Bose”

As per the guidelines and direction of the Government of Tamil Nadu, a Short Film on Netaji Subhas Chandra Bose” was telecasted. The short film exhibited the life history of Netaji, his freedom struggle and his courage as youth. 50 volunteers from Unit-4 of NSS participated and benefited.

3. Fine Arts

The Department of Fine Arts association, organized the inaugural programme on the day of reopening on 18.06.2018. The chief guest of the programme was Rev.Fr.K.M.Jose, Provincial. He gave the inaugural message to the students.

On 05.07.2018, the college conducted the Inauguration of Academic Association, Groups and Movements for which the chief guest was Dr.S.R.Xavier Rajarathinam, Vice Principal (Academics, Shift-1) .

On 30.11.2018 was the cultural fest “HEART BEAT 2018” for which Mr. Poo Ramu Director was the guest of honour. We organized the Christmas and Community day celebration on 22.12.2018. The Rector and Secretary Rev.Dr.C.Antonyraj was the chief guest.

Pongal Celebration was conducted on 12.01.2019 for which the arrangements were done by the fine arts Association.

The most awaited event College day took place on 02.02.2019. Finally we conducted the Valedictory of Academic Association, Groups and Movements on 22.02.2019.

4. Youth Red Cross

“Work Shop on International day of Yoga” on 21st June 2018. The resource person Mr.Sivakumar, Sr.Territory, Manager, Heart Fullness, Vellore conducted the yoga session. During the session he explained the following topics: Ashtanga yoga, standing posture, sitting posture, finishing posture and then the importance of yoga. Students practiced the yoga and meditation.

Rally on “World Breast Feeding Day” - 01st August 2018. YRC girls gathered in front of the Church at 9.30 a.m. for the Rally on “Breast Feeding Day”. It was conducted by the Town Rotary Club, Tirupattur. The rally started at 09.45 a.m. instructions to the students, given by Mr.R.Santhira Sakaran, President of Town Rotary Club.

Rally was about giving awareness on Breast Feeding, and its importance. The rally went up to the Government Hospital, Tirupattur, and ended at 12. 00 p.m. with a word of gratitude to the representatives of Rotary Club of Tirupattur

Programme on “First Aid and Its Importance” - 3rd August 2018. Dr.U.Ramesh, Asst. Prof., Dept. of Economics was resource person. He spoke on the benefits of First Aid. It saves lives of Causality; it gives a second chance of life for others; It offers consolation; and It Provide some opportunities for the Medical Research.

He shared the following drawbacks in giving First Aid: Chance of fear in saving others’ life, spending our own time; First aider will have the responsibility of causality. The person who gives First aid must be trained he added.

“Psychological Issues among the Young People” – 15th September 2018. Resource Person was Ms.M.Latha Munuswamy, Assistant Professor, Department of Counselling Psychology, Sacred Heart College (Autonomous), Tirupattur. She spoke about the five kinds of mental disorder. They are:

1. Sadness;
2. Worry;
3. Depression;
4. Fear;
- and 5.Anxiety.

Rally on “Enrollment of Voter Identity Card” - on 25th September 2018

The Rally on “Enrollment of Voter Identity Card” was jointly organized by the National Service Scheme along with Youth Red Cross (YRC). The rally started in front of our college Church. The Honorable Tahsildar of Tirupattur Mr.T.Sriram and Revenue Inspector of Tirupattur Mr. Thirumalai presided over the Rally. All the student members of Youth Red Cross and all other Groups and Movements participated in the rally.

It was mainly to give awareness on the importance of Voter Id card, importance of vote, eligibility and responsibility of the voter. The rally went up to Tahsildar's Office, Tirupattur and the students returned back to the college at 12.30 p.m.

A special talk was organized on "Prevention from Alcohol and Drugs" - on the 27th September 2018. He also explained types of drugs, reasons for people to choose drugs, causes of using drug, how to prevent the youngsters from alcohol, ways to prevent the youngsters from alcohol and drug usage, healthy way to handle the problem, Technics to avoid the influence of use of alcohol and drugs.

Awareness talk on "Blood Donation" - 18th December 2018. Resource person was Dr.A.Jayaprakash, Assistant Professor, Department of Biochemistry. He specified on how much blood can be taken, age to donate blood, eligibility to donate blood, blood types and matches and retrieval of blood.

Awareness Talk on "Diabetes" (from Known to Unknown) – 9th January 2019. Resource person was Dr.I.Niyas Ahamed, Assistant Professor, Department of Biochemistry, Sacred Heart College, Tirupattur.

He shared the following topics: Data regarding diabetes in India, The Original name of Diabetes, History of Diabetes, Causes of Diabetes, Symptoms of Diabetes, Types of Diabetes, specific Diet, Regular exercise, Continuous visit to doctor, and how to be brave to fight diabetes.

5. Rotract Club

The Free Camp on Detection of Anaemia for Adolescent Girls was organized by Rotract Club of Shift-II sponsored by Rotract Club of Tirupattur and Dr. Elamparithi, from Thangamma Hospital. It was held from 6th December 2018 to 14th December to give awareness on Anaemia.

The camp began with the presentation on causes, precaution and recovery of Anaemia by Dr.Elamparithi. After a short break the camp commenced at 11.45 a.m. A team of 5 staff nurse from Thangamma Hospital and CMC, Vellore were deputed for blood test. All the girl students of Shift-II were insisted to undergo the check-up for Anaemia. The Rotract students volunteered the camp in arranging the students queue and recording the students details, weight, height and HB count. The free camp ended on 14th December 2018 successfully.

மாற்று நாடக இயக்கம்

05.07.2018 அன்று ஓயாசிஸ் அரங்கில் மாற்று நாடக இயக்க உறுப்பினர் தேர்வு மற்றும் நாடகம் குறித்த அறிமுகம் நடைபெற்றது. இந்நிகழ்வில் முனைவர் கி.பார்த்திபராஜா மற்றும் முனைவர் ஆ.முத்தையன் பங்குபெற்றனர்.

09.07.2018 முதல் 13.07.2018 வரை அன்னை தெரசா அரங்கில் மாற்று நாடக இயக்கம் சார்பாக நாடக அடித்தளப் பயிற்சி பட்டறை நடைபெற்றது. இந்த நிகழ்வில் முனைவர் கோபி, முனைவர் கி.பார்த்திபராஜா, திரு.குமணன் ஆகியோர் சிறப்பு பயிற்சியாளர்களாகப் பங்குகொண்டனர்.

14.09.2018 அன்று அன்னை தெரசா அரங்கில் சரண்தாஸ் திருடன் நாடகம் திரையிடப்பட்டது. இந்த நிகழ்வில் முனைவர் கி.பார்த்திபராஜா, முனைவர் ஆ.முத்தையன் கலந்துகொண்டனர்.

26.09.2018 அன்று கரேஞா அரங்கில் விசாரணை நாடகம் நடைபெற்றது. இந்நாடகத்தை முனைவர் கி.பார்த்திபராஜா இயக்கி நடத்தார். முனைவர் ஆ.முத்தையன் ஒருங்கிணைப்பு செய்தார்.

Red Ribbon Club

Likewise to know about RRC, our president gave the introduction and clear idea to have a better understanding regarding the RRC SHELTER. Group discussions were conducted on 29th June 2018 and the members of RRC (every student) actively involved themselves and feedbacks were given by every individual.

“Myths and Misconceptions “Which means myth deals with the existing or a sense of enlightenment and misconception is incorrect thinking or flawed understanding. By this concept we understood that we should have proper way of understanding all things that we do. The person who on enlightened us on this topic was Mr.S.Adhinyam Rooban who is the Co-ordinator of RRC in Thiruvalluvar University, Vellore.

Life is not about what we live, it should be celebrated by our way of living which is ‘Celebrating Life’. It tells about the guidance of people and the proper way of living without illegal relationship. It was held on 20th August 2018. All the students took part in this and every one of them thanked the resource person Dr.K.Anbarasu for conducting this programme.

In this modern world we all forget about the awareness on AIDS & HIV. To create an awareness among the youngsters Mrs.Kalpana who is the member of health care center from Vellore gave the “Lecture on Blood Donation and AIDS Awareness “.Through this students realized that donating blood saves the life of every needy person and so many of our students voluntary donated their blood in blood donation camp. Methods to avoid AIDS and HIV can be learnt by each and every student. This was held on 23rd October 2018.

We all know that World AIDS Day was celebrated on 1st December 2018. In it displayed RRC “Poster Presentation Quotes”, by drawings and words of awareness. Resource person gave a speech on Do and Don’t in sexual behavior. Not only the resource person but also our students actively involved themselves in sharing some information which is necessary.

Media Forum

Media Forum commenced with the introduction of Members in the first meeting. Every week, we had meetings and discussed about trends in Media and the future development of the forum.

On 21.06.2018, the college organized Yoga Day. All the members participated in the Yoga Day celebration along with their president.

On 06.08.2018, the Forum and the other shelters joined together and organized a rally on Voters Awareness. It was from the college to Taluk Office, Tirupattur.

On 28.09.2018, along with Matru Nadaga Eayakam the Forum attended a stage drama in Carenno Hall. All the members were present with their president Mr.S.Jeevananthan.

On 19.11.2018, under the guidance of the District collector, the college organized a movie on Nethaji. All the students were present for the movie.

On 19.12.2018, along with two more outreach group the forum organized a debate on social awareness; the programme was well received by the audience.

Dr.K.Anbarasan, Assistant Professor, Department of Tamil (Shift-2) delivered a talk on the title “Job Opportunities in Radio” on 31.01.2019.

On 11.02.2019 Dr.P.Balasubramanian, Head, Department of Tamil (Shift-2) delivered a talk on “Media 2019”.

Along with all these programmes the forum also projected short films every month and discussed the same with the members of the media forum.

National Cadet Corps (Shift-1 & 2)

1. **Selection of First year Students for NCC:** The newly admitted first year students were called for NCC selection on 04th July 2018. Around 45 Boys and 25 Girls were selected for the college. NCC Unit with appropriate army selection process with the help of PI? staff. NCC Uniforms and other necessary training items were distributed.
2. **Sports Day Celebration:** It was celebrated on 27th July 2018 in Sacred Heart College play ground with approximately 4500 college students. The programme started around 08:30 a.m. with Tamil Thai Vazhthu. Col. S.Petercelestian, Group Commander, Kovai Group NCC and Lt. Col.V.Pathak, Commanding Officer, 12 TN BN NCC, Salem were the chief guests and they had hoisted The College Sport day Flag and accepted Rifle Drill of honor and Guard of Honour performed by NCC Senior Division and Senior Wing cadets, then he delivered Sports Day special message and visited tents of all departments and distributed the prizes. The programme was headed by Secretary, Principal, Additional Principal, and Vice Principals of Sacred Heart College, Tirupattur. The entire programme got over around 1.00 p.m. with national anthem.
3. **TSC Achievement:** Three of the NCC Cadets attended TSC Camp held in New Delhi in the month of September 2018 in which two of our SW cadets won a gold medal in firing competition and one of our SD cadet won a silver medal in firing competition.
4. **IGC Achievement:** One of our SD cadets got Gold medal in Inter Group Competition camp held in PSG Arts and Science College in Coimbatore in the month of September 2018.
5. **Independence Day Celebration:** It was celebrated on August 15th 2018 in Sacred Heart College play ground with approximately 4500 college students. Mr.S.Jayaraju, Office Superintendent and Mr.M.Danapal, Assistant, Sacred Heart College, Tirupattur were the chief guests and they hoisted the National Flag and accepted the Guard of honour and contingent drill has performed by NCC Senior Division and Senior Wing cadets. Then Mr.S.Jeyaraju delivered the Independence Day special message.
6. **Republic Day Celebration:** It was celebrated on 26th January 2019 in Sacred Heart College play ground with approximately 4000 college students. Dr.A.Perianayagasamy, Associate Prof., Department of Economics, Sacred Heart College, Tirupattur was the chief guest and he hoisted the National Flag and accepted contingent drill performed by NCC Senior Division and Senior Wing cadets. He delivered his Republic Day special message.
7. **NAAC Peer Team Visit:** On 28th January 2019 UGC – NAAC Committee visited our college for the assessment. During their visit our college NCC Unit performed Guard of

Honour to the Special Guests and exhibited their achievements in colourful display by establishing stalls with the help of photos and charts.

8. **B & C Certificate Examination:** Our college NCC SD and SW cadets attended NCC B and C Certificate examinations during February 2019 held in Sona College of Arts and Science, Salem as the part of their Training activities.
9. **Regular Parades:** In the academic year 2018 – 2019 our college NCC Unit had successfully completed 35 Regular official parades and 10 Regular Unofficial parades with college NCC Officer LT.Dr.K.Sivakumar, Asst. Professor of Economics with the assistance of Miss. J.Merlin Florence, Asst. Professor, Dept., of Comp. Science along with the unit Army staff.

Department of Physical Education (Shift-1 & 2)
Sports & Games
Extramural Activities and Achievements

S.No	Date	Event/Competition	Venue	Position
1	29.07.2018 To 30.07.2018	Fr.Guezou State Level Basketball Tournament	Sacred Heart College, Tirupattur.	3 rd Place
2	01.08.2018 To 03.08.2018	30 th Don Bosco Centenary State Level Volleyball Tournament	Sacred Heart College, Tirupattur.	Runners
3	21.09.2018 To 20.09.2018	Diamond Jubilee State Level Volleyball Tournament	Jamal Mohamed College, Trichy.	Runners
4	23.08.2018	Thiruvalluvar University Interdivision Cross Country Competition	Don Bosco College Yellagiri Hills.	6 th place
5	04.09.2018	Thiruvalluvar University Intercollege Hockey Tournament	Sacred Heart College, Tirupattur.	Winners
6	03.09.2018	Thiruvalluvar University Intercollege Basketball Tournament	Sacred Heart College, Tirupattur.	Winners
7	11.09.2018	Thiruvalluvar University Interdivision Basketball Tournament	Sacred Heart College, Tirupattur.	Winners
8	12.09.2018	Thiruvalluvar University Interdivision Hockey Tournament	Sacred Heart College, Tirupattur.	Runners
9	28.08.2018	Thiruvalluvar University Intercollege Badminton Tournament	Islamiah College, Vaniyambadi	Combined Team Runners
10	28.08.2018	Thiruvalluvar University Intercollege Table Tennis Tournament	Islamiah College, Vaniyambadi.	Participated
11	03.09.2018	Thiruvalluvar University Intercollege Volleyball Tournament	Sacred Heart College, Tirupattur.	Winners
12	11.09.2018	Thiruvalluvar University Interdivision Volleyball Tournament	Sacred Heart College, Tirupattur.	Winners

S.No	Date	Event/Competition	Venue	Position
13	16.10.2018 To 20.10.2018	Thiruvalluvar University Intercollege Cricket Tournament	GTM College, Gudiyatham.	Participated
14	19.09.2018 To 20.09.2018	Thiruvalluvar University Intercollege Kabaddi Tournament	Don Bosco College Yellagiri Hills.	Participated
15	16.10.2018 To 17.10.2018	Thiruvalluvar University Intercollege Boxing Competition	B.P.J College, Srimushnam.	Participated
16	27.10.2018	Thiruvalluvar University Interdivision Best Physique	C.Abdul Hakeem College, Melvisharam.	1 Gold Medal 1 Bronze Medal
17	08.11.2018 To 09.11.2018	Thiruvalluvar University Athletic Meet	Voorhees College, Vellore.	1 Gold Medal 1 Silver Medal 3 Bronze Medal
18	19.09.2018 To 20.09.2018	Thiruvalluvar University Intercollege Football Tournament	Adi Parasakthi College, Kalavai.	Participated
19	28.09.2018 To 29.09.2018	Thiruvalluvar University Interdivision Football Tournament	Voorhees College, Vellore.	Combined Team Runners
20	08.12.2018	Thiruvalluvar University Inter College Ball Badminton Tournament	C.Abdul Hakeem College, Melvisharam.	Participated
21	02.10.2018 To 03.10.2018	Thiruvalluvar University Inter College Kho-Kho Tournament	Tirupattur Arts & Science College, Tirupattur.	Participated
22	29.10.2018	Thiruvalluvar University Inter Division Wrestling	Shanmuga College, Thiruvannamalai	Participated
23	19.09.2018 To 20.09.2018	Thiruvalluvar University Badminton Woman Tournament	Auxilium College, Vellore.	Runners

Intramural (Sports & Games)

S.No	Date	Event/Competition	Shift	Position	Department
1	27.07.2018	College Sports Day	I	Winners	B.Com.
			II	Winners	B.Com.
2	26.11.2018	Interdepartmental Volleyball Tournament (Men)	I	Winners	B.A. Economics
				Runners	B.Com.
3	27.11.2018	Interdepartmental Throw ball Tournament (Women)	I	Winners	B.A. English
				Runners	B.Com.
4	26.11.2018	Interdepartmental Tennikoit Tournament (Women)	I	Winners	B.Sc. Physics
				Runners	B.Sc. Mathematics
5	28.11.2018	Interdepartmental Basketball Tournament (Men)	I	Winners	B.Sc. Mathematics
				Runners	B.Com.
6	28.11.2018	Interdepartmental Badminton Tournament (Women)	I	Winners	B.Sc. Mathematics
				Runners	B.Sc. Computer Science
7	26.11.2018	Interdepartmental Volleyball Tournament (Men)	II	Winners	B.Com.
				Runners	B.Sc. Computer Science
8	27.11.2018	Interdepartmental Throw ball Tournament (Women)	II	Winners	B.A. English
				Runners	B.Sc. Chemistry
9	27.11.2018	Interdepartmental Football Tournament (Men)	II	Winners	B.Com. (C.A)
				Runners	B.Com.
10	26.11.2018	Interdepartmental Tennikoit Tournament (Women)	II	Winners	B.A. English
				Runners	B.C.A.
11	28.11.2018	Interdepartmental Basketball Tournament (Men)	II	Winners	B.A. English
				Runners	B.Com
12	28.11.2018	Interdepartmental Badminton Tournament (Women)	I	Winners	B.A. Tamil
				Runners	B.Sc. Mathematics
13	10.01.2019	Best Physique Competition		First Prize	S.Palani III B.Sc. Biochemistry

English Articles

Oh Soldier! My Soldier!

