

# **GURU NANAK DEV UNIVERSITY REGIONAL CAMPUS, JALANDHAR**

## **INTRODUCTION**

### **COMPUTER SCIENCE AND ENGINEERING**

The department of Computer Science and Engineering was established in 2002. Department has been engaged in promoting undergraduate technical education in the fast growing field of Computer Science & Engineering since its inception. The establishment of the department marks an important milestone in the development of Technical Education in Doaba Region. The department is committed to develop itself in terms of academic input and infrastructural facilities. The placement scenario of the students has been excellent with most of students having good job offers.

### **ELECTRONICS AND COMMUNICATION ENGINEERING**

The department of Electronics and Communication Engineering was established in 2002. Department has been engaged in promoting undergraduate technical education in the fast growing field of electronics and communication since its inception. The establishment of the department marks an important milestone in the development of Technical Education in Doaba Region. The department is committed to develop itself in terms of academic input and infrastructural facilities. The placement scenario of the students has been excellent with most of students having good job offers

### **JOURNALISM & MASS COMMUNICATION**

#### **HISTORY**

The Department was conceived as a one-year postgraduate Diploma course under Guru Nanak Dev University College at Basti Nau, Jalandhar, in 1989 with Mr. Kamlesh Singh Duggal as sole Lecturer - Incharge. In the same session, however, the Diploma was converted into a one-year postgraduate Degree, BJMC. It became a full-fledged Department, with the addition of one-year MJMC. In 1997, Prof. Avinash Singh joined as Head of the Department. The Department shifted to a rented building in Model Town and after a few months to Urban Estate, Phase I, Jalandhar. In 2000, the University signed an MoU with the local Doaba College and the Department functioned from the college for two years, 2000-2002, with Dr. Kamlesh Singh Duggal as Incharge. With the construction of the new Regional Campus at Ladhewali, the Department finally stepped on to a new phase in its development.

#### **INFRASTRUCTURE**

Since the course involves practical training, the Department has developed some infrastructure, which includes equipment like still cameras, Handycams, CCD Video camera, editing suite, color TVs, VCD, DVD, OHP, Slide Projector, LCD Multimedia projectors, Music system, mini offset machine, Xerox machine, computers etc. The department has a state of the art audio-visual studio.

#### **ACTIVITIES**

The Department fully utilizes the equipment to conduct practicals in subjects like photography, production techniques, computers etc. The stress is on the development of the over all personality of the students. So, visits and tours to newspapers, AIR, DD etc. are regularly organised. Workshop at FTII, Pune is an annual feature. Guest Faculty, comprising experts in media, are invited for interaction with students. Quiz sessions, debates and declamations, seminars, workshops mock press conferences and other assignments are a regular feature in the department. Besides this, the students undergo a compulsory summer training for six weeks in a media organisation of their choice to learn the ropes of the profession.

#### **ALUMNI**

The Department attracts students from all over India and even abroad. The placement rate of the students in various media organisations is high. Our students figure on the rolls of prominent dailies like Hindustan Times, Times of India, The Indian Express, The Tribune, Ajit, Hind Samachar, Amar Ujala, Dainik Jagran; electronic

media like Asian News International, AIR, DD, PTC, Punjab Today; Advertising and P and even films. Some of them have started their own Production Houses, Advertising and PR Agencies.

## **SYLLABUS**

The Department has kept pace with other institutions in updating its syllabus as per UGC guidelines and the requirements of the market. Rather, it has been a pioneer in introducing subjects like Corporate Communication. In its two-year course, the syllabus covers a wide range of subjects like Mass Communication, Media Laws, History and Ethics, Advertising and Public Relations, Media Management, Production Techniques, Communication Research, Development Communication, International Communication, Film Studies etc.

## **LAWS**

The Department of Laws was started in 1979 on the persistent demand of the area to meet the demand of lacking facilities for legal studies at Jalandhar in the Doaba Region. The Department is presently functioning in the Guru Nanak Dev University Regional Campus, Ladhewali, Jalandhar. The Department has a well equipped library with over 26,000 books and all reputed law reporters, journals, and recent periodicals. The Department is running the LL.B (TYC), B.A.,LL.B. (Hons.) FYIC and LL.M (One Year Course) regular course. The Department has also Ph.D regular/ Part-Time Ph.D programme.

