



**ST. XAVIER'S COLLEGE (AUTONOMOUS)
PALAYAMKOTTAI - 627 002**
(Recognized as "College with Potential for Excellence" by UGC &
Accredited by NAAC at A++ Grade with a CGPA of 3.66 out of 4)



ANNUAL REPORT 2022-2023
DEPARTMENT OF COMPUTER APPLICATIONS

The Department of Computer Applications has paved the way for knowledge enrichment and learning even in the pandemic period by conducting a good number of programmes. Inauguration Function of Xaverian Computer Applications Professionals Association (XCAPA) was held on 18.08.2022. Dr. Grasha Jacob M.C.A., M. Phil., Ph.D., Associate Professor and Head (Department of Computer Science), Rani Anna Government College for Women, Tirunelveli, has served as the Chief Guest.

A Seminar on JavaScript for Client and Server-Side Scripting was held on 26.08.2022. Dr. M. Venkat, B.E.(CS), Technical Support- Corporate Trainer, Livewire served as the Chief Guest. A Seminar on Data Science was held on 27.08.2022. Ms. Amsiha Vora, Mr. Soha G and Ms. Anu G Data Science Students from Jain University, Bangalore served as key speakers. Career Guidance Programme on Numeric Aptitude and Reasoning Ability and Aptitude and Reasoning Ability was started on 02.09.2022. It was a 30 hours Training Programme. The programme was offered for the final year students of BCA and MCA courses.

An orientation programme for the chess competition is held on 06.09.2022. The Inter Collegiate Tech Meet ICAPO 2022 was held on 14.10.2022. Mr. J. S. Sukumar, Industry Institute Interactive Consultant, Advantage Pro, Chennai was the Chief Guest.



Alumni Meet of Department of Computer Applications was held on 10.12.2022. Mr. Sudalai Muthu, retired Canara Bank officer was the chief guest. Seminar titled Job Opportunities on Linux Certification is held on 12.12.2022. Mr. J. S. Sukumar, Industry Institute Interactive Consultant, Advantage Pro, Chennai was as the Chief Guest. The paper presentation competition was held on 12.01.2023. Dr. M.Venkatesh, Assistant professor of Computer Science and Dr. A. Jasmine Xavier, Assistant professor of Computer Science served as judges. For the Paper Presentation Competition 10 teams (one or two participants per team) participated in the paper presentation Competition.

Orientation Programme on Significance of Certifications on Linux in the Job Market was held on 08.02.2023. Mr. J. S. Sukumar, Industry Institute Interactive Consultant, Advantage Pro, Chennai is the Chief Guest.

An Orientation Programme on NISM Certification was held on 12.02.2023. Mr. Suresh, Founder and CEO, Diksha Academy for Banking and Finance, Tirunelveli was the Chief Guest. Paper Presentation Competition was held on 14.03.2023. Prof. L.Sujatha, Assistant professor of Computer Applications and Dr. R. Geetha, Assistant professor of Computer Applications Dept served as Judges.

XCAPA Valediction function is held on 28th March 2023, in Lebeau Auditorium.

Seminar on “Top Trending Technologies & It’s Opportunities was conducted on 20.03.2023. Ms. Thanga Atchaya, Livewire Engineer, Livewire Software Training Institute served as the resource person.

XCAPA Valediction function was held on 28.03.2023, in the Lebeau Auditorium. Mr. U. Silambarasan Shariff, Global Career Counsellor & Life Strategist served as the resource person for the valedictory function.

TABLE.8.a. PAPERS PUBLISHED IN JOURNALS (2022-2023)

S. N O	Name of the Teacher	Name of the Department	Title of the Paper	Name of the Journal	Volume No/ Issue No/ Page No / Year	ISSN No. / e-ISSN No.	Cited in Web of Science / Scopus Indexed/UGC Approved / Not Found in UGC-CARE List	National / International	Impact Factor
1	Dr.S. Chidambaranathan	Computer Applications	An Innovative Sensing Machine Learning Technique to Detect Credit Card Frauds in Wireless Communications	Hindawi Wireless Communications and Mobile Computing (SCI Indexed Journal)	Volume June 2022, Article Id: 2439205, Page Nos.:1-12	ISSN No.:2347-3150 https://doi.org/10.1155/2022/2439205	(SCI Indexed Journal)	International	-
2	Dr.S. Chidambaranathan	Computer Applications	An IOT based 5G filter that uses Fourier Transform to minimize noise (Accepted)	Hindawi Wireless Communications and Mobile Computing (SCI Indexed Journal)	Volume 2023	ISSN: 1530-8669	(SCI Indexed Journal)	International	-
3	Ms. Arul Vallarasi S	Computer	Challenges of	Gradiva	Volume 8 Issue 12,	0363-8057	Scopus	International	6.3