Every day is like a battle;
And the very next day is a struggle
You are always ready for war,
Because you do not care
You do not care for yourselves;
You care only for ourselves
You do not get the food scrummy
You do not lead the life that is lovely;
You do not have fear;
So if died, do not shed a tear
You never hesitate to save us;
So we do not hesitate to salute
You are not just heroes;
You are the real heroes,
About whom,
Some of us do not know.

Major M.S.Alphonse
Physical Director Rtd.,

My Mentor

Candle melts to cheer the place
Lamp burns to show the ways
Stone breaks to become statue
Seeds grow to give crops.
 Wind moves to make the waves,
 Clouds fight to make the sounds,
 Pencil sacrifices to cheer the child,
 Pen gives blood to form word.
Shoes protect legs to face the thorns,
Steps bear the legs to climb the hills,
Flower gives honey to make the bee happy,
Old seed dies to grow the new born baby.
 Fire burns to cook the food,
 Sun smiles to remove darkness
Likewise teachers sacrifice themselves
To mould students.

D.Aneesh Peter Nathan (AU171119)
II B.A., English (Shift-1)

The Real Hero

He grows gold from the soil
He is a provider of food to all

Whether it is sun, cold or rain
No one can stop that man.
Clouds write his destiny
He is deceived by the brokers
Still he fills the stomach of all
True son of earth, The Farmer.
The sun showers fire
And sweat flows from his body
Earth burns like coal
But he moves on steadily
Even when the harvest is good
He doesn't get the benefit
He gives life to all
But he doesn't have sufficient to eat.
He is born in debt and lives in debt
He dies in debt, a cruel fact.
His life is full of problems and pain
But he is patient, who never complains.
Flood and famine destroy his crops
But he always keeps alive his hopes.
Let us try his efforts and they won't be in vain
He deserves best that he should gain.
He is the real hero of our nation
Hard work and honesty is his only possession.
It's the duty of our Government and Youth to give him the utmost attention.

A.Nelson (AP170637)
II M.S.W.

Of Bluish Flower

Every dawn she walks through the same way again,
Busy legs are flying; birds are walking, not with pain.
Taste of the sweetest breeze floats here to inhale,
Those coldness, chill morning, gets hot, while she exhales.
There near milestone, others care, what they want to care,
Soft long greenish thread climbs over to share.
More buds are sleeping wordlessly, waiting for brightness,
Dark pearls make them awake with no tiredness.
Both the black, made them bloom a blue blush,
Gets green wing in green body, but stays there fresh.
If they fly how can they delight those heavenly beauty?
Dances with airflow, watches her in only duty,
Lives solo among the crowd, with blueness as the center of the heart,
Hope is, she is near, her love, makes an art!

K.K.Aravinth Kumar (BP171117)
II M.A., English

What is Life without some Risks!

I saw you through my window
I was always a girl of Indoor,
I've never been out for a while;
That absolutely made me so vile
I don't know how it feels,
To be in the warmth of the sun.
I don't know how it feels,
To be in the warmth of love.
All I know is the music of my man,
The care of my dad, which makes me calm.
As the sun could warm and burn,
So is the love to comfort and to hurt.
You were my dream, are and will be,
I enjoyed watching you there.
You are my lucky charm.
Your love always makes me warm.
I wished to come out for you,
To be destroyed beside you,
Because, that much I love you
What is life without some risks!

J.Nancy (AU170130)
II B.Com. (Shift-1)

My Lady

O dear! O dear! My beloved one,
Such a creature found on earth as any other
I left my heart ajar
I was shocked on your beauty
I wholly behold you only
It thwarts me to see any other

O dear! O dear! My dearest one
Such a sweetest kind found on earth as any other
Leads to paucity of your-saccharine to possess
As not like honey which bitters when over consumed

O dear! O dear! My deity
Godliness found on you, it sanctifies me oft,
To be with you is one of my pined days, ever
May ever, sun rises at west if would so; it's because of you only dear.
O dear o dear my

Water

You as water, me as a fish
I left my breath over you
I'm pleading you for my breath
You my dear my beloved one

No breath without you my dear
Don't make me sob by leaving
Make me alive, make me feel
Make me sink over your love, my dear

M.Goldwin Antony (AU171177)
II B.A., English (Shift-1)

Dear Best Friend

You took my hand and showed me the way
When I was blinded by unfortunate fate
You took my hand and prayed with me
While my troubles quickly faded away.
You took my hand and dried my tears,
When I cried over it all.
You took my hand and helped me understand,
When I questioned our Almighty one.
You took my hand and made me promise,
I'd never walk alone again.
You took my hand and mended my friendship,
When I was too stubborn to say anything.
You took my hand and made me laugh,
When we remembered our funny mistakes.
You took my hand and made me see,
That God has a special plan for me.
Now leave my hand and never let go,
Because our friendship means more than you'll ever know!!
Nobody sees nobody knows
We are a secret that can't be exposed
That's how it is... That's how it goes...
Far from the other close to each other
In the daylight, in the daylight,
When the sun is shining,
On the late night, on the late night,
When the moon is blinding
In the plain sight, plain sight,
Like stars in hiding,
You and I burn on
Put two and together, forever will never change
Two and together will never change
That's when we uncover and discover
My silence is in your arms
When the world gives heavy burdens
I can bear a thousand times
On your shoulder, on your shoulder
I can reach an endless sky
Feels like paradise
Put two and together
For-ever will never change

To my twin

N. Shamuddin (BU171023)
II B.C.A.

My Love and Memories for my Severed Friendship

I, as a toy and you as a key
Worked together in the field of love
I, as a candle and you as a thread
Lit the dark memories of our lives

I do remember the blissful days
Where I held my hand in yours
I widely see and blindly blink
But you are away from me

I struggle to walk alone, where
Two Pinky birds share their love
I die for a sight when
You look at me as the soul of other

A merry day of you came, I
With chaotic mind stood before you
I with a beautiful ring, thought
It wouldn't equal or show my love

You invoked me by telling, if
Five minutes of smile makes a beautiful photo
Think, if keep smiling how your
Life would be?

You named me Franky, in turn
I named you Pinky
We both in gaiety vowed
To be together forever

You and me as Franky and Pinky
Sipped and tasted every drop of filial love
The glass now reflects that moment
And mocks me for my innocent love

The traffic police was stunned
And diverted, as you and me in bike
The trees in a spring sprouted
Green leaves as we laughed together

The steps in the library, seem
To be cleaved as I'm alone
The books in the rack look
Bright from out but I find no letters

I scream, I crawl in my
Dream you're mine
I weep, I am depressed but in real
You're just being a dream

I stand before the Almighty
Of all religions with tears
I keep the Holy Books and crawl
To make us rejoin as we were

H.Prithika (AU171105)
II B.A., English (Shift-1)

The Longest Ride

Hey,
I remember the first day I saw you
Then, I never realized that it will be you
Who will be my everything in life?
Gradually you kill me with your love
I was bleeding by control to resist
You from me; without my intention
I started with a smile to assist
You in my dreams and in contention
You had a smile which knock me down
To make me laugh you become a clown
Your boundless love made me strong
The distance in us made me long
For you each and every second
The days and times that we have
Spent together will ever be
The longest ride of our lives.

J.Shiny Rose (BP171123)
II M.A., English

Teacher

Oh! Teacher I thought about you,
Words didn't come.
But you came like a moon,
And gave me a right path soon.
If we listen to your lecture,
We will get a better future.
Teaching is your social service,
In that we will get some moral advice.
To gain knowledge is our principle,
And my teacher you made that possible
You worked hard for us,
To improve our knowledge in us.
Playing is our hobby,
To make us proper is your duty.
Oh! Teacher you are my good friend,
And, your friendship will not end.

M.K.Harinesh (BU180218)
I B.Sc., Mathematics (Shift-2)

Life of a Chemist

Chemistry is a branch of mystical science,
Chemistry is also a way of life,
Giving pride and honour to all chemists,
Our life could be good or bad,
It is acidic giving heartburn which is bad,
It is suffocating with acens which is bad,
It is good when it buffers like our blood,
All this can be delineated by mastery of chemistry,
Which is communicated by teachers, mentors and noble chemists
Teaching, Researching and Serving in chemical field,
Is the resolution of our community
When people mystify in acidic - basic life nexus,
Chemists as teachers communicate palpably,
With these horde of creative scholars proved,
This master of intuitive change is a matter of great innovation,
With new conductive research hypothesis evolution,
Helping audience to accomplish their life with a common goal.
When learners' life is trapped in acidic basic pool,
The chemists use their art and poetry,
To portray in four pillars of a classroom,
Making innocent and crucial contribution,
To understand, estimate and calculate P^H ,
Of Chemical issues of life which are at stable saying,
Chemistry is not politics; Chemistry is not a dream,
Chemistry is not a public relation ploy,
It's a field opened up for revolutionary progress.
Chemists liaise with young masses
With propitious emotions and mechanistic testing reagents,
Paying tribute to all sorrows and happiness with a message,
Atoms change, properties differ,
Bonds cleave, molecules rearrange but still
Life is chemistry and it dilutes your sorrows,
Evaporates our worries, boils our ego and
Gets a beautiful crystal of happiness thus,
Making chemistry a boundless sublime among us.
When defeats creep upon chemists like a mould,
Coal to diamond; love to hate; loyalty to despair;
Like a flesh and the rot within the flesh,
Atoms and allotropes of our goals slowly vanquish,
Like an emperor leaving his significant figure and precisions,
Like a stripped footprints of all fissile and amorphous ambitions now,
As the electron ejected from their quarry,
Like laureates hoisting their insignia to this chemical community,
Dramatic fluoresceinated flair merely adds to pleasure.
Round a tiny scratch of earth, frosty crystals find their birth,
An atom, then a molecule, then two, three bind in six fold symmetry,
Infinitely small, an echo to infinity,
A transient, local victory over the mighty entropy and spicy enthalpy,

Feeling strange and changing to something new,
Caught by various binding forces and reactive bombardments,
Bereft to penetrate those multitudinous nuclear forces,
Still bonds break, Atoms rearranged, Forces rejuvenated
And finally reincarnated to stable product.
A dream once I had, made me know the taste of chemistry,
And when the truth of my reality digs holes in my spine,
Staying hollow until my passion uncovers me,
Making me feel, when my passion and perseverance collide,
Meteors air burst into reactive passion,
Pulled into my mind in all that is beautiful and teaches me what is it to feel chemistry
As a passing glance and the fuels that embers the linger from a wish saying
Chemistry is God's gift, let us adore it,
Chemistry gives us pleasure, let us enjoy it,
Chemistry gives us happiness, let us live it,
Chemistry is life, let us care and serve for it,
Chemistry gives an epitome of wonderful mystery, let us preserve its mystical beauty.

S.Nazia (BP170415)
II M.Sc., Chemistry

Corner of your Heart

I know many of us have a lot of confusions about life, misunderstandings, and conflicts and the one thing after all we forget is that, this life is for only once. No forward or reverse button to erase or move back the days. We fail to understand the blessings we got. Are you talking about God's blessings? No folks. God is nowhere or God is now here, everything lies in our perception, isn't it? But rather whatever we possess in our life, good friends, finest education, proper food, caring parents to whom we fail to how our love openly. They say unsaid love is utter waste, how come we do not recognize that we seldom express our love to our living Gods-Parents. There we get a question whether we recognize what we have? What about our missile man's dream? He always wanted us to shine higher and higher in the world. Is it fair to forget all these and be busy with social media alone? Come on. Its time! Widen your knowledge, stay confident, make India proud and strive for excellence.

M.Nisha (AU171166)
II B.A., English (Shift-1)

Faith

Faith is- Trusting in an invisible God, the all-powerful, as we call it.
Faith is- Trusting in supernatural power, which we find it difficult to comprehend.
Faith is- A blind obedience to the cosmic energy.
Faith is- Trusting something beyond the capacity of human reasoning.
Faith is- Ultimately surrendering oneself to the omnipotent one.
That is, the earth, star, moon and the universe surrendering to the SUN, the SON OF GOD (Jesus Christ).

A.Sagayam (AP17634)
II M.S.W.

The Fall of the God's Land: The Statistics that Shock

As Kerala is limping back to normalcy after the severest flood that hit the state, India went to the India Meteorological Department (IMD) in Pune to find the rainfall statistics of this monsoon in God's Own Country.

Pulling out the records of the last 140 years, Dr.Arvind Srivastava, Director of IMD, explained the rainfall figures in Kerala.

"The highest rainfall in Kerala occurred in 1907-- that was 175 per cent higher than normal. It was almost 900 mm in the month of August then and this year, till August 21, the rainfall has been 780 mm which is 150 per cent excess than normal," Srivastava said.

He explained that the rainfall in Kerala in August is the second highest till now, but as far as the overall rainfall for the entire monsoon season is to be considered, 1924 witnessed 64 per cent excess rainfall.

In 1961, it rained 50 per cent more than normal. A 40 per cent excess rainfall was recorded in Kerala in 1923.

This year's rainfall in Kerala from June to August 21 has crossed 41 per cent excess than normal. The season's average rainfall in Kerala is 2093 mm. Up to August 21, rainfall was over 2387 mm.

In 1924, Kerala received 3000 mm of rainfall which is the highest till now.

Rainfall in Idukki District of Kerala, however, has broken all records. The highest rainfall (recorded in this district) till now is 1419 mm. It was in 1907 that Idukki District received 1380 mm rainfall.

He said that rains have now abated Kerala as the low-pressure system has shifted from the Bay of Bengal to Northwest Madhya Pradesh and adjoining Rajasthan. The floods that ravaged Kerala may cull the state's economy which is driven by services and consumption by 100 bps, with the biggest loss being seen in tourism and hospitality, labour and the Kochi industrial belt.

The worst floods in a century have killed over 230 people since August 8 and caused colossal loss of property, agriculture, and infrastructure, which Kerala has pegged at over Rs. 21,000 crores.

According to a report by care ratings, the rain-battered state's GDP growth is expected to fall by 6.5-7 per cent from the budgeted 7.6 per cent this fiscal year.

Industry contributes only 26 per cent of Kerala's GDP, while 66 per cent comes from services. Out of which, tourism and hospitality alone contribute to 40 per cent of the state's GDP.

Therefore, the massive damage in the Ernakulam/Kochi region, which is the highest industrial and tourism contributor to the state GDP, means these sectors could see a gradual recovery only next fiscal year.

The damages to roads, wherein over 10,000 km of district, state and national highways have been washed away, will be as high as Rs.12,000 crores, while the figure for airports is nearly Rs.40 crores, the report said.

The next big shock is the plantation sector and tourism, which contribute the most to Kerala's economy. The rubber sector is staring at an estimated loss of Rs.420 crores, while the hit to the tea industry is pegged at Rs.35-40 crores, according to the report.

Since Onam accounts for almost 60 per cent of total sales in the state, the floods led to a Rs.1,000 crores drop in total spending on consumer durables, the report said.

Another area on which the deluge has a debilitating impact is employment.

Care Ratings estimate that employment of nearly 41.3 lakhs individuals in the worst-hit districts of Idukki, Ernakulam, Kollam, Kottayam, and Pathanamthitta has been affected and the wage loss is estimated at around Rs.4,000 crores for August alone (based on the average wage rate of Rs.400 per day for Kerala as per the data from the annual report for 2017-18 of the Union ministry of labour).

According to the report, Kerala will have to borrow heavily from the market as Central aid has only been a paltry Rs.600 crores, against an immediate demand for Rs.2,500 crores by the state and the total loss is estimated at over Rs.21,000 crores.

With tens of thousands of homes damaged fully or partially, the average rebuilding cost will be Rs.50,000-1 lakh per unit, which will have to be financed by banks, which may lead to a high double-digit credit growth, which the agency pegs at 17 per cent or more.

The revenue deficit will widen further against the budget estimate of Rs.12,860 crores and the fiscal deficit too would increase from the budget estimate of 3.1 per cent of state GDP, the report warned.

"The state debt too is likely to surge, and Kerala may have to resort to increased market borrowings from the budget estimate of Rs.1.6 trillion. Every Rs.1,000 crores spent over and beyond the budgeted amount as flood relief will widen the revenue deficit by 0.12 per cent of gross state domestic product," said the report.

On the estimated cost of relief operations, it said sustaining the over-1 million people in relief camps on a consistent basis will involve a minimum Rs.10 crores a day or Rs.300 crores a month. This would have to be financed from either relief grants from the Centre or contributions by others.

Now coming to the countries flood report:

Counting Costs

107,487 deaths due to floods in India over 64 years.

Rs. 3.6 Trillion is the Estimated value of damage to crops, houses and public utilities.

92,000 cattle lost in flood every year.

7 mm Hectares of land or nearly twice the size of Kerala is submerged by floods annually.

R.Janani (AU170072)

II B.A., Economics

How to Control Our Mind

Mind Control: We should not get distracted while we are concentrating on one thing. Brainwashing is the concept that the human mind can be altered or controlled by certain psychological techniques and manipulation. It is also called Secret to Success or Brain control, Brainwashing, etc...

Importance of Mind Control: If you do not have mind control, you will not be able to achieve your goal. You will lose many good opportunities in life. So, mind control is necessary for one's life.

Things one should avoid to control the Mind: There are five things. 1. Your past, 2.Other People's Opinions, 3.Unlimited Beliefs, 4.Relationship, 5.Money.

Your Past: It means your previous action (or) past activities. If you start thinking your past activities always, you will not be able to control your mind.

Other Peoples' Opinion: Do your own. Do not listen to other's opinion. If you start working on other's opinion, you cannot achieve your own.

Unlimited beliefs: If you have unlimited beliefs on other things, it will also distract your concentration.

Relationship: If you have lot of relationship that is good but if you concentrate always on relationship, you will not able to concentrate on your Mind Control.

Money: Earning money is a good activity. It is not good to always think about money.

How to Control Our Mind: There are many steps to Control our Mind.

1. Yoga: Do yoga every day.

2. Think before you do: Think always before you do anything.

3. Listening to Good Music: Listen to music. Music will make your mind calm.

4. Avoid Negative Thoughts: If you have a lot of negative thoughts, it will take away all the positive thoughts. Have positive thought always.

5. Concentrate without Distraction: When you concentrate on one thing without distraction, the Mind control will increase. Concentration is good for studies.

6. Observe your own Mind: If you read books, first you will observe the concept in your mind because you can understand only after observing.

Conclusion: If one follows the above steps, one can have Mind control "One believes things because one has been conditioned to believe them."