## **PUNJABI**

Established in 1979 to fulfill the demand of Doaba region for quality education, the department of Punjabi since then is catering to the linguistic and literary needs of the people of this region and providing trained teachers to the local colleges. It is a matter of great pride and honor that most of the teachers working in local colleges are the product of this department. The main objective of this department is to impart quality education and research in the field of Punjabi language, literature and culture. Apart from providing instructions in M.A.(Hons) Punjabi course, the department is also offering research guidance in the above said areas. The Faculty is engaged in the research activities related to the fields of Punjabi Language and Linguistics, Literature and Culture. The faculty members have published 6 books, 5 chapters and 3 articles in reputed journals and more than 18 students have completed their Ph.D. thesis & about 52 students have obtained their M.Phil. degrees from this department during the last 5 years.

## **FACULTY**

### **COMPUTER SCIENCE AND ENGINEERING**

**Head :** Jyoteesh Malhotra, Ph.D. (Professor)

**Assistant Professor :** Neena Madan, M.Tech.; Sheetal Kalra, Ph.D.; Pankaj Deep Kaur, Ph.D.;  
Varinder Kaur Attri, M.Tech.

### **ELECTRONICS AND COMMUNICATION ENGINEERING**

**Head :** Jyoteesh Malhotra, Ph.D. (Professor)

**Assistant Professor :** Deep Kamal Kaur Randhawa, Ph.D.; Manjit Singh, M Tech; Nitika Soni, M.Tech.;  
Butta Singh, Ph.D.; Harminder Singh, Ph.D.; Himali Sarangal, M.Tech.;  
Vinit Grewal, Ph.D.; Harmandar Kaur, M.Tech.

### **JOURNALISM & MASS COMMUNICATION**

**Head :** Namarta Joshi, Ph.D. (Associate Professor)

**Professor :** Dr. Kamlesh Singh Duggal, Ph.D, ( Re employed )

**Assistant Professor :** Charan Kamal Walia, Ph.D.

## **LAWS**

**Head :** Jyoteesh Malhotra, Ph.D. (Professor)

**Assistant Professor :** Rupam Jagota, Ph.D.; Inderpreet Kaur Narang, LL.M; Varinder Singh, Ph.D.;  
Nirmala Devi, LL.M.; Mona Goel, LL.M

**PUNJABI**

**Head :** Sukhvinder Singh, Ph.D. (Professor)

**ACHIEVEMENTS (FELLOWSHIP/HONOURS/AWARDS BY  
ACCREDITED/PROFESSIONAL BODIES)**

**JOURNALISM & MASS COMMUNICATION**

1. Dr. Namarta Joshi, Awarded Women Achiever of the Year Award, for contribution to the field of Education by St. Soldiers Group of Industries on International Women's Day , 8<sup>th</sup> March, 2016.