		Applications	Students in Online Classes	Review Journal	pages 1308 to 1312		Indexed		
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TABLE.8.b. – PAPERS PUBLISHED IN CONFERENCE / SEMINAR PROCEEDINGS (2022-2023)

S. No	Name of Teacher	Department	Title of the Paper	Title of the Proceedings	National / International	(Place, Publisher, Year, Page No.)	ISSN / ISBN No.
1	Dr.S. Chidambaranathan	Computer Applications	Chronic Kidney Disease Identification using Machine Learning Techniques	National Conference on Innovation in Engineering and Technology	National	Velammal College of Engineering and Technology, Madurai National (AICTE sponsored) 24 th 25 th Nov.2022	-
2	Dr.S. Chidambaranathan	Computer Applications	Machine Learning Approaches for the Detection of CKD	National Conference of Inter disciplinary Research through New Age Information Technology	National	Muslim Arts College, Thiruvithamcode, Kanyakumari, 24 th Feb. 2023	-

TABLE 9 - BOOKS / BOOK CHAPTERS PUBLISHED (2022-2023)

S. No	Name of Teacher	Department	Title of the Books / Proceedings	Place, Publisher, Year, Page No.	National / International	ISSN / ISBN No.
1	Dr.S. Chidambaranathan	Computer Applications	Learning Genetic Algorithms with Python – In	Scientific International Publishing House,	International	ISBN No: 978-93-5625-219-6

			Optimization and Machine Learning	06/06/2022 Pages: 213		
2	Dr.S. Chidambaranathan	Computer Applications	Handbook of Python Programming	Scientific International Publishing House, 22/02/2023 Pages: 213	International	ISBN No: 978-93-5757-042-8
3	Dr.S. Chidambaranathan	Computer Applications	Artificial Intelligent Techniques for Wireless Communication and Networking [Enabling Artificial Intelligence and Cyber Security in Smart Manufacturing]	Scrivener Publishing, Wiley, Georgia, USA	International	Scrivener Publishing, Wiley, Georgia, USA Published 2022 ISBN No: 978-1-119-82127-4 Pages 269-286
4	Dr.S. Chidambaranathan	Computer Applications	Handbook of Deep Learning in Biomedical Engineering and Health Informatics [Technical Assessment of Various Image Stitching Techniques: A Deep Learning Approach]	Biomedical Engineering, Apple Academic Press Inc, 1st Edition Published 2022,	International	ISBN No: 978-1-77188-998-8 Pages 51-81
5	Dr.S. Chidambaranathan	Computer Applications	Smart Mobility of Commercial and Hazardous Vehicles [Optimized	Apple Academic Press, USA Published 2023	International	ISBN:9781774915387

			Machine Learning Based Pedestrian Detection For Autonomous Vehicle]			
6	Dr.S. Chidambaranathan	Computer Applications	AI Based Digital twin Technology for Electric Vehicles [Artificial Intelligence enabled Electric Vehicle Contribution using Power Optimization Logic. (ACCEPTED)]	Scrivener Publishing, Wiley, Georgia, USA	International	
7	Ms. Arul Vallarasi S	Computer Applications	Handbook on Android Application Development	J.E Publication Nagercoil		978-93-84734-38-1

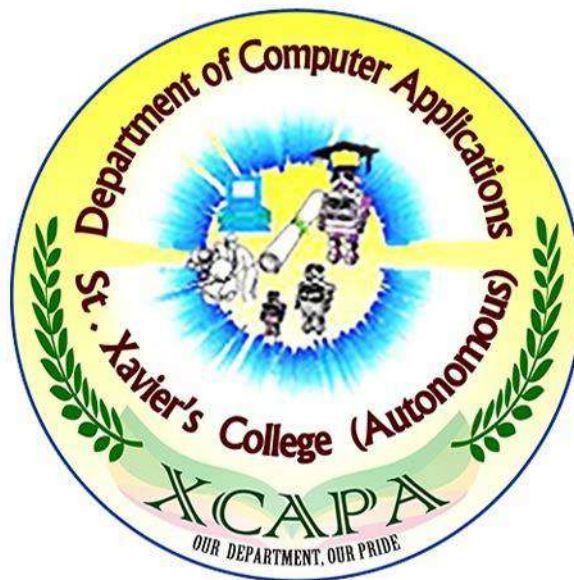


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XCAPA REPORT

2022 - 2023

The inauguration of XCAPA was held on 18th August 2022 at Lebeau Auditorium. The XCAPA was inaugurated by our Deputy Principal Dr. B. Xavier Innocent. The keynote address was delivered by the Chief Guest Dr. Grasha Jacob M.C.A., M. Phil., Ph.D., Associate Professor and Head (Department of Computer Science), Rani Anna Government College for Women, Tirunelveli. Dr. B. Xavier Innocent, Deputy Principal administered the Oath Taking Ceremony of Office Bearers.