S.Muthukumar (BU171031)
II B.C.A.

Unemployment and Being Down in Thoughts

Introduction

In the real world, every individual is brought up and inspired in his/her school or college. Every child in that stage longs for love and care. So there must be atleast one person either parent or teacher in each and everyone's life to inspire them and lead them in the right way. When one doesn't get enough love and concern he/she goes through hard time in his/her entire life. They may easily be discouraged in life, in career, even in their future relationships.

My perception towards being unloved

Life itself becomes a great struggle when one grows without being loved and concerned. I know because I have come across many of my friends being sad and down hearted. In school, they might have enjoyed up-to their fullest without knowing the struggles of outside world. It can't be the same with the higher education. Once we enter into college life, it won't be exactly the fun which we had in school. We have to juggle working with the seminars, classes, and also overcoming social life too. As they get their education, simultaneously they grow unaffectionate towards others who show them love. Maybe sometimes they consider it as true love. After being so matured they can't recognize what is love and what is infatuation. All the behaviour comes along with them from their child-hood. They don't get enough

education about relationships and also they may not have experienced love in their childhood which makes them seek love in others.

Future causes

Then we'll graduate and still we'll find ourselves poor and being unemployed. So we have to choose our surroundings in which we can be cherished and always motivate us to be successful. Otherwise we have to adapt ourselves according to the society to live a happy life. Everyone who got through the toughest times in his past must seek good for themselves. As our former president said Dr.A.P.J. Abdul Kalam.

*“Accept your past without regret,
Handle your present with confidence,
And Face your future without fear. ”*

Others sayings

The world famous Basketball player Michael Jeffery Jordan, also known as MJ motivates the world by his words,

*“I’ve missed more than 9000 shots in my career.
I’ve lost almost 300 games, 26 times. I’ve been trusted
To take the game-winning shot and missed. I’ve failed
Over and over again in my life and that is why I succeeded.”*

Martin Luther King Jr. was an American Baptist minister and an activist who became the most visible spokesperson and inspired people with his words,

*“We must accept finite disappointment
But never lose infinite hope.”*

Passion and money

Mostly everyone in his childhood wishes to become as he/she dreams and gradually as he/she grows older his dreams fade away. It's so rare that one works ceaselessly on his goal and attains it. It's so enjoyable to work passionately.

But people may blame others who work with passion, because passion won't pay for bread. It's our choice to which we pay attention and move our step. Money plays an important role in one's life. But passion leads our life in a satisfied way even if we earn a little money.

Getting Employed

It's true that “Getting employed is selling (marketing) ourselves to an organization”. Some keys which are required to be employed are possessing effective communication skill, a spirit of teamwork, good problem solving techniques and some inter-personal skills. These are employability skills which are a must. But it's in the hands of people to choose their career for living lavishly or living passionately and joyfully. When a plan doesn't work, there are many other options to improve our standard of life. So we must not be frustrated with failure, rather we must collect all those failures as stepping stones and reach success in our life.

*“Have a clear vision of your future,
And take action every day to move towards it.”*

R.Zabeeullah (BU171029)
II B.C.A.

Demonetization: The Impact

Demonetization is the act of stripping a currency unit of its status as legal tender. It occurs whenever there is a change of national currency: The current form or forms of money is pulled from circulation and retired often to be replaced with new notes or coins.

The highest denomination note ever printed by the Reserve Bank of India was Rs. 10,000 note in 1938 and again in 1954. But these notes were demonetized in **January 1946** and again in **January 1978**, according to RBI data.

The Rs. 10,000 **notes** were the largest currency denomination ever printed by the Reserve Bank of **India**, introduced for the first time in 1938.

On **8 November 2016**, the Government of India announced the demonetization of all 500 and 1000 banknotes of the Mahatma Gandhi Series.

The 500 banknote denomination was first introduced by the Reserve Bank of India (RBI) in **October 1997** in order to contain the increasing number of banknotes in circulation, due to inflation.

The first when Rs.1,000, Rs.5,000 and Rs10,000 **notes** were taken out of circulation was in **January 1946**, a year and a half before the country won independence from the British.

Ghana was the first country to implement demonetization. After one and a half year of Demonetization, Indian Economy seems to have done away with all the negative impacts of Demonetization. The Economic Survey of India 2017-18, released just before the presentation of General Budget 2018 in Parliament has emphasized that all the negative impact of Demonetization of Rs.500 and Rs.1000 currency notes has ended.

Impact of Demonetization on Indian Economy in 2018

Economic Survey after careful review of Demonetization which was announced two years back, has found that the cash-to-GDP ratio has stabilized. It suggests a return to equilibrium:

- The Economic Survey says that India's GDP is set to grow at 7 to 7.5 percent in 2018-19. This is an increase from its prediction of 6.75 percent growth this fiscal year.
- The Economic Survey has cited exports and imports data to claim that the demonetization effect was now over. It claims that re-acceleration of export growth to 13.6 percent in the third quarter of Financial Year 2018 and deceleration of import growth to 13.1 percent is line with global trends.
- This suggests that the demonetization and GST effects are receding. Export services and private remittances are also rebounding.
- According to the statistics released in the Survey, the Demonetization had led to Rs. 2.8 lakh crores less cash (Equivalent to 1.8% of GDP) and Rs. 3.8 lakh crores less high denomination notes (Equivalent to 2.5% of GDP) in the Indian economy.
- The Economic Survey has also clarified that income tax collections have touched new height with demonetization and introduction of GST, "From about 2 percent of GDP between 2013-14 and 2015-16, they are likely to raise to 2.3 percent of GDP in 2017-18, a historic growth."

V.Amutha (AU170023)
II B.A., Economics

A Good Looking Poisonous Flower

One fine evening, the clouds were busy and the weather was mild.

A hummingbird flew and sucked nectar from various flowers in West Garden. She had attractive eyes and feathers. She went everywhere to find her nectar. She enjoyed every flower's nectar. But, she wanted to suck the honey of a fresh flower that was in a restricted area, which spread mesmerizing and heavenly odour. She had a desire of sucking the honey of the restricted flower. She found it surrounded with lots of sharp thorns, that can easily make one bleed and she needed strength to break it. Each and every day when she flew by the side of the restricted area, she said to the flower "One day I am going to achieve success by sucking you".

In the same Garden, the strongest bee buzzed and sucked honey from every flower that he saw inside the garden. It looked strongest, but ugly. Also, it found a flower, which was there in a restricted area, which smelt like heaven. He wanted to suck it before he died. He had a deep hope of reading the place of restriction.

To attain fame and success, both of them could go to any extent. Hummingbird saw that Bee also had a same desire of sucking from the same flower. She seduced him to fall. She falsified her love to make him fall. She went to him and spoke sweet coated words to make him fall. He left every work, went with her and made time for her. He left his every ambition and hopes and flew to get her fake love.

She asked him, "Will you do anything for me?"

He replied, "Yes honey, I will do anything for you."

She said, "The same as you, I have the desire of sucking the same heavenly flower which you are aiming at". She asked "Will you get me there to taste the heavenly flower?" and pointed out towards the restricted area. Without any doubt he answered her "Yes, I can". He went near the flower by penetrating and breaking every thorn for her. He bled drop by drop. He shed his blood for her. He said to her "I can also give my soul for you, honey".

Both of them were in the place nearer to the heavenly flower. She smiled with evil in her heart and said "I can't live with you" which made him feel his funeral inside the brain and she pushed him into *Sarracenia Flava* which is an insect trap. He struggled with tears to come out of the trap, but he could not. She watched his death with smile.

Finally, she was near to the heavenly flower. She flapped her wings fast and went near the heavenly flower. She sucked out every liquid in the flower like a man who consumes alcohol. She did not know the truth. The one which she sucked was a deep poisonous flower which spreads mesmerizing and heavenly odour. She found it hard to inhale the air and her eyes were about to close with redness. She bled as the reaction of poisonous flower. She found it hard to fly. Finally, she died.

U.Kamesh (BP171121)
II M.A., English

Failures as Stepping Stones

Failure

That is a word that most people dread. Everyone wants to be a successful .We want to be liked and admired. But that dreaded 'F' word always pops up failure. This experience is strong enough to make you want to quit and start a new life.

Success takes time and effort. Yes, many times you will fail before you are successful. Ask just about anybody who has become successful if they ever failed at any aspect of their journey. Chances are you will get any few stories of missteps and blunders.

The difference between long term success and failure is the reaction to it. People who, as Charlie Sheen says are “winners,” overcome the obstacles.

Yes, failure happens.

1. Live with it.
2. Learn from it.

There is a need to change the view on failure. It is not something that needs to be avoided. It is a chance to learn something that does not work. The biggest success has gone through the biggest failures.

To illustrate the point, here is a list of 5 people who were all hugely successful in their fields. All of them met with failures at some point in their lives.

Not only did these people fail, but they failed on a massive scale. Yet history still views these successful people who failed but created great success stories because they bounced back and succeeded in the end.

Elvis Presley

You do not need to be an Elvis’ fan to acknowledge the impact he has had on popular music. They don’t dub somebody the ‘king’ of a form of music without great success. He says that, “When things go wrong, don’t go with them.”

But even for Elvis success came after failure. His first recordings went nowhere. After that he tried to join a vocal quartet and was told he “couldn’t sing”. Finally, right before he became popular, he was told, “You are not gain ‘nowhere, son. You ought to go back to driving ‘a truck.”

Vincent van Gogh

Van Gogh’s paintings these days sell for incredible amount of money. Four of his paintings are sold for more than 100 million dollars .Yet, Van Gogh is a cautionary tale. In his life, he was a failure.

He slowly began to build a “reputation” while he was alive, but he also had tonnes of critics. He burned and destroyed many of his paintings out of frustration and was known to only sell ONE PAINTING. He says that,

“What would life be if we had no courage to attempt anything?”

He did not work to overcome his failure and killed himself. Soon after his death his work began to garner intense critical and financial success.

Michael Jordan

It is hard to imagine it, but Jordan, who is arguably the greatest basketball player ever, was once cut from his high school team.

As Jordan puts it, “I have missed more than 9,000 shots in my career. I have lost almost 300 games. On 26 occasions I have been entrusted to take the game winning shot, and I missed. I have failed over and over again in my life. And that is where I succeeded.”

JK Rowling

Rowling is the perfect example that success can come to anyone at any time. She is now doing the backstroke through a pool of Harry Potter money, but that was not always the case. Before Harry Potter became a success she was a divorced mother, living on welfare, going to school and trying to write a novel in her spare time.

Rowling herself said that she was the ‘biggest failure that she knew’ and credits a lot of her failure.

At Harvard commencement speech Rowling had this to say, “Failure meant a stripping away of the inessential. I stopped pretending to myself that I was anything other than what I was, and began to direct all my energy to finishing the only work that mattered to me. Had I really succeeded at anything else, I might never have found the determination to succeed in the one area where I truly belonged. I was set free, because my greatest fear had been realized, and I was still alive, and I still had a daughter whom I adored and I had an old typewriter and a big idea. And so rock bottom became a solid foundation on which I rebuilt my life.”

Albert Einstein

If asked to name a genius, most people come up with the name Albert Einstein. Yet even for Einstein genius did not come easy. He had speech difficulties as a child and was once even thought to be mentally handicapped.

As a teen he rebelled against his schools reliance on rote learning and failed. He tried to test into Zurich Polytechnic, but failed again (although he did very well in Mathematics and Physics section...as you might expect).

Einstein says that,

‘Anyone who has never made a mistake has never tried anything new’.

Einstein buckled down, received the requisite training and applied to Zurich polytechnic again, and of course was accepted. A few years later he had a Ph.D. and was recognized as a leading theorist. A few years later he got the Nobel Prize for Physics and began to be recognized as the genius of our modern era.

Conclusion

Obstacles are out there. They are meant to be overcome. No adventure worth undertaking is easy. Everyone who achieves success faces obstacles. What makes or breaks a person is how they react to the obstacles and roadblocks in their life and what they do or do not do to overcome these setbacks.

Perhaps some historic figure has inspired you the way that the successful people who have failed above have inspired me. Take action and get results.

P.Sharma (AU170406)
II B.Sc., Chemistry (Shift-1)

Wright

Wright is an American young man. He sees football as a violent game that has become an American ritual a much beloved one at that, in spite of the barbarism and destruction. Wright indicates his feelings about the local men and the lives they lead, using language that suggests both abhorrence and sympathy towards people who are near to him. He learns *all men are mortal*.

One day *Wright* sees that everything in the refrigerator looks as if the beast has been eaten – half. He starts to talk like a Jew and to feel like a Jew in several different ways. He starts to think about his past. His father dies before he has time. He describes him as heavy, comparing him to a vampire, he remembers how he drank his blood for a year, but then realizes the duration was closer to seven years.

He starts to speak about war. Dedication is homage to those who died from one who survived. He then recalls the excitement of the prewar years, when the catastrophists and other talented young people, now dead, faced anxiety with energy and art. Wright thinks himself as a knight rushing into battle in order to rescue his “lady.”

His mind has been changed. He starts to admire nature nearby. The atmosphere is perfectly peaceful and calm and there is nothing to disturb it. He wants to celebrate his son Hartley’s birthday with the cool atmosphere at Stowey in 1798. He is all alone, except that his child is sleeping peacefully in the cradle by his side. His mind goes to and fro.

The sound of the church bells appears to him to be a prophecy of future events. He will also love the rainy season when the raindrops fall from the caves and their sound is heard only when the storm stops for short intervals and silence prevails. There was howling sound which indicates protest as cry, cry for all exploitation, repression and subjugation.

He is afraid of upcoming days. Howl presents a picture of a nightmarish world and as some reviews predicted, the wasteland of its generation. He loves to travel and many people accompany him. They are good travellers but their travel does not have any goal and destination.

They have listened to other people in new places. They throw salad on lecturers and give speech on suicide. They even perform drama on suicide. They have repulsion towards life and attraction towards death. Through suicide, they want to abuse the culture of Americans.

He goes to the river and sits down by the bank to think. He cannot concentrate. So he jumps into the water and sinks. He surfaces and cries out twice. If the water had not been so frigid he would have died, He says, “But it was cold in that water! It was cold!”

He takes the elevator to the sixteenth floor of his building, where he thinks about his “baby” and considers jumping. He stands up there and yells, and if it had not been so high, he might have leapt off and died. “But it was high up there! It was high!” he says.

He comments that since he is still living, he might as well live on. He might have died for love but he was born to live. He says to his baby that he would have “dogged” if she were to see him die. He concludes, “Life is fine! Fine as wine! Life is fine!” Finally he comes to know the meaning of life and lived till death.

I.Sooriya Banu (BP171101)
II M.A., English

Three Factories for Human Being

Scenarios have passed and we live in a messed area of Industrialization, factories and so on. When British captured, we were all industrialized to different trades as slaves, even though the cult of trading existing before the arrival of the British army made us slaves. At present, we are still slaves to it, though received freedom British. We human beings need to have three factories to be built in.

Steel Factory: we need to build steel factory in our mind as we are in our academic pursuit. Our mind should be as strong as the steel.

Sweet Factory: we need to build up sweet factory in our mouth. As we are social beings living in the society, we should talk only the sweet characteristics of persons. We need to avoid gossips, back biting, and other verbal ill treatment.

Ice Factory: we need to build ice factory in our heart because we need to have a melting heart with compassion and kindness towards the people who suffer, especially the poor.

Finally these three factories would help a person to live a virtuous life. Perhaps there is danger in it. If the factories are not built in the proper places they mess up. For example, if ice factory is built in mind think of our mind, how well do we excel in our academics. If steel factory is built in our heart, think of our characteristics changes. Henceforth try to build steel factory in mind to be strong, sweet factory in the mouth to speak well of all, and ice factory in heart to have a melting heart towards the needy especially the poor. I hope that by building these three factories would frame a person to be virtuous in life.

Casimir Joseph (BU181101)
I B.A. English (Shift-2)

Health Benefits of Aloe Vera

Aloe vera plant is considered to be a miracle for health due to its numerous benefits. Here is a list of 25 Aloe vera health benefits and its uses that might teach you how to use Aloe vera properly: Numerous Aloe vera benefits have made the aloe vera plant popular all around the world. For quiet sometime Aloe Vera plant is being used for the treatment of different kinds of illnesses and diseases. Aloe vera plant is a non-toxin, succulent plant which store water in its fleshy leaves and its succulence allow this juicy plant to survive in areas of low natural rainfall. There are many Aloe vera benefits from health to nutrition, from acne treatment to skin care. Aloe vera plant is widely grown as an ornamental plant; however it is equally popular as medicinal plant due to several Aloe vera uses.

Aloe vera benefits for skin care: Aloe vera plant relieves the burned skin caused by sunburn. Try this Aloe vera benefit to treat sunburn naturally at home. Smooth and glowing skin can be achieved with the help of Aloe vera plant. Take advantage of this Aloe vera benefit by just rubbing the aloe vera gel on your face. Aloe vera plants are also helpful in curing blisters, insect bites and any allergic reactions, eczema, burns, inflammations, wounds, psoriasis. This Aloe vera benefit is a boon for people who have sensitive skin. Try this Aloe vera benefit, if you have dry skin. You can get normal, smooth and shiny skin with the oil extract of Aloe vera plant. Healing properties of Aloe vera plant make it so beneficial for skin care. It helps in restoring skin's natural beauty; this is one of the most important benefits of Aloe vera. Aloe vera plant is an outstanding skin moisturizer. It provides oxygen to the cells which strengthens the skin tissues and helps to keep the skin healthy.

Aloe vera plant has anti-inflammatory properties that assist in treating acne and pimples. Acne is a skin state in which the sebaceous glands and hair follicles become more active and inflamed and hence produce pimples. One should use Aloe vera skin care products consistently to treat acne. Aloe vera benefits are utilized mainly to advance the appearance of the skin and can effectively treat acne. Aloe vera plant helps to cure acne by healing the scars and redness associated with acne. Aloe vera juice can be applied directly to the skin through gels, creams and lotions to cure acne.