**PAPERS PUBLISHED IN PEER REVIEWED JOURNALS**

**COMPUTER SCIENCE AND ENGINEERING**

1. Davessar, N.M., & Kaur K. (2016), IOT Based Approach for Traffic Movement Data Analysis, Vol.2, No. 11: 210-213.
2. Sharma, P. & Kaur, P.D. (2016), Effectiveness of Web-Based Social Sensing in Health Information Dissemination: A Review, Journal of Telematics and Informatics, Vol. 34, No. 1: 194-219.
3. Gazal, & Kaur, P.D.(2016), A Novel Neighbourhood Density based K-means Algorithm for Clustering Quality Objective Function, International Journal of Control Theory and Applications, Vol. 9, No. 17: 8473-8478, ISSN No: 0974-5572.
4. Kaur, P., & Monga, A.A. (2016), Opinion Dynamics based Affinity Propagation Clustering, International Journal of Control Theory and Applications, Vol. 9, No. 17: 8479-8487, ISSN No: 0974-5572.
5. Kaur, P.D., & Singh, J.(2016), SLA Mechanism for Tenant Submission in Multiple Queues, International Journal of Control Theory and Applications, Vol. 9, No. 17: 8527-8532, ISSN No: 0974-5572.
6. Kaur, P.D., & Monga, A.A. (2016), Managing Big Data: A Step towards Huge Data Security, International Journal of Wireless and Microwave Technology, Vol. 6, No. 2: 10-20, ISSN No: 2076-1449.
7. Kumar, K., & Kaur, P.D. (2016), A Sensor Cloud Based Traffic Control System Using War State Battle Field, International Journal of Signal Processing, Image Processing and Pattern Recognition, Vol. 9, No. 3: 399-412.
8. Kaur, P.D., Kaur, S., & Kaur, A. (2016), Big Data Compression in Mobile and Pervasive Computing, International Journal of Wireless and Microwave Technologies, Information Technology and Computer Science, Vol. 3: 1-8, ISSN No: 2076-1449.
9. Kalra, S. (2016), A Novel Passwordless Authentication Scheme For Smart Phones Using Elliptic Curve Cryptography, Advances in Engineering: An International Journal,1.2: 11-27.
10. Sharma, G., & Kalra, S. (2016), Identity based Secure Authentication Scheme based on Quantum key Distribution for Cloud Computing, Peer-to-Peer Networking and Applications, 1-15.
11. Rani,A. & Kalra, S. (2016), Personalised Recommendation System for Asthma Patients using cloud, International Journal of Telemedicine and Clinical Practices.
12. Kaur, D. & Kalra, S. (2016), Five-tier barrier Anti-Phishing Scheme using Hybrid Approach, Information Security Journal: A Global Perspective: 1-14.

13. Kiran & Kalra, S.(2016), An Improved Energy Efficient Routing Algorithm for Manets, Innovative Systems Designs and Engineering, Vol. 7, No. 5, ISSN 2222-1727.
14. Rubal & Kalra, S.(2016), Real-Time Applications of Big Data- A Survey, International Journal of Engineering Research & Technology, Vol. 5, No. 3: 823-828.
15. Rubal & Kalra, S.(2016), Securing Data Confidentiality in Cloud Computing using improved Boosting Technique, International Journal of Engineering Applied Science And Technology, Vol. 1, No. 8: 113-119, ISSN No: 2455-2143.
16. Kaur, M. & Kalra, S. (2016), A Review on IOT Based Smart Grid, International Journal of Energy, Information and Communications.
17. Kaur, M. & Kalra, S.(2016), A Survey on Wormhole Attack Detection and Prevention Techniques in Mobile Ad Hoc Networks, International Journal of Scope of Computer Research, Vol. 5, No. 4: 38-42.
18. Sharma,S. & Kalra, S. (2016), A Survey on XSS- The Top Web Application Security Vulnerability, International Journal of Scope of Computer Research, Vol. 5, No. 4: 34-37.

#### **ELECTRONICS AND COMMUNICATION ENGINEERING**

19. Kaur, A. & Malhotra, J. (2016), On the Selection of Efficient Back-off with QoS Aware Routing in VANET, International Journal of Future Generation Communication and Networking, Vol.9, No.02: 163-176, ISSN: 2233-7857.
20. Kaur,R. & Malhotra, J. (2016), Efficient Localization in WSN based on Structured Deployment of Anchor Nodes in DV-HOP, International Journal of Future Generation Communication and Networking, Vol.9, No. 3: 155-166, ISSN: 2233-7857.
21. Duggal D. & Malhotra J. (2016), Performance Analysis of Long Term Evolution: Physical Channels, International Journal of Future Generation Communication and Networking, SERSC Publisher, Vol.9, No.3: 269-278, ISSN: 2233-7857.
22. Kaur, G. & Malhotra , J. (2016), On the Selection of Routing Optimised Key Distribution Technique for MANET, International Journal of Engineering Applied Sciences and Technology, Vol.01, No.08:130-133, ISSN: 2455-2143.
23. Kaur, G. & Malhotra, J. (2016), Comparative Analyses of QoS Provisioned Data Forwarding Techniques In Vanet, International Journal of Engineering Applied Sciences and Technology, Vol.01, No.08: 91-93, ISSN: 2455-2143.
24. Kaur, R. & Malhotra, J. (2016), Performance Evaluation of QoS Parameters for Different Application Header Lengths for Adaptive Probabilistic Broadcast in WSN, International Journal of Advanced Research in Computer and Communication Engineering, Vol.5, No.06: 159-163, ISSN: 2278-1021.
25. Kaur, S. & Malhotra, J. (2016), Error Rate Performance of Digital Modulations Schemes through Body Surface to External Communication in Wireless Body Area Network, International Journal of Signal Processing, Image Processing and Pattern Recognition, Vol.9, No.06: 293-310, ISSN: 2005-4254.
26. Kaur, A. & Malhotra, J. (2016), Design and EM analysis of Dual Band Hilbert Curve based Wilkinson Power Divider, Transactions on Electric and Electronic Materials, Vol. 17, No. 5: 257-260, ISSN: 2092-7592.
27. Kaur, S. & Malhotra, J. (2016), On Statistical Behavioural Investigations of Body Movements of Human Body Area Channel, International Journal of Computer Network and Information Security, MECS Publisher, Hong Kong , Vol.8 , No.10: 29-36, ISSN: 2074-9104.
28. Kanupriya & Malhotra, J. (2016), On the Selection of Queue Optimised Routing Protocol for VANET, International Journal of Advanced Science and Technology, SERSC Publisher, Korea ,Vol.95 , No.10: 01-14, ISSN: 2005-4238.