Seminar on JavaScript for Client and Server-Side Scripting was held on 26th August 2022. Dr. M. Venkat, B.E.(CS), Technical Support- Corporate Trainer, Livewire gave an introduction of Scripting Languages through PowerPoint presentation. Light was thrown on scripting languages and the students gained the introductory knowledge on it.



Seminar on Data Science was held on 27th August 2022. Ms. Amsiha Vora, Mr. Soha G and Ms. Anu G of Data Science Students from Jain University, Bangalore addressed the gathering and

share their knowledge about Data Science and conducted a quiz competition on the same topic and they rewarded the students who answered well.

Career Guidance, 30 hours Training Programme was planned to be conducted to the students. Career Guidance Programme on “Numeric Aptitude and Reasoning Ability” for BCA and “Aptitude and Reasoning Ability” for MCA started on 2nd September 2022. The Programme Trainer was Ms. Saranya, Assistant Professor of Mathematics, St. Xavier’s College, Palayamkottai.



An Orientation Programme for chess competition was held on 6th September 2022 in MCA Seminar Hall. Ms. Eniha Sharme III BSc Mathematics of St. Xavier’s College, Palayamkottai served as a resource person. The resource person Ms. Eniha Sharme has represented the college chess team in various competitions and received ‘Form 3’ certificate from Manonmaniam Sundaranar University.

The chess competition of the BCA and MCA students was held on 22nd September 2022 in MCA Seminar Hall. Ms. Eniha Sharme of III BSc, Mathematics and R. Vignesh of II BCom and S.Gnana Banu Priya of III Bcom conducted the Chess competition.



The Inter Collegiate Tech Meet ICAPO 2022 was held on 14th October 2022. The Inauguration of the Tech Meet was held at Lebeau Auditorium. Mr. J.S.Sukumar, Industry Institute

Interactive Consultant, Advantage Pro, Chennai inaugurated ICAPO 2022. 18 colleges participated in ICAPO 2022. Totally 162 participants of 27 teams from 18 colleges participated. Five competitions namely Techno Talk (Paper Presentation), Bug Squeezers (Software Debugging), Web Weavers (Web Designing), AdJugglars (Software Marketing), Cool Stalwarts (Stress Interview) were conducted. Mepco Schlenk Engineering College got high score and secured the overall winners Trophy. Sadakathullah Appa College, B.Sc. (IT) team got second place and secured runners Trophy.



Alumni Meet of Department of Computer Applications was held on 10th December 2022. Mr. Sudalai Muthu, retired Canara Bank officer served as the Chief Guest. Rev. Dr. G. Pushparaj, S.J., Secretary of our college delivered a speech on the role of alumnus in part of the growth of the college. Followed him, Rev. Dr. S. Mariadoss, S.J., Principal of our college addressed the gathering.



Seminar for MCA and M.Sc.(CS) students titled Job Opportunities on Linux Certification was held on 12th December 2022. Mr. J.S.Sukumar, Industry Institute Interactive Consultant, Advantage Pro, Chennai pointed out the opportunities of RedHat certification.

The Paper Presentation Competition for MCA students was held on 12th January 2023. Dr. M. Venkatesh, Assistant professor in Computer Science and Dr. A. Jasmine Xavier, Assistant Professor in Computer Science served as Judges for the Paper Presentation Competition.



SXC@100 Centenary exhibition of St. Xavier's College (Autonomous), Palayamkottai was held from 30th January 2023 to 3rd February 2023. Our department exhibition stuffs were displayed in Hall No 18 and 19. Students of various colleges and schools visited the exhibition.

An Orientation Programme for BCA and B.Sc.(CS) on Significance of Certifications on Linux in the Job Market was held on 8th February 2023. Mr. J.S.Sukumar, Industry Institute Interactive Consultant, Advantage Pro, Chennai served as the Resource Person. He motivated the students to get international certification.