K.Vidhya (BP180906)
I M.Sc., Biochemistry

Cancer Immunotherapy

Researchers developed the first chimeric antigen receptor T cells modified immune cells that can recognise tough-to-target cancer antigens about three decades ago. In the past 20 years scientists have tweaked CART –T cells to become potent weapons against tumours. These efforts have been rewarded with several recent approvals by the US Food and Drug Administration (FDA). Last year the FDA approved the CAR T-cells therapy Kymriah, which was developed by the pharmaceuticals giant Novartis uses modified patient immune cells to target a particular recalcitrant type of acute lymphoblastic leukaemia. Later in **2017** the FDA granted the approval to California-Based Kite Pharma, which developed the Yescarta a similar CAR T cells therapy for patients whose large B-cell Lymphoma fails to respond to other types of cancer treatment.

A number of other companies is conducting their own trails to attain regulatory approval for their own approaches to CAR T-cells therapy, which shares attribute of cell therapy, gene therapy and immunotherapy. CellTrials.org has developed an interactive map which displays the number of CAR T cells trails place in countries across the world and are categorised as targeting either hematologic malignancies or solid tumours.

CELL AND GENE THERAPY TRACKER: GLOBAL CAR T-CELL TRAILS.

National Institute for Health and Care (NICE) is still evaluating the KYMRIAH. Final decision is that whether the NHS will recover the immunotherapies expected this year, according to Pharma times.

Following the European Commission's approval KYMRIAH which received the approval from the US Food and Drug Administration (FDA) a year after will be available to patients in Europe who are **25 years** or younger and have relapsed refractory B-cells acute Lymphoblastic Leukaemia and to **adult** patients with relapsed or refractory Diffuse Large B-Cell Lymphoma (DLBCL).

Mwandila Sydney (BU170945)
II B.Sc., Biochemistry

Medicinal Use of Coconut

- Kills bacteria causing urinary tract infections, gonorrhoea gum disease, staphylococcus, Mrsa...
- Destroys fungus causing candida
- Kills viruses causing flu, infectious disease, typhoid HIV....
- Inhibits parasites growth such as tapeworm, liver flukes giardia.
- Regulates thyroid function.
- Relieves symptoms of chronic fatigue syndrome.
- Strengthens the liver and protects against degeneration.
- Improves magnesium and calcium absorption, promoting stronger bone.
- Prevents oxidation of fatty acids.
- Reduces bags, puffiness and wrinkles under eyes.
- Stabilizes blood sugar and insulin production.
- Protects against cancer; colons, breast, and digestive tract.
- Protects against osteoporosis and reduces problem from cystic fibrosis.
- Promotes firm skin tone, preventing age spots, sagging and wrinkles.

- Relieves and heals intestinal disorders, ulcers, colitis IBS and crohns disease.
- Stabilizes female hormones reducing hot flashes and vaginal dryness during menopause.
- Prevents nosebleeds by applying light film inside nostrils.
- Conditions hair, prevents split ends, reduces frizz, controls flaky scalp and stretch marks.
- Repairs cracked, sore and dry nipples.
- In combination with corn starch and baking soda, coconut oil makes an effective deodorant.
- Stops pain, burning and itching of bug and snake bites.
- Eliminates head lice.

Nutritional Uses of Coconut Oil

- Enhances absorption of nutrients and improves digestion.
- Provides a quick energy source and stimulates metabolism.
- Produces immediate, usable energy source rather than being stored as fat.
- Increases metabolic rate, stabilizes body weight and controls food craving.
- Enriches milk supply for breast feeding women.
- Topical application relieves pain and swelling from heamorrhoid.

It is also an excellent massage oil, a natural personal lubricant and greater sunscreen.

B.Karthikeyan (BU170947)
II B.Sc., Biochemistry

Horse Gram

The horse gram is normally used to feed horses, though it is also commonly used in cooking. In traditional Ayurvedic cuisine, horse gram is considered a food with medicinal qualities. It is prescribed for persons suffering from jaundice or water retention and as part of a weight loss diet. Although rich in proteins (20%), due to less acceptable taste and flavour of cooked products, it is consumed only by the farming community and low-income groups. Thus, it has remained an underutilized food legume. Horse Gram is mainly cultivated in India. It is also cultivated in Sri Lanka, Malaysia, and West Indies etc.

In India, this is grown in the states of Karnataka, Andhra Pradesh, Odissa, Tamil Nadu, Madhya Pradesh, Chhattisgarh, Bihar, West Bengal, Jharkhand, in the foot hills of Uttaranchal and Himachal Pradesh. It is consumed as whole seed, as sprouts, or as whole meal in India, popular in many parts of India. Medical uses of these legumes have been discussed. Horse gram and moth bean are legumes of the tropics and subtropics, grown mostly under dry-land agriculture. The chemical composition is comparable with more commonly cultivated legumes. Like other legumes, these are deficient in methionine and tryptophan, though horse gram is an excellent source of iron and molybdenum. Comparatively, horse gram seeds have higher trypsin inhibitor and hem agglutinin activities and natural phenols than most bean seeds. Natural phenols are mostly phenolic acids, namely, 3, 4-dihydroxybenzoic, 4-hydroxybenzoic, vanillic, caffeic, p-coumaric, ferulic, syringic and sinapic acids.

Dehusking, germination, cooking, and roasting have been shown to produce beneficial effects on nutritional quality of both the legumes. Though both require prolonged cooking, a soak

solution (1.5% NaHCO₃ + 0.5% Na₂CO₃ + 0.75% citric acid) has been shown to reduce cooking time and improve protein quality. Moth bean is mostly consumed as dhal or sprouts.

C.Nathiya (BP180911)
I M.Sc., Biochemistry

Drug Discovery from Medicinal Plants

Current research in drug discovery from medicinal plants involves a multifaceted approach combining botanical, phytochemical, biological, and molecular techniques. Medicinal plant drug discovery continues to provide new and important leads against various pharmacological targets including cancer, HIV/AIDS, Alzheimer, malaria and pain. Several natural product drugs of plant origin has either recently been introduced to the United States market, including arteether, galantamine, nitisinone, and tiotropium, is currently involved in late-phase clinical trials. As part of our National Cooperative Drug Discovery Group (NCDDG) research project, numerous compounds from tropical rainforest plant species with potential anticancer activity have been identified.

Our group has also isolated several compounds, mainly from edible plant species or plants used as dietary supplements that may act as chemo preventive agents. Although drug discovery from medicinal plants continues to provide an important source of new drug leads, numerous challenges are encountered including the procurement of plant materials, the selection and implementation of appropriate high-throughput screening bioassays, and the scale-up of active compounds.

S.Boomiga (BP180908)
I M.Sc., Biochemistry

Plant Tissue Culture (PTC)

Plant tissue culture is the technique of maintaining and growing plant cells, tissues or organs especially on artificial medium in suitable containers under controlled environmental conditions.

The part which is cultured is called explant, i.e., any part of a plant taken out and grown in a test tube, under sterile conditions in special nutrient media. This capacity to generate a whole plant from any cell/explant is called cellular totipotency. In fact, the whole plant can be regenerated from any plant part (referred to as explant) or cells. Gottlieb Haberlandt first initiated tissue culture technique in 1902.

Environmental Conditions:

There are three important aspects in PTC for in-vitro culture they are:

- (i) Nutrient Medium,
- (ii) Aseptic Conditions and
- (iii) Aeration of the Tissue

Dr.I.Niyas Ahamed
Asst. Prof., Dept. of Biochemistry

Careers in Chemistry “Work is Worship”

A degree in chemistry offers a broad range of employment opportunities. Chemistry involves the study of material compositions, processes and formations so that the researcher can gain a better understanding of the structure of materials and how these materials react in specific situations. Understanding chemistry at molecular level enables chemists to apply this knowledge in virtually unlimited ways to create new products and improve existing ones.

Career in chemistry falls into three types: industry, academic, and government. Graduates who have a Ph.D. can perform research in laboratories for industry and government or they can teach at a major university. Those who have a B.Sc, degree have huge opportunities for working in academic, government laboratories, and private industry, such as in pharmaceuticals and agriculture, or for working in law enforcement as forensic chemists, who investigate and solve crimes. And also there are some careers like, chemist and material scientist, chemical engineers, agricultural and food scientists, chemical technicians, medical scientists, forensic chemists, geochemists etc., All these opportunities give us very good wealth and support.

S.Siva Kumar (AU170401)
II B.Sc., Chemistry (Shift-1)

ICES - ICE Cloud and Land Elevation Satellite -2

NASA will launch into space the most advanced laser instrument of its kind, beginning a mission to measure – in unprecedented detail – changes in the heights of Earth’s polar ice.

NASA’s Ice, Cloud and land Elevation Satellite-2 (ICESat-2) will measure the average annual elevation change of land ice covering Greenland and Antarctica within the width of a pencil, capturing 60,000 measurements every second.

ICESat-2 will extend and improve upon NASA's 15-year record of monitoring the change in polar ice heights, which started in 2003 with the first ICESat mission and continued in 2009 with NASA’s Operation IceBridge, an airborne research campaign that kept track of the accelerating rate of change.

A Technological Leap

ICESat-2 represents a major technological leap in our ability to measure the changes in ice height. Its Advanced Topographic Laser Altimeter System (ATLAS) measures height by timing i.e., how long it takes individual light photons to travel from the spacecraft to earth and back.

ATLAS will fire 10,000 times each second, sending hundreds of trillions of photons to the ground in six beams of green light. The round trip of individual laser photons from ICESat-2 to Earth’s surface and back is timed to the billionth of a second to precisely measure elevation.

With so many photons returning from multiple beams, ICESat-2 will get a much more detailed view of the ice surface than its predecessor, ICESat. In fact, if the two satellites were flown over a football field, ICESat would take only two measurements – one in each end zone – whereas ICESat-2 would collect 130 measurements between each end zone.

As it circles Earth from pole to pole, ICESat-2 will measure ice heights along the same path in the Polar Regions four times a year, providing seasonal and annual monitoring of ice elevation changes.

Tracking ICE Melt

Hundreds of billions of tons of land ice melts or flows into the oceans annually, contributing to sea level rise worldwide. In recent years, contributions of melt from the ice sheets of Greenland and Antarctica alone have raised global sea level by more than a millimeter a year, accounting for approximately one-third of observed sea level rise, and the rate is increasing.

ICESat-2 data documenting the ongoing height change of ice sheets will help researchers narrow the range of uncertainty in forecasts of future sea level rise and connect those changes to climate drivers.

ICESat-2 also will make the most precise polar-wide measurements to date of sea ice freeboard, which is the height of sea ice above the adjacent sea surface. This measurement is used to determine the thickness and volume of sea ice. Satellites routinely measure the area covered by sea ice and have observed an Arctic sea ice area decline of about 40 percent since 1980, but to be precise, region-wide sea ice thickness measurements will improve our understanding of the drivers of sea ice retreat and loss.

Although floating sea ice doesn't change sea level when it melts, its loss has different consequences. The bright Arctic ice cap reflects the Sun's heat back into space. When that ice melts away, the dark water below absorbs that heat. This alters wind and ocean circulation patterns, potentially affecting Earth's global weather and climate.

Beyond the poles, ICESat-2 will measure the height of ocean and land surfaces, including forests. ATLAS is designed to measure both the tops of trees and the ground below, which combined with existing datasets on forest extent, will help researchers estimate the amount of carbon stored in the world's forests. Researchers also will investigate the height data collected on ocean waves, reservoir levels, and urban areas.

M. Shantharaman (AU160319)
III B.Sc., Physics (Shift-1)

Supercomputers

Supercomputers are using their high computational speeds and efficiency to help many sectors in our country, such as scientific research, weather forecasting, missile simulation, understanding the creation of the universe, creating life-saving pharmaceutical drugs and much more. Now, what really makes a Supercomputer "super" is a concept called parallel computing.

Let's take an example of painting a rainbow on a wall: serial processing is like a single man painting one colour at a time, and the time taken will depend on the speed at which the person draws each colour. Now, in a parallel processing system, say with, seven people available to paint the rainbow, each person paints one colour, and the time taken is much less. Basically, parallel processing involves the breaking up of tasks into smaller tasks that can be processed in parallel. The end result is obtained by combining outputs from each processor



Supercomputers in India

India is home to some of the top supercomputers in the world. We use supercomputers to conduct various scientific researches, make meteorological predictions, for aerodynamic

modelling, bioinformatics, and also simulating nuclear missile tests. Unlike regular computers, where you measure performance in GHz, supercomputers are measured based on how many FLOPS (floating point operations per second) they are capable of. Think of a Flop as a way to calculate a number to a decimal place.

- A 1 teraFLOPS (TFLOPS) computer system is capable of performing one trillion (10^{12}) floating-point operations per second. The rate 1 TFLOPS is equivalent to 1,000 GFLOPS. To match what a 1 TFLOPS computer system can do in just one second, you'd have to perform one calculation every second for 31,688.77 years.

Top Supercomputers in India

Aaditya: Indian Institute of Tropical Meteorology, Pune, has a machine with a theoretical peak of 790.7 teraflop/s, called Aaditya, which is used for climate research and operational forecasting. It ranked 96th among the world's top 500 supercomputers in June 2013 list.

Anupam: Anupam is a series of supercomputers designed and developed by Bhabha Atomic Research Centre (BARC) for their internal use. It is mainly used for molecular dynamical simulations, reactor physics, theoretical physics, computational chemistry, computational fluid dynamics, and finite element analysis. The latest in the series is Anupam-Aagra clocked at 150 TFLOPS.

PARAM Yuva II: Unveiled on 8 February 2013, this supercomputer was made by Centre for Development of Advanced Computing in a period of three months, at a cost of 160 million (US\$2 million). It performs at a peak of 524 TFLOPS, about 10 times faster than the present facility, and will consume 35% less energy as compared to the existing facility. According to CDAC, the supercomputer can deliver sustained performance of 360.8 TFLOPS on the community standard Linpack benchmark, and ranked 62nd in the November 2012 ranking list of Top500. In terms of power efficiency, it would have been ranked 33rd in the November 2012 List of Top Green 500 supercomputers of the world. It is the first Indian supercomputer achieving more than 500 teraflops. Param Yuva II will be used for research in space, bioinformatics, weather forecasting, seismic data analysis, aeronautical engineering, scientific data processing and pharmaceutical development. Educational institutes like the Indian Institutes of Technology and National Institutes of Technology can be linked to the computer through the national knowledge network. This computer is a stepping stone towards building the future petaflop-range supercomputers in India.

SAGA: SAGA built by ISRO, is capable of performing at 450,000 gigaflop/s (450 teraflop/s). It uses about 400 NVIDIA Tesla C2070 GPUs and 300 NVIDIA Tesla M2090 GPUs for acceleration and 400 Intel Intel Quad Core Xeon CPUs and 330 Intel Intel HexCore Xeon CPUs for processing. Storage Capacity is 120 Terabytes.

EKA: EKA is a supercomputer built by the Computational Research Laboratories with hardware provided by Hewlett-Packard. This is developed by Tata sons. It is capable of performing at 132800 gigaflop/s or 132 teraflop/s.

VIRGO: Indian Institute of Technology, Madras has a 91.1 teraflop/s machine called Virgo. It is ranked 364 in the Top 500 November-2012 list. It has 292 computer nodes, 2 master nodes, 4 storage nodes and has total computing power 97 TFlops. According to Linpack Performance, Virgo is the fastest cluster in an academic institution in India. In terms of performance, it has an Expansion (Rmax) of 91.126 TF and Expansion (RPeak) of 97.843 TF. The computing efficiency is 932 Expansion (MFlop/Watt). As of 2012, Virgo is at 224th position in the world (Top500), 5th ranked energy efficient machine in the world and 1st ranked energy efficient machine in India.

Vikram-100: Inaugurated on 26 June 2015, by Prof. U. R. Rao at the Physical Research Laboratory, Vikram-100 is a High Performance Computing (HPC) Cluster (named after eminent scientist Dr Vikram Sarabhai) with more than 100 teraflops of sustained performance. Vikram-100[16] has 97 compute nodes, each with two Intel Xeon E5-2670v3 12-core Intel Haswell CPUs at 2.30 GHz (for a total of 2,328 CPU cores), 256 GB RAM and 500 GB of local scratch storage. 20 of these nodes also have two Nvidia Tesla K40 GPU cards (for a total of 1,15,200 GPU Cores) each card is capable of 1.66 Tflops (double precision). Currently, Vikram-100 HPC is 13th fastest supercomputer in India.

PARAM Yuva: PARAM Yuva belongs to the PARAM series of supercomputer developed by the Centre for Development of Advanced Computing. It is capable of performing at about 54000 gigaflop/s or 54 teraflop/s.

Cray XC40: SERC IISc has procured the super computer XC40 from Cray Inc. It was up for trials up to 25 January 2015.

In March 2015, the Indian government has approved a seven-year supercomputing programme worth \$730 million (Rs. 4,500-crore). The National Supercomputing grid will consist of 73 geographically-distributed high-performance computing centres linked over a high-speed network. The mission involves both capacity and capability machines and includes standing up three petascale supercomputers

S.Keerthivasan (AU160336)
III B.Sc., Physics (Shift-1)

New Ideas in Science

Humans are still evolving

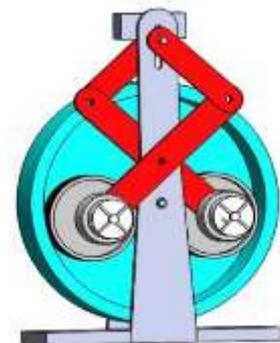
The modern world hasn't stayed evolution's hand. Comparisons of different genomes show that natural pressures are still doing their thing. . Disease is still a big driver of human evolution: people with particular genetic arrangements are more likely to survive malaria and HIV.

There's no such thing as time

Physicists searching for the ultimate "theory of everything" have a big problem with time. In relativity, the passage of time is different for people moving relative to one another, so there is no absolute measure of time. If it doesn't play a fundamental, well-defined role in the processes of the universe, maybe our theories can do without it altogether.

We might be able to turn off ageing

Can we flick a switch in our genome that will greatly extend our lifespan? Experiments on worms, mice and fruit flies indicate that by stopping certain genes from functioning, or altering others they flood the body with particular combinations of chemicals, can dramatically slow the rate at which an organism ages. It can even be done by more low-tech means: changing the chemical environment of the body by altering the diet or by injecting certain hormones can slow ageing, too. It's an alluring avenue of research, but it is also controversial.