29. Gupta, A. & Malhotra, J. (2016), On the Selection of Optimum Performance Bounds for Co-OFDM Systems through Standard Fibers, *International Journal of Future Generation Communication and Networking*, SERSC Publisher, Vol.9, No.09: 203-214, ISSN: 2233-7857.
30. Gupta, A. & Malhotra, J. (2016), On the Optimization of Channel Spacing in the Hybrid WDM-COOFDM System, *International Journal of Signal Processing, Image Processing and Pattern Recognition*, Vol.9, No.7: 353-360, ISSN: 2005-4254.
31. Sharma, R. & Malhotra, J. (2016), On Achievable QoS Bounds for Mobile IP through Rayleigh Channel in VANET, *International Journal of Information Technology and Computer Science*, MECS Publisher, Hong Kong, Vol.8, No. 8: 87-92, ISSN: 2229-4333.
32. Kaur, A. & Malhotra, J. (2016), Recent Trends and Challenges in Microwave Power Dividers, *International Journal of Grid Distribution Computing*, Vol.9 No. 08: 223-230, ISSN: 2005-4262.
33. Kaur, R. & Malhotra, J. (2016), Comparative Analysis of DV-HOP and APIT Localization Techniques in WSN, *International Journal of Future Generation Communication and Networking*, SERSC Publisher, Vol.9, No.08: 327-344, ISSN: 2233-7857.
34. Kanupriya & Malhotra, J. (2016), On the Selection of Optimum QoS Bounds for Mobile IP Enabled VANET through Realistic City Scenario, *Indian Journal of Science and Technology*, Vol.09, No. 47: 01-07, ISSN: 0974-5645.
35. Arora, K. & Sarangal, H.(2016), Performance Analysis of TDM and WDM PON Using Different Receivers for Extended Reach, *Ciit International Journal of Digital Signal Processing*, Vol. 8, No. 5.
36. Arora, K. & Sarangal, H. (2016), Simulative Investigation of 64Å—60Gbps WDM PON Using Dispersion Compensation Technique (FBG), *International Journal of Modern Electronics and communication Engineering*, Vol. 4, No 3.
37. Sharma, S. & Sarangal, H. (2016), Simulation and Analysis of Filters Using different Photodiode and Wavelength in Free Space optics, *Asian Journal of computer science and technology*, Vol. 5, No. 1:25-29.
38. Sharma, P & Sarangal, H.(2016), Performance Comparison of APD and PIN Photodiodes using Different Modulation and Different Wavelengths, *International Journal of Signal Processing, Image Processing and Pattern Recognition*, Vol.9, No.4: 257-264.
39. Sharma, P. & Sarangal, H. (2016), Performance Evaluation of Multiple Transceiver FSO for different Weather Conditions, *International Journal of Signal Processing, Image Processing and Pattern Recognition*, Vol.8, No.12: 149-156.
40. Kaur, N., Malhotra J. & Sarangal, H. (2016), A Survey of utmost Valued Technology- LTE, *International Journal of Advanced Research in Electronics and communication Engineering*, Vol. 5, No.9.
41. Takiar, S. Sarangal H. & Soni,N. (2016), Steganography and Steganalysis-A Review, *International Journal of Innovation and Research in Computer Science*: 22-28.
42. Kalgotra, M. Soni, N. & Sarangal H. (2016), An Architectural Review of Wireless Mesh Networks, *International Journal of Innovation and Research in Computer Science*: 29-32.
43. Singh, H. , Khosla, H. , Sidhu, T.S., Kalsi, S.B.S. , Karthikeyan, J. (2016), Characteristic study of N07718 Superalloy Surface prepared by Cold Spray, *Materials and Manufacturing Processes*, Taylor and Francis Publication.
44. Pandey, A.Singh, B., Saini, B.S. & Sood, N. (2016), A 2D Electrocardiogram data Compression Method using a Sample Entropy-based Complexity Sorting Approach, *Computers and Electrical Engineering*, Vol. 56: 30-45.
45. Pandey, A.Singh, B., Saini, B.S. & Sood, N.(2016), A Joint Application of optimal threshold based Discrete Cosine Transform and ASCII encoding for ECG data compression with its inherent encryption, *Australas Phys Eng Sci Med*.