An Orientation Programme on NISM Certification was held on 12th February 2023. Mr. Suresh, Founder and CEO, Diksha Academy for Banking and Finance, Tirunelveli motivated the students to get National Institute for Security Market (NISM) Certification.

Paper Presentation Competition for I BCA was held on 14th March 202. Mrs. L. Sujatha and Dr. R. Geetha Assistant Professors of Computer Applications, served as the Judges for the competition.

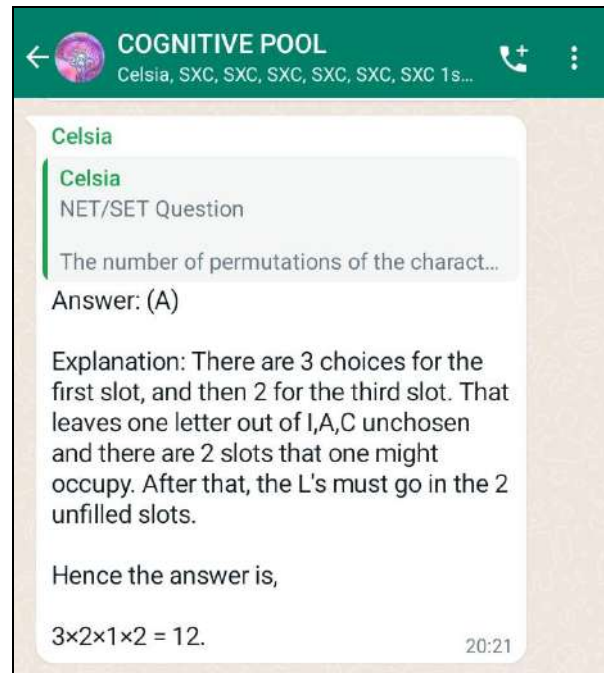
Pencil Drawing Competition for all Computer Applications students was held on 15th March 2023. Dr. A. Regita Thangam and Mr. E. Alex Prabahar, Assistant Professors of Computer Applications Department served as Judges for the competition. 16 students participated in the Pencil Drawing Completion.



Story Writing Competition was held on 15th March 2023. 27 students participated in the Story Writing Competition. Mrs. L. Sujatha and Dr. K. Joy Alfia Assistant Professors of Computer Applications served as the Judges for the Competition.

The Tech Quiz Series of Computer Application Department was held in 4 different days of even semester (08.01.2023, 01.03.2023, 05.03.2023, 17.03.2023) though Online mode. Both MCA and BCA students participated in the Tech Quiz Series.

Seminar on Top trending technologies & its opportunities was held on 20th March 2023, at MCA Seminar Hall. Ms. P. Thanga Atchaya, Livewire Engineer, Livewire Software Training Institute, Tirunelveli delivered talk on top trending technologies of 2023. Mr. M Varatharaj (B.E), Centre Head, Livewire Software Training Institute, Tirunelveli (Branch) motivated the students to learn more new technologies.



Learn Tech & English through WhatsApp: Through WhatsApp group, Students share their knowledge about latest technical happenings and English Vocabulary.

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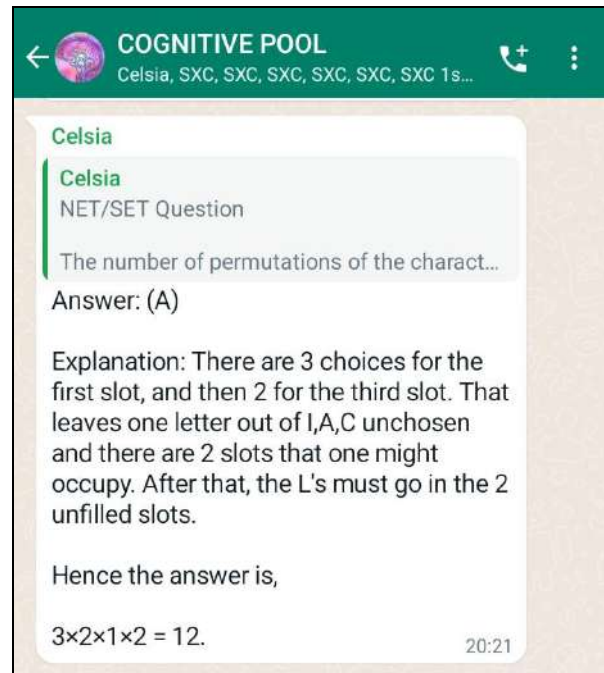
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