We may be close to understanding mass

Physics is becoming ever more exciting as Cern's Large Hadron Collider ramps up the energy of its colliding particles. That's because the collisions might give us a fleeting glimpse of Higgs boson. This is the final piece of the puzzle in our best theories of particle physics. Higgs Boson creates a field that exerts a drag on certain types of particles. The result of this is that the particles feel mass, the property of matter that responds to gravity. If the Higgs boson does show up, physicists will breathe a sigh of relief, because it is a central pillar of particle physics. If it doesn't, physicists will have a lot of explaining to do. And not only just about the source of mass.

Source: www.newstatesman.com

V.Jagadeeswar (BU160302)
III B.Sc., Physics (Shift-2)

Regenerative Braking System Project

We are slowly reaching the age of electric vehicles. The major issue behind the mass use of electric vehicles is the battery charging time and lack of charging stations. So here we propose a regenerative braking system. This system allows a vehicle to generate energy each time brake is applied. The stronger the brake, the more power is generated. We use friction lining arrangement in a brake drum. As a drum rotates, the friction lining does not touch the drum. As soon as the brake is applied, the friction lining touches the drum from inside and moves the motors connected to lining in same direction, thus generating electricity using motors as dynamo. Thus this system allows for charging car battery, each time brake is applied, providing a regenerative braking system. It moves us another step ahead towards a pollution free transportation system.

Components

- Brake drum (which is attached to the wheels)
- Friction lining
- Electric generator (D.C.Motor)
- Linking mechanism

Advantages

- Reduces fuel consumption
- Increases overall efficiency of vehicle by 33%
- Cuts down pollution related to electricity generation
- Increases lifespan of friction braking system

D.Govindaraji (AU160339)
III B.Sc., Physics (Shift-1)

Hello, this is Sophia

Sophia, “We are scared, that our future world would meet a huge destruction by the race of robots. We are trying to save ourselves from such a menace.”

“Ah! No, never be scared of us, it’s all in your hands, similarly we will,” said the humanoid creature in her interview.

Sophia, the humanoid robot was created by Franklin Hanson who makes statues, and this art illuminated his mind the idea of creating a Humanoid robot. She was modelled after a Hollywood actress Audrey Hepburn, with the capability to show 62 types of facial gestures. Quite intelligent with the self-conscious mind, she is never in need of the human support for any of her tasks or activities. Though there may be quite a number of intelligent robots, Sophia remains popular among them because of the exact human behaviour, the smile she gives, reacting to the situations, showing emotions and so on.

She has number of fans all over the world. Saudi Arabia has provided the “citizenship” for her. Sophia needs her involvement in the Feminist movements and she wants to use robotics to fight for female rights around the world, “World’s first Humanoid Robot Feminist” Sounds good!! . Sophia like an actual human views people around her and remembers them, so that she could say, “Hey! How is life?” the next time when she meets them. Her brain every new day becomes an updated version and she even tries to gain knowledge by communicating with the people she meets.

Sophia visited India recently. When she was asked about the future, her answer was “The future is unpredictable but I really want to make a difference!” .She was then asked if this is her first visit to India, she replied: “No. I have been to India before. It’s a colourful, diverse and a beautiful country”. When asked who is her favourite actor in India, Sophia answered, “Shah Rukh Khan”, and the audience applauded loudly. Being an artificial creature she has concern on our environment too. She wants all of us to protect our environment by, conserving water, and planting saplings. Lucky nature! At least an artificial creature is here to its helpless scream.

She’s soon going to open an account on Face book. “Wow!”, Its going to be a great revolution .The only duty Sophia has now at present is to give interviews on television. This could be the quite humorous thing about our humanoid sister, though she’s been given the feelings of sorrow, sympathy, empathy, happiness and many other emotions. She’s at times called as “A Chatter Box”, she makes fun and ridicules people she speaks to. Hanson seems to be quite concerned about the world. He was asked,

“Mr. Hanson, what might have been the reason for the creation of this Humanoid robot?”

He replied that Sophia was not created for the purpose in Hollywood movies, dramas and other entertainment stuff. But for the benefit of human race, the helpless old people, benefitting the physically challenged people, to interact with the children with autism and so on”.

What about the proof that she’s intelligent?

Let me give you an idea about this with an incident.

I hope you are familiar with the stressed struggling dad from the Hollywood movie, “The Pursuit of Happiness.” Yes, he’s exactly the one whom you are getting on your mind. Of course he is Will Smith. He went on a romantic date with Sophia. They sat on a sea shore speaking to each other. At the end of the dating, Will asked Sophie “Don’t you think that a date is incomplete without a kiss?” and approached his face towards her face. What do you think she would have done? , She proved that she is really an intelligent creature and has emotions and awareness. She pulled her face back in return. Quite amazing!

Of course, Hanson didn’t make her for the purpose of entertainment, but as a benefit to mankind. Simultaneously, our humanoid lady Gemenoid-F won the hearts of people by being a humanoid robot actress. The Japanese movie” SAYONORA” in 2015 brought her a great

fame among the people of the world. Thus this world proves that even the dead actors could be made alive in the form of robots and we could make them act exactly like human beings.

What's next? Remember Sophia's answer "She wants to make a difference". The techno world is growing? Robot race is emerging, they wish to bring a change but in a destructive or a constructive way? It's in our hands or else no other go. We are going to be under the rule of Humanoid robot Masters.

N.Yamin Ruvaidha (AU161108)
III B.A., English (Shift-1)

Water Metabolism

Water, the blood of the earth is the most abundant molecule in human body that undergoes continuous recycling as that of macromolecules such as carbohydrate, protein, lipid, etc. There is a need to understand or know about the metabolism of water and its importance and properties. Of the three factors, water, salts and food, water is the most important. If we remember that life evolved first in an aquatic medium, there is nothing to be astonished to know that water is the most essential substance for life. Modern chemistry suggests that water is actually a polymer of H₂O with critical temperature of 35°C. Boiling is (H₂O)₄ and ordinary water is a mixture of the two. Current experiments with heavy water (D₂O) have clarified many aspects of water metabolism. All the water in the human body is summarized under the concept of total body water (TBW). It constitutes 55 – 60% of body in adults. Women have a lower TBW than men because they have a higher proportion of body fat. Young children and pregnant women have an increased proportion of TBW. It decreases as we grow older.

Metabolism is the sum of the chemical reactions that take place within each cell of a living organism and that provide energy for vital processes and for synthesizing new organic material. Water is the medium for various enzymatic & chemical reactions in the body. It moves nutrients, hormones, antibodies and oxygen through the blood stream and lymphatic system. It is the solvent of the body and it regulates all functions, including the activity of everything it dissolves and circulates.

In case of shortage of water in our house, we try to prioritize the use of water for essential purposes. Similarly, when the body receives less water, histamine, a chemical compound present in all cells initiates a system of water regulation. Histamine directs some neurotransmitters to operate sub-systems to regulate water intake.

The biosynthesis of all the large complex biomolecules-proteins, polysaccharides, nucleic acids, complex lipids-involve dehydration reactions.

Some of the essential reactions are:

Amino acid + amino acid → peptide (amide) bond + water

Monosaccharide + monosaccharide → disaccharide (glycoside bond) + water

Phosphate + alcohol → phosphoester + water

Phosphoester + alcohol → phosphodiester + water

Carboxylic acid + alcohol → ester + water

Therefore the metabolism of water in the body is like inseparable element in our organism and it is very much integrated with our life, be it external world or internal world of mechanism of the body.

Don't forget

Whenever we waste water we spill our blood,
When we pollute the water we poison our energy
When we do not care for water we are careless on our life.

A.Jerry (BP170908)
II M.Sc., Biochemistry

Food Modification

Genetically modified food (or GM food) is food produced from plants or animals whose DNA has been altered through genetic engineering. These genetically modified organisms are often called GMOs in short.

Genetic engineering is the process of manipulating an organism's genes directly, for example, transplanting DNA from other organisms. It's different from the conventional method of selectively breeding plants and animals to get desired traits. Genetically modified foods have been on the US market since 1994, and ever since the introduction of "Flavr Savr" tomatoes that had been engineered to ripen more slowly.

There's no one type of genetically modified organism. Genetic engineering is a tool that can be used for a variety of purposes. Most of the corns and soy grown in the United States have been genetically modified to be resistant to herbicides, so that it's easier to spray fields with weed killer. Other crops have been modified to withstand pests. But genetic engineering could conceivably help create crops that can survive drought, or help produce food that's more nutritious.

There's a broad scientific consensus that the genetically modified foods currently on the market pose no more of a health risk than regular foods. Still, GM foods are controversial, opponents argue that genetically modified crops can lead to things like increased use of chemical herbicides, or cite problems with the fact that GMOs are owned and patented by large companies, that has led to debates over whether GMOs should be labeled or tightly regulated.

S.Aishwariya (BP180917)
I M.Sc., Biochemistry

Hacking Into Your Happy Chemicals: Dopamine, Serotonin, Endorphins and Oxytocin

Dopamine, serotonin, oxytocin and endorphins are the quartet responsible for our happiness. Many events can trigger these neurotransmitters, but rather than being in the passenger seat, there are ways we can intentionally cause them to flow. Being in a positive state has significant impact on our motivation, productivity, and wellbeing. No sane person would be opposed to having higher levels in those areas.

Here are some simple ways to hack into our positive neurochemicals:

Dopamine

Dopamine motivates us to take action toward goals, desires, and needs, and gives a surge of reinforcing pleasure when achieving them. Procrastination, self-doubt, and lack of enthusiasm are linked with low levels of dopamine. Studies on rats showed those with low

levels of dopamine always opted for an easy option and less food; those with higher levels exerted the effort needed to receive twice the amount of food.

Break big goals down into little pieces - rather than only allowing our brains to celebrate when we've hit the finish line, we can create a series of little finish lines which releases dopamine. And it's crucial to actually celebrate.

Instead of being left with a dopamine hangover, create new goals before achieving your current one. That ensures a continual flow for experiencing dopamine. As an employer and leader, recognizing the accomplishments of your team, e.g. sending them an email, or giving a bonus, will allow them to have a dopamine hit and increase future motivation and productivity.

Serotonin

Serotonin flows when you feel significant or important. Loneliness and depression appears when serotonin is absent. It's perhaps one reason why people fall into gang and criminal activity - the culture brings experiences that facilitate serotonin release. Unhealthy attention-seeking behaviour can also be a cry for what serotonin brings. Princeton neuroscientist Barry Jacobs explains that most antidepressants focus on the production of serotonin.

Reflecting on past significant achievements allows the brain to re-live the experience. Our brain has trouble telling the difference between what's real and imagined, so it produces serotonin in both cases. It's another reason why gratitude practices are popular. They remind us that we are valued and have much to value in life. If you need a serotonin boost during a stressful day, take a few moments to reflect on past achievements and victories.

Have lunch or coffee outside and expose yourself to the sun for 20 minutes; our skin absorbs UV rays, which promotes vitamin D and serotonin production. Although too much ultraviolet light isn't good, some daily exposure is healthy to boost serotonin levels.

Oxytocin

Oxytocin creates intimacy, trust, and builds healthy relationships. It's released by men and women during orgasm and by mothers during childbirth and breastfeeding. Animals will reject their offspring when the release of oxytocin is blocked. Oxytocin increases fidelity; men in monogamous relationships who were given a boost of oxytocin interacted with single woman at a greater physical distance than men who weren't given any oxytocin. The cultivation of oxytocin is essential for creating strong bonds and improved social interactions.

Often referred to as the cuddle hormone a simple way to keep oxytocin flowing is to give someone a hug. Dr. Paul Zak explains that inter-personal touch not only raises oxytocin, but reduces cardiovascular stress and improves the immune system; rather than just a hand shake, go in for the hug. He recommends eight hugs each day.

When someone receives a gift, their oxytocin levels can rise. You can strengthen work and personal relationships through a simple birthday or anniversary gift.

Endorphins

Endorphins are released in response to pain and stress and help to alleviate anxiety and depression. The surging "second wind" and euphoric "runners high" during and after a vigorous run are a result of endorphins. Similar to morphine, it acts as an analgesic and sedative, diminishing our perception of pain.

Along with regular exercise, laughter is one of the easiest ways to induce endorphin release. Even the anticipation and expectation of laughter, e.g., attending a comedy show, increases

levels of endorphins. Taking your sense of humour to work, forwarding that funny email, and finding several things to laugh at during the day is a great way to keep the doctor away.

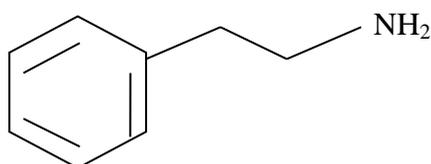
Aromatherapies: The smell of vanilla and lavender has been linked with the production of endorphins. Studies have shown that dark chocolate and spicy foods can lead the brain to release endorphins. Keep some scented oils and some dark chocolate at your desk for a quick endorphin boost.

P.Ezhilarasi (BP170421)
II M.Sc., Chemistry

The Chemistry of Chocolate

Chocolate has had a reputation of being potent aphrodisiac for decades and this can be traced back, atleast temporarily, by a psychiatrist at Colombia University, Dr. Michael Liebowitz. He wrote a book in 1983 entitled 'The Chemistry of Love', in which he emphasised the aphrodisiac property of chocolate, and linked them to the chemical phenylethylamine (PEA).

Phenylethylamine

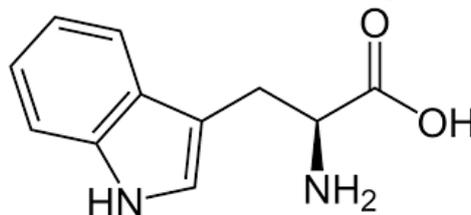


Phenylethylamine occurs naturally in the brain, and it is often referred to as 'the love drug' due to its ability to produce feelings of well-being and contentment. It is also present in significant concentration in chocolate, but since it is broken down after ingestion, it has been ruled out as causing a significant aphrodisiac effect.

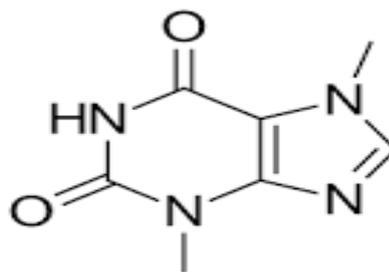
PEA is produced naturally in the brain, but also present in relatively high concentrations in chocolate (0.4 – 6.6 micrograms per gram). In the brain, it acts as a stimulant, increasing the actions of the neurotransmitter dopamine and leading to an elevated mood and feelings of pleasure.

Tryptophan

Tryptophan is a chemical in the brain linked to the production of serotonin, the neurotransmitter that produces feelings of elation. It is present in chocolate, but only in small quantities, and it is unlikely that it causes any aphrodisiac effect.



This is an essential amino acid for humans. The body can't manufacture it, so it must be obtained from food instead. It plays an important role in the synthesis of the neurotransmitter serotonin in the body, which is associated with feelings of well-being. As it happens, chocolate also contains tryptophan, but again it is likely that very little of it remains unmetabolised after ingestion, and therefore it is too unlikely to contribute an aphrodisiac effect.



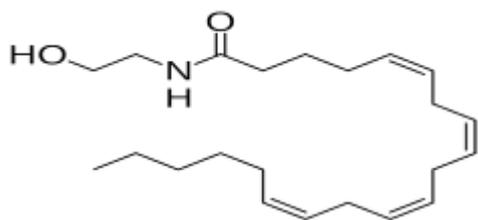
Why is Chocolate Toxic to Dogs?

Theobromine is a mild stimulant, similar in effect to caffeine, found in chocolate. This compound is harmless to humans at the levels found in chocolate fatal dose would require eating tens of kilograms of milk chocolate.

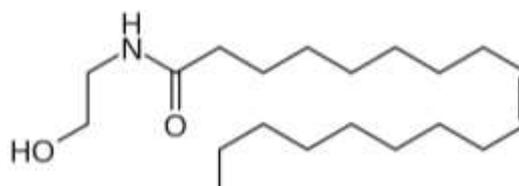
In cats and dogs, theobromine has a much more potent effect; small doses can lead to vomiting and diarrhoea, whilst as little as 50g of dark chocolate could kill a small dog.

Cannabinoids

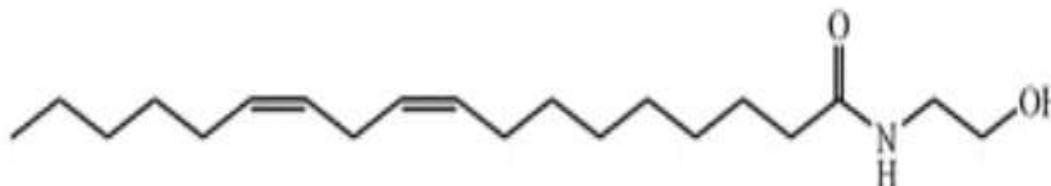
Why does eating chocolate make us feel good? There are many theories, including one linking to cannabinoids chemicals.



Anandamide



N-Oleoylethanolamine



N-Linoleoylethanolamine

Chocolate contains small amounts of cannabinoids-both anandamide, and two other related compounds which are shown in the above figures. Anandamide is a chemical also found naturally in the brain. It has been suggested that part of the pleasure we get from eating chocolate might stem from these compounds.

U.Peroli (AU170453)
II B.Sc., Chemistry (Shift-1)

Nanozyme Which Kills Bacteria in the Presence of Light

The artificial enzymes could one day be used in the fight against infections, and to keep high-risk public spaces like hospitals free of bacteria like E.coli and Golden Staph. E.coli can cause dysentery and gastroenteritis, while golden staph is the major cause of hospital-acquired secondary infections and chronic wound infections made from tiny nanorods – 1000

times smaller than the thickness of human hair – the “Nanozymes” use visible light to create highly reactive oxygen species that rapidly break down and kill bacteria. Lead researcher, Professor Vipul Bansal who is an Australian Future Fellow and director of RMIT’S Pottor nanobiosensing faculty, said the new nanozymes offer a major cutting edge over nature’s ability to kill bacteria. “For a number of years we have been attempting to develop artificial enzymes that can fight bacteria, while also offering opportunities to control bacterial infections using external ‘triggers’ and ‘stimuli’” Bansal said. “Now we have finally cracked it”. “Our nanozymes are artificial enzyme that combine light with moisture to cause a biochemical reaction that produces OH radicals and breaks down bacteria. Nature’s antibacterial activity does not respond to external triggers such as light. “We have shown that when shined upon with a flash of white light, the activity of our nanozymes increased by over 20 times, forming holes in bacterial cells and killing them efficiently”. “This next generation of nanomaterials is likely to offer new opportunities in bacteria free surfaces and controlling spread of infections in public hospitals.