46. Vadehra, R, Singh, M., Singh, B. & Chowdhary, N. (2016), Evaluation of Flow and Average Entropy Based Detection Mechanism for DDoS Attacks using NS-2, *International Journal of Security and Its Applications* ,Vol. 10, No. 5:139-146.
47. Singh, B., Singh,M. & Sharma, D.(2016), Chaotic Function Based ECG Encryption System, *Handbook of Research on Healthcare Administration and Management*.
48. Pandey, A.Singh, B., Saini, B.S. & Sood, N. (2016), Nonlinear Complexity Sorting Approach for 2D ECG Data Compression, *Computational Tools and Techniques for Biomedical Signal Processing*: 1-21.
49. Vadehra,R, Singh, M., & Chowdhary, N. (2016), Analysis of Countermeasures for DDoS Attacks and Evaluation of Entropy based Detection Mechanism using NS2, *An International Journal of Engineering Sciences*, Vol. 17, ISSN: 2229-6913.
50. Kaur,R., Singh, M. & Singh, B. (2016), Comparative Analysis of Color Edge Detection Techniques Based on Fuzzy Logic, *An International Journal of Engineering Sciences*,Vol. 17, ISSN: 2229-6913.
51. Bhagat, S., Singh, M. & Singh, B. (2016), A Review on PLI minimization in FECG Extraction, *An International Journal of Engineering Sciences*, Vol. 17, ISSN: 2229-6913.
52. Kaur S., Singh, B. & Singh, B. (2016), Different Design Approaches for the Optimization of FIR Filter Coefficients, *An International Journal of Engineering Sciences*, Vol. 17, ISSN: 2229-6913.

#### **JOURNALISM & MASS COMMUNICATION**

53. Walia, Charan Kamal. (2016), Impact of Radio based Agricultural Programmes on farmers, *Science Communication*, ISSN No. 978-81-302-0374-4.
54. Joshi, Namarta & Singh. (2016), *Discourse Journal*, Vol.5, No. 1, RNI NO. HARBIL/2012? 45761, ISSN/ISBN No. 2278-3296.
55. Joshi, Namarta and Singh, Ranbir, (2016), *Creating Scientific Temper among Rural Children-Role of Pushpa Gujral Science City*, Science Communication, ISBN 978-81-302-0374-4.

#### **LAWS**

56. Varinder Singh (2016), Role of Indian Judiciary in Solid Waste Management, *International Journal of Recent Scientific Research*, Vol. 7, Issue 1: 8317-8323, ISSN: 0976-3031.
57. Varinder Singh (2016), Witness Protection in India: The Judicial Endeavour, *International Journal of Advanced Research*, Vol. 4, Issue 1: 367- 372, ISSN 2320-5407.
58. Varinder Singh (2016), Collegium System vis-a-vis National Judicial Appointments Commission: A Critical Appraisal, *International Journal of Research in Economics and Social Sciences*, Vol. 6, Issue 1, ISSN 2249-7382.
59. Varinder Singh, Ramita Sahotra (2016), *Scientific Justice: Judicial Endeavours in India*, Army Institute of Law Journal, Vol. IX, ISSN 0975-8208.
60. Rupam Jagota, De-Criminalizing attempt to Suicide: A Judicial Perspective, *Indian Journal of Socio Legal Studies*, Vol. VI, ISSN2320-8562.
61. Nirmala Devi (2016), The Protection of Children from Sexual Offences Act, 2012: An Analysis, *International Research Journal of Social Sciences and Humanities*, Vol. 5, No. 4, ISSN 0976-3031.
62. Nirmala Devi (2016), Sexual offences against Children in India: On the Higher side, *International Journal of recent Scientific Research*, ISSN 0976-3031.
63. Inderpreet Kaur (2016), Legal Concerns for Combating Acid Violence in India-An Analysis, *International Research Journal for Social Sciences And Humanities*, Vol.5 No.1: 47-62, ISSN 2320-4207.
64. Inderpreet Kaur (2016), Law Relating to Protection of Women Against Matrimonial Cruelty-A Boon or A Bane, *Law Journal*, Guru Nanak Dev University Amritsar, Vol.XIX, ISSN 0972-382X.

65. Inderpreet Kaur (2016), Transnational Adoptions: A Quest For Comprehensive Legislation The International Research Journal For Social Sciences And Humanities Vol.5, No.2,: 28-49, ISSN 2320-4702.
66. Inderpreet Kaur (2016), Backlog in The Judicial System- International and National Legal Perspective, International Research Journal for Social Sciences and Humanities, Vol.5, No. 3: 77-101, ISSN 2320-4702.
67. Inderpreet Kaur (2016), Euthanasia and Medico-Legal Complexities, ACADEMICIA-International Multidisciplinary Research Journal, Vol.6 Issue 9: 77-101, ISSN 2249-7137.
68. Inderpreet Kaur (2016), The Menace of Domestic Violence and the Indian Legal Proforma- An Appraisal, Indian Journal of Arts, Vol.6, No.-20: 178-187, ISSN 2320-6659.

## **PAPERS PUBLISHED IN NON PEER-REVIEWED JOURNALS**

### **PUNJABI**

1. Sangha, Sukhvinder Singh and Pardip Kumar (2016), Vigiapan ate Ishtihar: Bhashak ate Sarachnatmak Vakkhartawan, Samdarshi, No. 149: 133-139, ISBN: 978-93-82455-56-1.

## **PAPERS PUBLISHED IN CONFERENCE PROCEEDINGS**

### **COMPUTER SCIENCE AND ENGINEERING**

1. Chowdhary, N.& Kaur, P. D. (2016), Addressing the characteristics of Mobility Models in IV for smart City, International Conference on Computing, Communication and Automation, ISBN: 978-1-5090-1666-2.
2. Kaur, P.D., & Kaur, K.P. (2016), SQL Injection: Study and Augmentation, IEEE International Conference on Signal Processing, Computing and Control: 102-107.
3. Gazal, & Kaur, P.D. (2016), A Survey on Big Data Storage Strategies, IEEE International Conference on Green Computing and Internet of Things: 280-284.
4. Kaur, P.D., & Kanu Priya (2016), Discovering Execution of Real time Tasks in Cloud Computing, IEEE International Conference on Green Computing and Internet of Things: 1048-1053.
5. Kaur, P.D., & Kanu Priya (2016), Fault Tolerance Techniques and Architectures in Cloud Computing-A Comparative Analysis, IEEE International Conference on Green Computing and Internet of Things: 1090-1095.
6. Kaur, P.D., & Singh, P. (2016), Optimization of Cloud Resources for Air Pollution Monitoring Devices, ACM International Conference on Advances in information in Communication Technology & Computing: 1-6.
7. Kaur, J., & Kaur, P.D. (2016), Unfolding the Cloud IOT Paradigm, International Conference on Recent Innovations in Science, Management, Education and Technology, ISBN No: 978-93-86171-04-7.
8. Sharma, G., & Kalra, S. (2016), A Novel Scheme for Data Security in Cloud Computing using Quantum Cryptography, International Conference on Advances in Information Communication Technology & Computing.
9. Kaur, A., & Kalra, S. (2016), Enhancement to Asymmetric Clustering. International Conference on advances in Computer Science and Information Technology: 275-280.
10. Kalra, S., & Kaur, A. (2016), Technique to Enhance Spectral Clustering with sparse representation, 3<sup>rd</sup> DAV National Congress on Science, Technology, Engineering, Humanities and Management: 117-122.