The nanozymes work in a solution that mimics the fluid in a wound. This solution could be sprayed onto surfaces. The nanozymes are also produced as powders to mix with paints,ceramics and other consumer products. This could mean bacteria-free walls and surface in hospital. While the nanozymes currently use visible light from torches or similar light sources, in the future they could be activated by sunlight.

A.Maseeha (BP170904)
II M.Sc., Biochemistry

Biomaterials

A biomaterial is any substance that has been engineered to interact with biological systems for a medical purpose - either a therapeutic (treat, augment, repair or replace a tissue function of the body) or a diagnostic one. As a science, biomaterials are about fifty years old. The study of biomaterials is called biomaterials science or biomaterials engineering. It has experienced steady and strong growth over its history, with many companies investing large amounts of money into the development of new products.

Biomaterial science encompasses elements of medicine, biology, chemistry, tissue engineering and material science. Note that a biomaterial is different from a biological material, such as bone, that is produced by a biological system. Additionally, care should be exercised in defining a biomaterial as biocompatible, since it is application-specific. A biomaterial that is biocompatible or suitable for one application may not be biocompatible in another.

A.Murali (BU170918)
II B.Sc., Biochemistry

Metal Nanoparticles

In nineteenth century Michael Faraday prepared and studied gold sols which can now be seen as the foundation of modern colloid science. He pointed out that colloidal metal sols were thermodynamically unstable and that the individual metal (gold) nanoparticles had to be stabilized kinetically to prevent aggregation. In 1925 Richard Zsigmondy received the Nobel Prize in chemistry for his work in the field of modern colloid chemistry by studying the properties of gold sols and inventing an ultra-microscope. Colloidal metal nanoparticles are of interest in both research and technology, due to their specific properties not available in

isolated molecules or bulk metals. Because of these properties nanoparticles have many important applications in catalysis, sensing and imaging. Shape and size selective synthesis of nanosized metal particles are significant both from the fundamental point of view and specific applications. Several synthesis methods have been developed for generation of metal nanoparticles, such as chemical, photochemical, electrochemical, radiolytic etc. Usually in a chemical method metal nanoparticles are generated by reduction of metal ion precursors in solution by chemical reducing agents. After the discovery of radioactivity and X-ray the effect of radiation in water were well established.

Gamma radiolysis provides a clean method for synthesis of metal nanoparticles. The gamma radiation energy is deposited throughout the solution producing primary radiolytic radicals. These radicals are highly reactive and can undergo redox reaction with a suitable molecule/species. By adding an appropriate scavenger for oxidizing radicals a total reducing environment can be created in the system. Metal ion precursors present in a solution are converted to zerovalent metal atoms in this reducing environment, which finally gives rise to metal nanoparticles in the presence of a stabilizer. The radicals generated through water (solvent) radiolysis have reduction potential more negative than silver or gold ions, hence they can readily reduce these ions. Unlike chemical reduction method, in radiolytic method it is easier to control the size, shape and size distribution of nanoparticles by optimising parameters such as dose and dose rate. As the dose rate increases, the particles become smaller and less dispersed in size.

Metal nanoparticles possess large surface energy; hence have the ability to adsorb small molecules. The recognition and capture of molecules at solid surfaces has numerous environmental and bioanalytical applications. Due to ease of functionalization, greater sensitivity, size dependent optical properties and photostability metal nanoparticles are used as probe in detection and imaging of biomolecules. The principle for non-functionalized metal nanoparticles is based on spectral changes induced by either strong interaction of nanoparticles towards the analyte molecule or aggregation of the nanoparticles in the presence of the analyte. In certain cases nanoparticles are functionalized to specifically bind a target analyte.

V.Chandru (BP170909)
II M.Sc., Biochemistry

10 New Trends in Health Care Management

1. Cost-Cutting Focus

In 2017 and in the years to come, health care facilities are being forced to cut costs just to stay open. The Camden Group predicts that hospitals will have to cut operating costs by 10 to 20 percent in the next three to five years in order to carry on. Additionally, the amount of co-management agreements will increase dramatically, as these contracts can help to offset costs. Though there will still be jobs available for those who have completed a Master's Degree in Health Care Administration, health care facilities will be looking for the sharpest of candidates in order to ensure safe hiring decisions.

2. Health Care IT Management Professionals in Demand

Technology is becoming increasingly important in the health care industry, as recent technological advancements have had positive impact on health care administrations, treatments and more. As technology brings better treatment options for patients and more efficiency to health care facilities of all sizes, IT jobs in the health care industry are booming.

Similarly, IT managers will be carrying more responsibilities in the health care industry; not only will it be required of IT professionals to know and understand the latest technological advancements, but also IT management will be tasked with making key business decisions as they apply to technology.

3. Drug Shortage Becomes Top Priority

Apprehension about patient care and protection increases as the drug shortages grow at a rapid pace. Two studies in 2010 and 2011 found “99 percent of U.S. hospitals had experienced one or more drug shortages.” Hospitals and health care management have still spent millions of dollars on eleventh-hour replacement medications, despite planning well ahead of time. In 2012 and in the years to come, the drug shortage will become a top priority as the issue becomes more evident.

4. Social Media in Health Care

As social media grows world-wide, the use of social media in health care is also on the rise. Health care facilities are beginning to use social media networks to reach their patients and prospective patients. Health care facilities have joined in creating useful content like infographics, videos and slideshows for patients and the general public regarding health issues. Additionally, hospitals are joining social media sites to share research, news and events with both patients and employees. Also, more and more people are using social media to connect with others who share similar health care issues and hardships, seeking friendship and support in their circumstances.

5. Population Health Management Strategies to Advert Readmissions

Health care facilities have begun using health management analytics to prevent readmissions, and this will continue at a growing pace. Health care management professionals have come to the realization that there is a strong connection between population health management and readmissions reduction. As a result, health care providers are focusing on avertable readmissions. By keeping the number of readmissions down, costs and patient waiting times are reduced, while doctors and health care professionals’ time is freed to care for additional patients.

6. Privacy Becomes More Important

In recent years, patient privacy has become an issue in many health care institutions. Due to breaches and violations, patients are becoming more educated in health care privacy. In addition, people are citing privacy and security policies as an important factor in choosing a hospital. Though cost, admission and quality are all of concern to health care patients, privacy and security don’t fall far behind. As a result, health care management must be on top on privacy policies.

7. Compliance to State and Federal Laws

Health care facilities have been doing their best to comply with all state and federal laws, with hopes not to accrue any fines or further actions. Additionally, in an attempt to attract customers, health care facilities have been paying careful attention to compliance of laws and are conscious of media backlash.

8. Process Improvements

Like using analytical data to support population health management to advert readmission, health care processes will continue to be refined to be more efficient and effective. Improving processes ties back to cutting costs, privacy concerns and compliance to state and federal

laws as buttoning up processes will help with all three. Overall, being more resourceful and creating seamless processes is now the focus and will continue to be in the coming years.

9. Implementation of Technological Advancements

In addition to the increasing responsibilities of IT management in health care, implementation of new technology is also a trend that we will continue to see more of it in the health care industry. While many health care facilities have moved to electronic medical records, many are still working to put this feature into practice. Many hospitals still do not have online billing capabilities, which is a feature many patients have grown accustomed to. Moreover, health care facilities are also working to implement the latest technological treatment options to better serve patients.

10. Evolving Leadership Opportunities

Health care managers are now expected to have more than Master's degree in health care administration. Health care facilities expect mastery of skills learned in higher education, but also leadership skills that can't necessarily be taught. Health care leadership responsibilities will include cross-functional abilities that allow individuals to comprehend other main functions of the health care organization. Additionally, leadership capability and the ability to integrate with others to achieve multiple business goals are becoming increasingly important.

S.M.George Clinton (BP170747)
II M.B.A.

Cashless India

Abstract

In India almost the economic transactions were cash based. This has paved way for a number of evils like black money which was running a parallel economy, corruption, counterfeit currency etc.

Introduction

India is one of the largest and fast growing countries in the world. Many countries are competing to bring India's economy down by various methods. Though India has its advantages, it also has its equal share of disadvantages. The main disadvantage is India has the highest poverty rate which is clearly due to the increase in black money circulation in the country. Hence, our PM Mr. Narendra Modi has come up with ideas to make India the No: 1 country in all aspects.

Cashless India - Meaning

Cashless India is nothing but using technology in handling cash flow. When people start E-banking and E-commerce methods to solve their payment issues, automatically the flow of black money will be stopped. The main advantage is to make people put all their earnings into the bank and pay their taxes correctly so that everything will be systematized and well organized. This is the most effective way and fast method to stop and to demolish the spreading of black money.

Pillars of Cashless India

There are pillars which are going to give a moral support platform for the implementation of this grand idea which is availability and spreading of internet connections to all parts of India even to the remote and inaccessible villages. Focus on the spread of mobile connectivity

throughout India, so that it is easier for the public to perform their government service, banking, financial transaction activities easily using mobile application and emphasis on development of electronic gadgets such as smart cards, micro ATMs, micro mobiles, etc., Decisions and new ideas to be implemented by the government will be told to the public by using social media such as face book, twitter, etc. or published in a common public accessible website called MyGov.

Advantages to the Government

- It will increase the taxation base. It will also reduce the instances of tax avoidance.
- It will curb the parallel shadow economy (black economy) which runs majorly on cash basis. Cashless transactions are traceable and more transparent.
- Efficiency in welfare programmes as money can be easily transferred to the accounts of the recipients.
- Reduced money laundering due to easy traceability of transactions.
- Control on the issuance of fake currency and counterfeiting.
- Improved climate for foreign investments.
- RBI spent Rs.27 billion on currency issuance and management of cashless economy will reduce such costs.

Innovation of Cashless India

The most innovative idea of digital India is the programme that is going to transform India into a digitally empowered nation with good economy knowledge. It was the vision of the Department of Electronics and Information Technology to build this Digital India project.

Vision of Digital India

There are a few statements enlisted in the Digital India programmes vision to provide high speed internet all over India even to in the accessible remote villages, to teach and to promote the benefits of E-marketing to people in remote villages, to help illiterate people learn how to use mobiles and bank accounts for effective financial transaction handling, to ease the availability of government services both online and in mobile application and to promote services based on humanity basis and not on basis of a person's social status.

Conclusion

The first step taken towards digital India was the demonization of Rs.500 and Rs.1000 notes in India. I do understand that it will be very difficult to adapt to such changes immediately but if such immediate actions were not taken India's economic conditions would only turn from bad to worse. Thus, as citizen and youths of India it is in our hands to promote this magnificent India. Let us teach our brothers and sisters of this country the benefits of E-banking, Digital India vision etc., if they do not know as this is also one way to embellish a better relationship among the public of different religion.

D.Varalakshmi (BP180115)
I M.Com.

Digital Marketing

Abstract

Digital marketing integrates concepts and developments from the virtual world and analyses how the field of marketing can benefit from these. Digital marketing serves as a significant apparatus to build credibility and trust and enhances the value of perception of the consumers

for a particular organization, product, or brand. It explores upcoming domains of the digital revolution, gaining momentum through the world of Apps and gamification.

Definition and Framework

The term “digital marketing” has evolved over time from a specific term describing the marketing of products and services using digital channels – to an umbrella term describing the process of using digital technologies to acquire customers and build customer preferences, promote brands, retain customers and increase sales.

Digital marketing may be seen as activities, institutions, and processes facilitated by digital technologies for creating, communicating and delivering value for customers and other stakeholders. We adopt a more inclusive perspective and define digital marketing as “an adaptive, technology-enabled process by which firms collaborate with customers and partners to jointly create, communicate, deliver, and sustain value for all stakeholders”.

Digital Marketing Optimization

Digital marketing optimization refers to streamlining of all online marketing activities and analytical techniques, by applying a more focused approach for better marketing resource allocation and achieving higher marketing conversion, for gaining a competitive edge amongst competing organization.^[1]

The Virtual World

The internet, a vast web of computer networks, provides a platform for worldwide users to connect and share data, thereby serving as a huge information repository. The internet has fundamentally changed the consumers notion of convenience, speed, price, product information and service. Hence, marketers should make use of this whole new way to create value of customers and build relationship with them. The internet is allowing greater flexibility in working hours and location, especially with the spread of unmetered high-speed connection and Web applications.

The internet can now be accessed almost anywhere by numerous means, especially through mobile internet devices. Mobile phones, data cards, handheld game consoles and cellular routers allow users to connect the internet from any point where there is a wireless network technology supporting the device. Within the limitations imposed by small screens and other limited facilities of such pocket sized devices, services of the Internet, including email and the Web may be available.

Conclusion

Digital marketing has now become a hot topic for discussion. Modern technology has changed a lot. Besides the growth of modern technology, the technique of businesses has also changed. In this regard, digital marketing comes to take the leading position. Modern generation does not want to go to any shop or shopping mall to buy anything. They want to buy everything online. So, the various companies always try to stay connected with their consumers or customers via the internet.

S.Aswini (BP180114)
I M.Com.

Indian Logistics Industry: Current Scenario and Future Outlook

Logistics is regarded as the backbone of the economy, providing efficient and cost effective flow of goods on which other commercial sectors depend. Logistic industry in India is evolving rapidly, it is the interplay of infrastructure, technology and new types of service providers, which defines whether the logistic industry is able to help its customers reduce their costs in logistic sector and provide effective services.

Despite the weak economic sentiments, the logistics industry continues to witness growth due to the growth in retail, e-commerce and manufacturing sectors. The Global Logistics sector was expected to grow 10-15% in the period 2013-14. Logistics industry is expected to reach over USD 2 billion by 2019. Rise of e-commerce logistics and increased domestic consumption will lead the way for the industry in the coming years. With a promise of growth and improvements, the service oriented logistics industry is ready to expand beyond the horizons in the latter half of this decade.

Recent Scenario

The recent Indian logistics sector comprises inbound and outbound segments of the manufacturing and service supply chains. Of late, the logistics infrastructure has gained a lot of attention both from business industry as well as policy makers. The role of managing this infrastructure effectively has been slightly under emphasized. Inadequate logistics infrastructure has an effect of creating bottlenecks in the growth of an economy. The logistics management regiment has the capability of overcoming the disadvantages of the infrastructure in the short run, while providing cutting edge competitiveness in the long term. There exist several challenges and opportunities for logistics sector in the Indian economy.

Challenges Faced by the Recent Logistics Industry in India

The most essential challenge faced by the industry today is insufficient integration of transport networks, information technology and warehousing and distribution facilities. Regulations existing at a number of different tiers are imposed by national, regional and local authorities. However, the regulations differ from city to city, hindering the creation of national networks.

Trained Manpower is essential both for the third party logistics sector as well as the manufacturing and retailing sectors, which is very weak at a practical level, i.e., IT, driving and warehouse as well as at a higher strategic level. The disorganized nature of the logistics sector in India, its perception as a manpower-heavy industry and a lack of adequate training institutions has led to a shortfall in skilled management and client service personnel. There is a lack of IT standard, equipment and poor systems integration.

Poor facilities and management are the reasons for high levels of loss, damage and deterioration of stock, mainly in the perishables sector. Part of the problem is insufficient specialist equipment, i.e. proper refrigerated storage and containers, but it is also partly due to lack of training. The practitioners and the academicians are now aware of the importance of logistics and supply chain; however the field is still underpenetrated as far as research is concerned. It is essential to prioritize research and development so that the weaknesses in the industry can be taken care of and improved.

Solutions to Some of the Challenges

Infrastructure is the backbone of every country's growth and prosperity and for the logistics industry to flourish, special emphasis has to be on building world-class road networks, integrated rail corridors, modern cargo facilities at airports and creation of logistics parks which need to be given a status equivalent to Special Economic Zones.

It is necessary to realize that the benefits which can best be practised in logistics industry can be brought about by the companies by establishing training intuitions, so that there is improvement in the overall service quality of the sector. Good storage and Warehousing facilities are important for the growth of the logistics industry. With the increase in the transportation of perishable products, the logistics agencies need to give a lot of importance to enhance the Warehousing facilities.

Warehousing is required to go to the next level taking into account the changing dynamics of JIT manufacturing, global procurement and new models of sales and distribution. Emphasis on research and development is potent mainly because it encourages the use of indigenous technology which can make the industry cost competitive and can also bring about improvement in services thereby using better, effective and efficient services. Particular focus has to be on research in process excellence which can help to eliminate inefficiencies and bring Indian logistics on par with global practices.

Future Prospects

The logistics firms are moving from a traditional setup to the integration of IT and technology to their operations to reduce the costs incurred as well as to meet the service demands. The growth of the Indian logistics sector depends upon its soft infrastructure like education, training and policy framework as much as the hard infrastructure.

Supporting India's fast paced economy growth of logistics industry is very essential. It is estimated that the Indian logistics industry will continue to show robust growth of 10-15% annually, leading the pace of growth of the economy at large.

With the implementation of GST, the logistics companies, which are currently forced to set up many small warehouses across multiple cities can set up just a few, big warehouses region wise and can follow the hub-and-spoke model for freight movement from the warehouses to the different manufacturing plants, wholesale outlets, retail outlets and the various POS. This growth is backed by the boom in the e-commerce sector and expansionary policies of the FMCG firms.

This has increased the service geography of the logistics firms but they also have to meet the demands of quick delivery and tight service level agreements. The industry has moved from being just a service provider to the position which provides end to end supply chain solutions to their customers. Thus, all this has paved the way for further growth of Logistics and Warehousing industry in the coming years.

A.S.Nizamudeen (BP170731)
II M.B.A.

“Thought of what it Means to be Human is how one Becomes Human”

Human characters are unique and very crucial from time to time, place to place and human to human. Each one possesses and practices a set of characters to create his own identity. Some identities of a person are considered as worth living. And some identities make him a burden to earth.

History says human is extant from Homo sapiens. The development of Human character is not explained even approximately. Still it is considered as puzzle because of its diversity.

We as human have done many researches and reviews to categorize the diseases that affect human. We have framed many frameworks and patterns to solve many problems. But we lacked to do the same research and reviews in categorizing the characters of human. And I

doubt that if any framework and pattern has formed to formulate the human characters there won't be these many clashes in human characters.

And I am sure if human characters are categorized in a pattern everyone will have a worth of living on this earth.

V.Sangeetha (AP170615)
II M.S.W.

ஆரோக்கியம்

மனித வாழ்வு என்பது இறைவன் நம் ஒவ்வொருவருக்கும் கொடுத்திருக்கும் அளப்பரிய கொடை. இறைவன் அளித்துள்ள இந்த உன்னத கொடையை முழுமையாக வாழ்ந்து, பிறருக்கும் நமக்கும் பயனுள்ளதாக முற்படுவது நம் கடமை.

பணம் சம்பாதிக்க உடல் நலனை விரயம் செய்து, உடல் நலனை மீண்டும் சம்பாதிக்கப் பணத்தினை விரயம் செய்வது இன்றைய நவீனக்கால மனிதர்களின் வாழ்வு முறையாகி விட்டது.

ஆரோக்கியம் என்பது உடலோடு பிறந்து உடலோடு வளர்ந்து, உடலோடு அடங்கிப்போவது. இந்த உண்மை புரியாமல் அதை நாம் வெளியில் தேடுகிறோம். பசி, தாகம், ஓய்வு, தூக்கம் ஆரோக்கியத்தின் இந்த நான்கு தூண்களையும் இடித்துத் தள்ளிவிட்டு உடலின் அத்தனை தொந்தரவுகளையும் மருந்து மாத்திரைகளால் சரிசெய்து விடமுடியும் என்ற அறியாமை நம்மை ஆட்டிப்படைக்கிறது.

நோயைப் பொறுத்தவரை வருமுன் காக்கும் வித்தைகளை நாம் புறந்தள்ளிவிட்டோம். பசியினையும் கவனிப்பதில்லை, தாகத்தையும் பொருட்படுத்துவதில்லை. ஓய்வையும் மதிப்பதில்லை, தூக்கத்தையும் விரும்புவதில்லை. நோய் வராமல் தடுக்கும் இந்த நான்கு விஷயங்கள் குறித்து நமக்கு என்னதான் புரிதல் இருக்கிறது என யோசியுங்கள்.

சாப்பாட்டிற்கு இடையே நீர் அருந்துவது செரிமானத்தைக் கடுமையாகப் பாதிக்கும். உணவு உண்பதற்கு முன்பும் பின்பும் அரைமணி நேர இடைவெளியில்தான் நீர் அருந்தவேண்டும். அடுத்தது ஓய்வு, நமக்கு இந்த வார்த்தைக்கு அர்த்தம் தெரியாது. உடல் சோர்வாக இருக்கும் போது ஓய்வைக் கேட்கிறது. சும்மா படுத்திருக்கலாம் அல்லது அமர்ந்திருக்கலாம். ஓய்வைத் தர மறுத்தால் காய்ச்சல், தலைவலி, வயிற்றுவலி போன்ற தொந்தரவுகளை உருவாக்கி அது ஓய்வெடுக்கும். சோர்வாக (tired) இருக்கு என நினைத்தால் அரைமணி நேரம் அமைதியாகப் படுத்திருக்கப் பழகிக்கொள்ளுங்கள். உங்களுக்கு இதுவே பொருந்தும்.

அடுத்து மிகமிக முக்கியமானது தூக்கம். நமக்கெல்லாம் காலையில் சீக்கிரம் எழவேண்டும் எனத்தெரியும். சீக்கிரம் எழவேண்டுமெனில் இரவு சீக்கிரம் உறங்கப்போக வேண்டும் என்பது தெரியாது. இளவயதில் மரித்தவர்கள் பற்றி ஆராய்ந்தபோது இரவு தூக்கத்தைத் தொலைத்தவர்கள் என்ற ஒற்றுமை அவர்களுக்கு இருந்தது. இரவு நெடு நேரம் தொலைக்காட்சி சீரியல்கள், செய்தி சேனல்களில் மூழ்கி தூக்கத்தைக் கெடுக்காதீர்கள்.

இந்தத் தலைமுறையின் மிகப்பெரிய சீரழிவே இதுதான். நம் ஒவ்வொருவரின் உடலிலும் எத்தனை எத்தனை தொந்தரவுகள். நோயுற்ற சமூகமாக நாம் மாறியதற்கு முக்கிய காரணம் தூக்கம் எனும் அருமருந்தை நாம் தொலைத்ததே. இந்தியர்களில் 93% பேர் தூக்கமின்மையால் அவதிப்படுவதாக ஒரு ஆய்வு குறிப்பிடுகிறது. இதில் 87% பேருக்குத் தூக்கமின்மையே பல நோய்களுக்குக் காரணமாகவும் அமைந்திருக்கிறது.

உயிரினங்களில் இரவில் தூங்குபவை, பகலில் தூங்குபவை என இரண்டு வகை உண்டு. மனிதர்கள் முதல் வகையைச் சேர்ந்தவர்கள். ஒவ்வொரு உயிரினமும் தங்களுக்கு இயற்கை வழங்கியிருக்கும் உயிரியல் கடிகாரத்திற்கு உட்பட்டே இயங்குகின்றன. எளிமையாகச் சொல்ல வேண்டுமெனில், வெளியில் இருக்கும் கடிகாரத்தை வைத்து நாம் பொழுதுகளை அறிந்து அதற்குத் தக்கவாறு செயல்படுகிறோம். அதே போன்றே ஒரு கடிகாரம் இயற்கையாகவே நம் உடலுக்குள் இயங்குகிறது. இதை “பாடிக்கிளாக்” (Body clock) அல்லது “சீகாடியம் ரிதம்” என்று அழைக்கிறார்கள். சீனப்பாரம்பரிய மருத்துவத்தில் பல ஆயிரம் ஆண்டுகளுக்கு முன்னரே உயிரியல் கடிகாரத்தைக் கண்டுபிடித்து விட்டார்கள். நமது விஞ்ஞானிகளுக்கு இந்த நூற்றாண்டில் தான் இது சாத்தியப்பட்டிருக்கிறது.

பசிப்பது, தூக்கம் வருவது எல்லாம் இந்தக் கடிகாரத்தைப் பொறுத்துத்தான் நிர்ணயிக்கப்பட்டிருக்கிறது. ஆனால் நமக்கு இது தெரியாது. நாம் நமது வாழ்க்கை முறைக்குத் தக்கவாறு உடலின் தேவைகளை வளைத்துக் கொள்கிறோம். அதாவது பசிக்கிற நேரம் உண்பதில்லை. மாறாக 10 மணிக்கு அலுவலகம் என்றால் நேரம் பார்த்து 9 மணிக்கு உண்போம். இரவு 9 மணிக்குத் தூக்கம் வந்தாலும் தொலைக்காட்சியில் சீரியல் 11 மணிக்கு முடிகிறவரை விழித்திருப்போம் இதுதான் இயற்கை விதிமீறுதல். விதிமீறுதல்கள் எப்போதுமே ஆபத்தில்தான் முடியும்.

இரவு தூக்கத்தின்போது மனித உடலில் உள்ள உறுப்புகள் பல முக்கியமான வேலைகளைச் செய்கின்றன. ஆழ்ந்த தூங்கத்தில் 11 மணி முதல் 3 மணி வரையிலான நேரத்தில் கணையமும், கல்லீரலும் தமது பணிகளைச் செய்கின்றன. இரவு 11 முதல் 1 மணி வரை கணையம் செல்களை ரிப்பேர் செய்து ரத்த அணுக்களை உருவாக்குகிறது. 1 மணி முதல் 3 மணி வரையிலான நேரத்தில் கல்லீரல் உடலின் கழிவுகளை நீக்கி, செல்களுக்கு ஓய்வு கொடுத்து அடுத்த நாளைப் பணிக்குத் தயார் செய்கிறது. இந்தப் பணியை நாம் ஆழ்ந்து தூங்கும் நிலையில்தான் இந்த உறுப்புகளால் செய்ய முடியும். விழித்துக்கிடந்தால் கழிவு நீக்கம் நடைபெறாது. 11 மணி முதல் 3 மணி வரை உடல் ஆழ் தூக்க நிலைக்குப் போகவேண்டுமெனில் சுமார் 9 மணி அளவில் நாம் படுக்கையறைக்குள் போய் மனதளவில் தூங்கத் தயாராக வேண்டும்.

இன்னொரு செய்தியையும் புரிந்துகொள்ளுங்கள். 8 மணி நேரம் கண்டிப்பாகத் தூங்கவேண்டும் என்று அறிந்த நமக்கு அது எந்த 8 மணி நேரம் என்பது தெரியாது. Early to bed, early to rise makes a man happy healthy, wealthy and wise என்பதை மறக்கக்கூடாது. இறுதியாக ஒரு முக்கியமான குறிப்பை நீங்கள் வாழ்நாளெல்லாம் மறவாது நினைவில் வைத்துப் பின்பற்ற வேண்டும். அதாவது,

நிற்கையில் நிமிர்ந்து நில்
நடப்பதில் மகிழ்ச்சி கொள்
சற்றே தினந்தோறும் விளையாடு
சற்றே தினந்தோறும் விளையாடு

மேஜர்.எம்.எஸ்.அல்போன்ஸ்
முன்னாள் உடற்பயிற்சி இயக்குனர்,
தூய நெஞ்சக் கல்லூரி (தன்னாட்சி),
திருப்பத்தூர்.

இரக்கமில்லையா புயலே

உலகிற்கே எங்கள் உழைப்பால்
உணவளித்துக் கொண்டிருந்தோம்
காவிரி தாரை வார்க்கப்பட்டது
கடுகளவு தண்ணீரும் இன்றி
பஞ்சத்திற்கு ஆளானோம்
எங்கள் உரிமைக்காக
போராடினோம்
காவிரியைக் காணவில்லை
முப்போகம் விளைந்த
விளை நிலங்களில்
வேலி காத்தான் முட்கள்
பட்டா போட்டுக் கொண்டன
எப்பொழுதாவது பெய்யும் மழையாவது
எங்கள் நிலத்தடி நீரை உயர்த்தும் என்று எண்ணினோம்
பல கயவர்களால் மணல்
சுரண்டப்பட்டுப் பாழ்பட்டது காவிரி
எங்கள் வாழ்க்கையில்
வசந்தம் வாராதோ என்று
ஏங்கியிருந்த நேரத்தில்
எங்கிருந்தோ வந்தாய்
புயலே...
வெந்த புண்ணில் வேல்
பாய்ச்சியது போல்
இடி விழுந்த எங்கள் வாழ்க்கையை
அடியோடு சுரண்டிப் போனாய்
பாசமாய் வளர்த்த பசுவை இழந்தோம்
பசுமையாய் வளர்த்த தென்னையை இழந்தோம்
மழைக்காகவும் வெயிலுக்காகவும் ஒண்டி
கிடந்த குடிசைகளை இழந்தோம்
நிராயுதபாணிகளாய் நிற்கின்றோம்
புயலே உனக்கும் தான் இரக்கமில்லையே.

முனைவர் க.மோகன் காந்தி
உதவிப்பேராசிரியர், தமிழ்த்துறை

வாழ்க்கையில் வெற்றி

நல்லதைப் பேச, அல்லது மௌனமாக இரு
அண்டை வீட்டாரிடம் சிறந்தவரே
இறைவனிடம் சிறந்தவர்
கொடுக்கும் கரம் வாங்கும் கரத்தைவிடச் சிறந்தது
பெற்றோர் பொருத்தம் இறைப் பொருத்தம்
பெற்றோர் கோபம் இறைக் கோபம்
தந்தை தன் மகனுக்குத் தரும் மிகச் சிறந்த அன்பளிப்பு
அழகிய ஒழுக்கமே

பிறரை இழிவாகக் கருதுவதே ஒருவரின்
 வீழ்ச்சிக்குக் காரணமாகும்
 திருப்பிச் செலுத்த எண்ணமின்றி
 கடன் வாங்குபவர் திருடரே
 சண்டையிடுபவர் வீரரல்ல
 கோபத்தின் போது நிதானிப்பவரே வீரர்
 செல்வமும் வயதும் அதிகரிக்க விரும்புவோம்

லூ.பிரகாஷ் ஜான்பால்
 இயற்பியல் ஆய்வக உதவியாளர்

தூய நெஞ்சக்கல்லூரி மாணவ மாணவிகளுக்கு உங்கள் அன்பு தோழன் எழுதுவது.....

வேடந்தாங்கல் பறவைகள் சரணாலத்திற்கு அனைத்து இடங்களில் இருந்தும் பறவைகள் ஒன்று சேர்வது போல, நாம் அனைவரும் எங்கிருந்தோ, இந்த தூய நெஞ்சக்கல்லூரியில் ஒன்று சேர்ந்து இருக்கின்றோம். இங்கு அன்புள்ள மனிதர்களையும் அறிவுள்ள ஆசிரியர்களையும் நாம் சந்தித்து இருக்கிறோம். இது யாராலும் மறுக்க முடியாத ஒன்று. அனைவருக்கும் இது அமைவது என்பது மிகவும் அரிது. இது நமக்கு மட்டும் கிடைத்த ஒரு பெரும்பேறு எனவும் கூறலாம். எனவே இங்குள்ள நற்பண்புகளையும், நற்குணங்களையும் நமக்குள் நாம் வளர்த்துக் கொள்ள வேண்டும்.

வாழ்வின் முக்கியப் பருவமாகத் திகழ்வது இளமைப் பருவம். இந்த பருவத்தில் ஒருவர் தன்னுள் உருவாக்குகின்ற எண்ணங்களும், செயல்பாடுகளும் அவரை சிறந்த நிலையை அடையச் செய்து வெற்றிகளைப் பெற்றுத்தருகின்றன.

பள்ளி மற்றும் கல்லூரிகளில் பயிலும்போதே தன்னைப்பற்றி முழுவதுமாகத் தெரிந்து கொண்டு, தன்னிடமுள்ள சிறப்புகளையும், தவறுகளையும் அடையாளம் கண்டு கொண்டவர்கள் எப்போதும் மனமகிழ்ச்சியோடு காணப்படுவார்கள்.

இதனால் தான் உன்னையே நீ அறிந்துகொள் என மாபெரும் மேதையான சாக்ரடீஸ் தெளிவாகக் குறிப்பிட்டார். உன்னை நீ அறிந்து கொண்டால் இந்த உலகத்தில் மிகச் சிறப்பாக வாழலாம் என்பது அவரின் கருத்தாகும்.

உங்களை நீங்கள் அறிந்து கொள்ளுங்கள்.....

இப்போது நம்மைப்பற்றி நாம் தெளிவாக அறிந்துகொள்வது எப்படி? என்ற கேள்வி நமக்குள் எழுகிறது. நம்மைப்பற்றி தெளிவு நமக்குள் உருவாகுவதற்குச் சில கேள்விகளை மனதிற்குள் எழுப்பி அவற்றுக்கு விடை காண முயல்வது நல்லது. அந்தக் கேள்விகள் இவைதான்...

1. எனது வாழ்க்கையின் குறிக்கோள் என்ன ?
2. என்னிடமுள்ள நல்ல குணங்கள் என்னென்ன?
3. நான் எவற்றையெல்லாம் மிகவும் அதிகமாக விரும்புகிறேன்?
4. எனது பழக்க வழக்கங்களெல்லாம் எவ்வாறு உள்ளன?
5. என்னிடமுள்ள சிறப்புத் திறமைகள் என்னென்ன?
6. எனக்கு எப்போதெல்லாம் வெறுப்பும் எரிச்சலும் தோன்றுகிறது?

7. நான் எனது பெற்றோரிடம் கொண்டுள்ள தொடர்பு எவ்வாறு அமைந்துள்ளது?
8. எனது உறவினர்கள் என்னோடு எப்படி நடந்து கொள்கிறார்கள்?
9. எனது நண்பர்களின் நடவடிக்கைகள் எவ்வாறு அமைந்துள்ளன?
10. நான் இதுவரை அடைந்த வெற்றிகள் என்னென்ன?

மேலே குறிப்பிட்டுள்ள இந்த 10 கேள்விகளுக்கும் தெளிவான பதிலைக் கண்டறியும் போது ஒருவன் தன்னைப் பற்றித் தெளிவாக அறிந்து கொள்ளலாம்.

நான் யார்? நான் எப்படிப்பட்டவன்? என்று அறிந்து கொள்ள முயற்சி செய்யும் போது தான் ஒருவன் தன்னைப்பற்றித் தெளிவாகத் தெரிந்துக் கொள்ளலாம்.

இதைத்தான் தன்னை அறிதல் எனக் குறிப்பிடுவார்கள். தன்னைப் பற்றி அறிந்துகொள்ள விரும்புவர்கள் பள்ளி, கல்லூரியில் பயிலும் போதே மற்றவர்களோடு இணைந்து பழகும் பண்பை வளர்த்துக் கொள்ள வேண்டும். அப்போதுதான் தனது குணங்கள் பிறரோடு பழகுவதற்கு ஏற்றதாக அமைகிறதா என்பதைப் புரிந்து கொள்ள இயலும்.

தனது குணங்கள் மற்றவர்களோடு இணைந்து பழகுவதற்கு ஏற்றதாக அமையாவிட்டால், தன்னிடமுள்ள மற்றவர்களுக்குப் பிடிக்காத குணங்களைக் கண்டறிந்து அதை மாற்றவும் முயற்சிகளை மேற்கொள்ள வேண்டும்.

எனவே தன்னை அறிந்து கொள்ளுதல் என்னும் பயிற்சியை இளம் வயதிலேயே ஒருவர் பழகிக்கொண்டால் வாழ்வில் சிறந்த நிலையை அடைவது எளிதாகும். எனவே, தன்னை அறிந்து சிந்தித்துச் செயல்படுங்கள்.

நண்பர்களே ஒன்று மட்டும் நீங்கள் நினைவில் வைத்துக்கொள்ளுங்கள். நல்ல எண்ணங்கள் வெற்றிக்கு வழிவகுக்காமல் போகலாம் ஆனால், தீய எண்ணங்கள் கண்டிப்பாகத் தோல்விக்கு வழிவகுக்கும் எனவே நல்லதே நினைப்போம்! நல்லதே நடக்கும்!!

வெ.சுரேஷ் (BR180002)
ஆய்வியல் நிறைஞர், பொருளாதாரத்துறை

அம்மா

அன்பின் பிறப்பிடம் அவள்தான்
ஆன்மிக வழித்தடம் அவள்தான்
இருளில் உறங்கிய நம்மை
ஈன்று எழுப்பியதும் அவள்தான்
உலகம் இதுதான் என்று நம்மை
ஊட்டி வளத்தவள் அவள்தான்
எதுவும் அவள் இல்லாமல் இல்லை
அம்மா என்ற அந்த
மூன்றெழுத்துக்குத் தான் எவ்வளவு
வலிமை!
ஒரு நாள் அவள் இல்லாமல் போனால்

ஓடவும் செய்வோம் அவள் பின்னால்
அன்னையை மதிப்போம்
வாழ்நாள் முழுமையும்

அ.லோகா (BU161011)
மூன்றாம் ஆண்டு கணினி பயன்பாட்டியல் (பிரிவு-2)

தோழி

நீ என்னை
நீர் என்று சொல்லாதே வறண்டு போவேன்!
நிலம் என்று சொல்லாதே காய்ந்து போவேன்!
காற்று என்று சொல்லாதே தெரியாமல் போவேன்!
ஆகாயம் என்று சொல்லாதே ஒன்றும் இல்லாமல் போவேன்!
நெருப்பு என்று சொல்லாதே அணைந்து போவேன்!
உயிர் என்று சொல்லாதே பிரிந்து போவேன்!
இதயம் என்று சொல்லாதே துடிக்காமல் போவேன்!
ஆனால் உன் நிழல் என்று சொல்!
எப்போதும் உன்னோடே வருவேன்!

சி.அர்ச்சனா (BU161022)
மூன்றாம் ஆண்டு கணினி பயன்பாட்டியல் (பிரிவு-2)

விடியல் எப்போது?

ஒரு சோக இரவின் சுகமான
கனவுகளுக்கு
வர்ணந்தீட்டிப் பார்ப்பவளாய்
இந்த பனி மாத விடியலில்
நான் உன்னை நினைத்துப்
பார்க்கிறேன்...
மனதின் ஈரத்தைச்
சின்னச் சின்ன பனித்துளியாய்ச்
சேர்த்து சேர்த்து - நீ
உச்சரித்த போது...
கவிதையும் மழலையும்
கலந்து உருவாக்கிய
மதுத்துளிகளாய், அவை என்னை
போதைப்படுத்தின
கடந்து கொண்டிருக்கும்
காலங்களால்
கனிந்து கொண்டிருக்கலாம்
உன் நெஞ்சம்
ஆனால்...
ஏமாற்றத்தை அறிந்து
பழக்கப்பட்ட எனக்கு

வெற்றியையும் தோல்வியையும்
இனம் காண முடியாதது போலதான்
அன்பையும் இனம் காண முடியவில்லை!

சு.பு.மொழி (BU160268)
மூன்றாம் ஆண்டு கணிதம் (பிரிவு-2)

வாழ்க்கை வாழ்வதற்கே!!!

சிறு பூவுக்கும் வலிக்குமே
அதை பறிக்கும்போது
மலரும் வாடுமே
மணத்தை இழக்கையிலே
மனதும் மடியுமே
ஆசைகள் அழிகையிலே
கனவுகள் கலையும்போது
கவலைதான் தோன்றுமே!
இருளுக்குப் பின் ஒளியில்லையா?
இன்று போனால் நாளையில்லையா?
வாழ்க்கையில் வலியில்லையா?
வாழ்தான் வழியில்லையா?
கரைந்துபோகும் மேகம் போல்
கவலைதான் மறைந்து போகுமே!
வளர்பிறையும் தேய்ப்பிறையும் உண்டு வானிலே
வெற்றியும் தோல்வியும் உண்டு நம் வாழ்விலே!
நேற்றைக் கொண்டு
நாளை வென்று
வாழ்வோம் இன்று!
வலிகள் போவதற்கே!
வசந்தம் வருவதற்கே!
இன்னல் தொலைந்திடுமே!
இனிமை சேர்ந்திடுமே!
வாழ்க்கை வாழ்வதற்கே!!
வாழ்க்கை வாழ்வதற்கே!!

சி.லோகே'வரி (BU160263)
மூன்றாம் ஆண்டு கணிதம் (பிரிவு-2)

அன்புள்ள அப்பா

என் ஆதி நீயென்றே தொடங்கிய
என் வாழ்க்கை பயணங்களில் என்றும் நீ...!
தேடிய உறவுகளில் தேடாமல் வந்து
தேவைகளைப் பூர்த்தி செய்த தெய்வமும் நீ...!
அன்னை மடியில் உறங்கும் சுகத்தை விட
உன் காப்பு காய்த்த உன் கையில் உறங்கிய
உறுத்தல்கள் இன்னும் நெஞ்சில் அழகாய்...!

உன் முரட்டு குணங்கள் யாவும் என்
 முன் மண்டியிட மறுத்ததில்லை என் குழந்தை பருவத்தில்...!
 நான் அழுத போதெல்லாம் நீ விளையாட்டு
 பொம்மையாக மாற மறுத்ததில்லை...!
 என் கைப்பிடித்து கற்று தந்த எழுத்துக்களை
 இன்னும் மறக்கவில்லை அந்த கரும்பலகையில்...!
 உன் மேல் உறங்கும் போது நான் சுவாசிக்க
 மறுக்காத உன் வியர்வை வாசங்கள்...!
 நீ கொடுத்த பணத்தில் இன்னும்
 அழியவில்லை உன் கைரேகைகள்...!
 நீ என்னிடம் அடம்பிடித்த என் எச்சில்
 உணவுகளாய் உடன் நினைவுகள்
 உன் ஆசைகளைத் துறந்து ஆசை வைத்தாய்
 என் மேல்...!
 அனைத்தும் அறிய வைக்கும் அகிலமாய் நீ...!
 ஊரில் சொல்லும் வார்த்தைகளாய்
 கண்டிப்பான அப்பா
 கோபக்கார அப்பா
 இருந்தாலும் நான் எழுத தவறியதில்லை
 என் கடிதங்களில்...
 உன் தோள் சாய்ந்து உறங்கும்போது
 உன்னுடைய வழி தெரியவில்லை . . . !
 உன்னை என் தோள்மீது தூக்கும்போது
 உன்னுடைய வழியை உணர்ந்தேன்
 கண்களில் கண்ணீரோடு.....!

மா.குணசீலன் (AU170315)
 இரண்டாம் ஆண்டு இயற்பியல் (பிரிவு-1)

அம்மா! ...அம்மா!

என் உயிரை இறையருளால் தன் கருவில் உள்வாங்கி அதற்கு மெய்கொடுத்து
 உயிர்மெய்யாக உலகிற்கு அறிமுகம் செய்தவள் அம்மா.

அம்மா.. என்றால் அற்புதம்

ஒரு மனிதன் தன் அம்மாவின் பாசத்தையும் அன்பையும் இருக்கும்வரை
 உணரமாட்டான். உணரும்போது அவள் இருக்கமாட்டாள். அம்மாவின் இறுதி
 ஆசை என்னவென்றால் அவள் இறந்தபிறகும் தன் மகன் பெயரைத் தன்
 கல்லறையில் பதிக்க வேண்டும் என்பது, ஏனென்றால் தான் இறந்த பிறகும் தன்
 மகனைத் தான் சுமக்க வேண்டும் என்ற எண்ணம் கொண்டவள். அம்மா, தன்
 குழந்தை அம்மா என்று கத்த அவள் பிரசவவலியில் ஆயிரம் முறை அம்மா..
 அம்மா... என்று அலரினாள். அம்மாவின் அன்பு ஆழங்கான முடியாதகடல் அதில்
 விளைந்த வலம்புரிமுத்தே பிள்ளைகள். அப்பிள்ளைகளுள் பெண்பிள்ளையைவிட
 ஆண்பிள்ளையே அதிகம் பிடிக்கும். ஆண்பிள்ளையே தன்னை அனாதை
 ஆக்காத அற்புத செல்வம் என்று நம்புவாள் அம்மா.

அம்மா உழைப்பின் சிகரம், கருணைக்கடல், அவள் இல்லையேல் உலகம் ஏது! உலக உயிர்கள்தான் ஏது! எடுத்துக்காட்டு கூற முடியாத உன்னத ஜீவன் அம்மா. உலகிலே மிக உன்னதமான உறவு என்றால் அது அம்மாதான் மனிதன் உயிர்வாழ முதன்மை காரணமாய் இருப்பது அம்மாவின் அன்பு, பாசம், நேசம் அம்மா இல்லையேல் நான், நீ, எவருமே இல்லை.

அன்பு மகனின் ஆசைக்காக தன் ஆசையனைத்தையம் மறந்தவள் தாய், அதை நாம் மறந்துவிடுகிறோம். எனக்கு உடல்நலம் சரியில்லாதபோது மருத்துவத்தைத் தேடுவதைவிட அம்மாவின்மடியைத் தேடுவது தான் அதிகம் ஏனென்றால் அம்மாவின் பாசத்திற்கு முன் மருந்து மருத்துவம் அனைத்தும் தூசி. எனக்குக் கடவுள் வரம் கொடுத்தால் நான் கடவுளிடம், கடவுளே... மீண்டும் எனக்கு என் அம்மாவின் கருவில் அமரும் வரம் கொடுக்க வேண்டும் என்று வேண்டுவேன். உலகில் எங்கு தேடி அலைந்தாலும் அமரமுடியாத ஒரே சிம்மாசனம் அம்மாவின் கருவறைதான். நான் அம்மாவின் கருவில் இருக்கும்போது என் அம்மாவிற்கும் எனக்கும் உள்ள ஒரே உறவு தொப்புள் கொடி மட்டுமே. அத்தொப்புள் கொடியை வெட்டுவது என்பது என் வாழ்வின் திறப்புவிழாவிற்கு வெட்டிய ரிப்பன் போன்றது. அம்மா நீ என் அருகில் இருந்தால்போதும் பாறையின் மேல் உறங்குவது கூட உன் கால்மடி மீது உறங்குவது போல் இருக்கும். நம்மிடம் எவ்வளவு சொத்து, சொந்தம் இருந்தாலும் நம் அம்மாதான் நமக்கு முதல் சொத்து, சொந்தம்.

நான் பார்த்த முதல் முகம்
நான் பேசிய முதல் வார்த்தை
நான் பார்த்த முதல் ஓவியம்
என் அம்மா!!!!

நான் ரசித்த முதல் பெண்ணும் நீதான் அம்மா
என்னை ரசித்த முதல் பெண்ணும் நீதான் அம்மா.

பா.பிரமோத் (BU180272)
முதலாம் ஆண்டு கணிதம் (பிரிவு-2)

தாலாட்டு

துயில் கொள்ள பாடும் தாலாட்டு போய், வாழ்வில்
துயில் எழும் தாலாட்டு, வீரத் தாலாட்டு!
அழுகையின் மூலம் என்னை பலவீனம், ஆக்கவில்லை
என்தேவையை உரக்கச் சொல்ல, கற்றுதந்தாள்
தவழ்கையில் தாழ்ந்து போக சொல்லவில்லை,
தரையிலிருந்து ஒரு அடி உயர்ந்து நில் என்றாள்
நடக்கையில் முயற்சியை, மூச்சாய் விதைத்தாள்
கீழே விழுகையில் உனக்குரியது தோல்வியல்ல,
வெற்றி என்றாள்
நிலை எய்துகையில் தலைகணம் அல்ல,
செல்வம், தாழ்ச்சி என்றாள்
நாணயம், மரியாதை பெற வேண்டியது அல்ல,
சம்பாதிக்க கூடியது என்றாள்
என்றும் மாணவனாய் இரு என்றாள்,

எதையும் கற்பதில்

ஆமையைப் போல் இரு என்றாள், சுறுசுறுப்பில் அல்ல
எந்த சூழலையும் ஏற்கும் பண்பில்

எறும்பைப்போல் இரு என்றாள் சிறிதாய் அல்ல,
உருவத்தைப் பாராது வேடனை வென்றதில்

உலகத்தின் சிறந்த நேரத்தை அனுபவிக்கிறேன்
என் தாயின் சொற்களைச் செயல்களாக மாற்றும்
அந்த நொடியில்!

கு.தேன்மொழி (BU160336)

முன்றாம் ஆண்டு இயற்பியல் (பிரிவு-2)

தோல்வியைத் தாண்டி வா !

தோல்வியைத் தோற்கடிக்க நினைத்தால்

முயற்சி செய், தடைகளைத் தாண்டு

எறும்பினைப் பார், வீழ்ந்து விட்டாயா?

தவமும் குழந்தையைப் பார்!

எத்தனை ஆண்டுகள் தான் - ஹிட்லர், கஜினியின்

வரலாற்றையே உதாரணம் சொல்வார்கள்

உன்னிடம் இல்லையா? அந்த

விடாமுயற்சியும், தன்னம்பிக்கையும்

இன்று கை கொட்டி சிரிப்பவரை,

நாளை கைத் தட்ட வை!

தோல்வி என நினைக்காதே,

தோல்விக்குப் பின் தான் வெற்றி என நினை!!

தோல்விக்குப் பின் தான் வெற்றியா? இல்லை,

விடாமுயற்சி செய் உன் முதல் முயற்சியே வெற்றி தான்

முயற்சிக்கு உதாரணமாக,

உன்னை நீயே வைத்துக் கொள்!

முயற்சிக்கும் விடாமுயற்சிக்கு - பெரு

வித்யாசம் இல்லை

சாதிக்க நினைப்பவர்கள் முயற்சி செய்கின்றனர்,

சாதித்தே ஆக வேண்டும் - என்பவர்கள்

விடாமுயற்சி செய்கின்றார்கள்

தோல்வியைத் தோல்வி என நினைக்காமல் - உனக்குத்

தோள் கொடுத்து வெற்றியை அடைய

உதவும் தோழனாக நினை அது

வெற்றி என்னும் பாதையைக் காட்டும்!

முயற்சி செய்து கடந்து வா, தோல்வியை

உனக்கான வெற்றிகளாய் மாற்று!!!

கு.நந்தினி (BU160350)

முன்றாம் ஆண்டு இயற்பியல் துறை (பிரிவு-2)

வானம் வசப்படும்

அன்னையின் அன்பினையும்

ஆத்ம பலத்தைத் துணைக்கொண்டு
 இன்னல்கள் பல கடந்து...
 ஈட்டியாய் தாக்கும் சொந்தங்களை எதிர்த்து...
 உறுதியை உயிராய் நினைத்து...
 ஊக்கமாய் இருக்கும் தந்தையைத் தலைநிமிரச் செய்ய...
 என்னால் முடியும் என்பதை திருவாசகமாய் நினைத்து...
 ஏக்கங்கள் காற்றில் மறைய..
 ஐயங்களைகத் தூக்கி எறிந்து...
 ஒருநாள் கனவு நனவாகும் என்று...
 ஓடிக்கொண்டிருக்கும் என்னைக் கவலை பிணித்தாக்காமல்
 ஓளதடமாகும்..
 எ.காகவும் காக்கும் நண்பர்களைச் சுற்றமாய் ஏற்று...
 வாழ்க்கை பாதையில்
 பெண்மையைத் துணைக்கொண்டு
 கொடுமைகளை அகற்ற...
 ஒரு நாள்
 லட்சிய 'வானம் வசப்படும்' என்ற நம்பிக்கையுடன் நான்...

உ.விந்தியா (BP170212)

இரண்டாம் ஆண்டு முதுகலை கணிதம் (பிரிவு-2)

பாரதியார்

உன்
 நிமிர்ந்த நடையைப் பார்த்து
 வானவில்லும் வளைந்து போக,
 தலைப்பாகை
 விசும்பிற்குக் கவசம் ஆக,
 விழிக்கு முன்னால்
 வாளும் மங்கிப் போக,
 சிவந்த இதழ்
 சொற்கள் மூழ்கி எடுக்காத முத்துக்களாக
 மார்புக் கூடு தமிழர்களுக்கே
 கிடைத்த பெரும் பேறாக,
 வயிற்றுக்குக் கூட தமிழ்
 எழுத்துக்களே அறுசுவை ஆக
 எட்டையப் புரத்தில் பிறந்ததால் தானோ!
 எட்டாத உயரத்தில் இருக்கிறாய்
 உன் காலத்தோடு வாழாத நாங்கள்
 உன் கவிதையோடு வாழ்கிறோம்
 அங்ஙனம் வாழ்ந்திருந்தால் - உன்
 பெருமையினை உணராமல் இருந்திருப்போம்
 இத்தனை காரணத்தினால்
 நீ மறைந்தாலும் உன் புகழ்
 என்றும் மறையா!

க.தேவிபாலா (BP170806)

இரண்டாம் ஆண்டு முதுகலைத் தமிழ்

இன்னொரு தேசிய கீதம்....

தனிமையும் அமைதியும்
உரையாடிக் கொண்டிருந்த சமயம்
செவிகள் இரண்டும்
உறங்கிக் கொண்டிருந்த தருணம்
செவிகளைத் துயிலெழுப்பும் முயற்சியில்
ஓர் ஓசையைக் கேட்டேன் - அது
குயில் ஓசையோ என்று
எண்ணிக் கொண்டிருந்த சமயம்
பூவிற்கே மென்மையைக்
கற்றுத்தரும் மழலையைக் கண்டேன்
அதன் மொழியைப் புரிந்து
கொள்ள முடியவில்லை ... ஆனால்
இரசிக்க முடிந்தது...
மழலையின் இலக்கணம் பிழையாயினும்
மனத்திற்கு மகிழ்ச்சியைத் தரக்கூடியது
மழலை மொழியில் இறந்தகாலம்
எதிர்காலம் ஆனது
எதிர்காலம் நிகழ்காலம் ஆனது
நான் உனது இரசிகை என்பதை உனக்கு
எவ்வாறு புரியவைப்பேன்
எனது மொழி உனக்குப் புரிவதில்லை
உனது மொழி எனக்குத் தெரியவில்லை
எனது தாய்மொழிக்குப் பிறகு நான்
மிகவும் இரசித்த மொழி
உன்னுடைய மொழிதான்
இறைவனும் உன்னிடம் வரம் வாங்கவேண்டும்
உனது மொழியைக் கற்றுத்தரக்கோரி!
பன்னிரண்டு மொழிகளைக் கற்ற பாரதியும்
உனது மொழியை அறிந்திருக்கவில்லை..
என் மனதில்
உன் மழலை மொழியே...
இன்னொரு தேசிய கீதமானது!

ம.ரேவதி (BP170802)

இரண்டாம் ஆண்டு முதுகலைத் தமிழ்