11. Sekhri, B. & Kalra, S. (2016), Secure Mechanism by using BB84 protocol in Quantum Cryptography, International Conference on Science, Engineering and Technical Innovation, Vol. 1: 121-125.
12. Sekhri, B. & Kalra, S. (2016), Security Threats in Big Data, Third International Conference on Computing Sciences.
13. Kaur, K. & Kalra, S. (2016), Enhanced on Demand Energy Efficient routing Algorithm in MANETs. International Conference on Sciences, Engineering & Technical Innovations, Vol. 1: 254-256.
14. Rubal & Kalra, S. (2016), Securing storage infrastructure in cloud environment- A Survey, International Multi Track Conference on Sciences, Engineering & Technical Innovations, Vol. 1: 109-113.
15. Kaur, M. & Kalra, S. (2016), A Survey on Internet of things applied on Smart Grid, 3<sup>rd</sup> DAV National Congress, Science, Technology, Engineering, Humanities & Management.
16. Kaur, S. and Kalra, S. (2016), Feature Extraction Techniques Using Support Vector Machines In Disease Prediction, 4<sup>th</sup> International Conference on Science, Technology and Management, ISBN: 978-81-932074-8-2.
17. Kaur, S. & Kalra, S. (2016), Comparison of Various Enhancements in K-means Clustering Algorithm, 2<sup>nd</sup> International Conference on Sciences, Engineering and Technical Innovations, ISBN: 978-81-929077-4-1.
18. Kaur, S. & Kalra, S. (2016), K-means: Its Various Enhancements and Integration with Classification Techniques in Healthcare Industry, International Conference on Research Advances in Mechanical, Electrical, Electronics, Civil, Computer Science and Information Technology (MECIT) ISSN No: 2393-9907.
19. Sharma, S. & Kalra, S. (2016), An Authentication Scheme for Preventing Phishing Attack, 3<sup>rd</sup> DAV National Congress, Science, Technology, Engineering, Humanities & Management.
20. Chaudhary, T. & Kalra, S. (2016), On Fog Computing: Future of Cloud Computing, International Conference on Sciences, Engineering & Technical Innovation: 88-92.
21. Kaur, D. & Kalra, S. (2016), Anti-Phishing Techniques- A Survey, UGC Sponsored National Seminar on Latest Emerging Trends in Computer Science & Information Technology.
22. Kaur, H. & Kalra, S. (2016), An Audit on Internet of Things, 3<sup>rd</sup> National Congress on Science, Technology, Engineering, Humanities and Management.

#### **ELECTRONICS AND COMMUNICATION ENGINEERING**

23. Sekhon, D.S., Kaur H. & Malhotra, J. (2016), Upgrading a 20 Gbps DWDM System to 160 Gbps System using add/drop Multiplexers and Couplers, IEEE International Conference on Computational Techniques in Information and Communication Technologies, IPU, New Delhi: 163 – 169.
24. Gupta, A. & Malhotra, J. (2016), Comprehensive Survey on the Advancements in the field of optical OFDM, 3<sup>rd</sup> DAV National Congress on Science, Technology, Engineering, Humanities and Management.
25. Gupta, A. & Malhotra, J. (2016), Simulative Investigation to Mitigate the Kerr Effect in Hybrid WDM-COOFDM system Using Optical Filter, International Conference on Sciences, Engineering, Technical Innovations, -4-1, CTIT, Jalandhar, Vol.1: 203-206, ISBN:978-81-929077.
26. Kaur, G. & Malhotra, J. (2016), Improving QoS, Security by using MPLS & Mobile IP in VANET, International Conference on Sciences, Engineering & Technical Innovations (ICSETI 2016), CTIT, Jalandhar, Vol.1: 248-253, ISBN: 978-81-929077-4-1.
27. Kaur, G. & Malhotra, J. (2016), Comparative Analysis of Key Management Strategies in MANET, International Conference on Sciences, Engineering & Technical Innovations, CTIT, Jalandhar, Vol.1: 267-271, ISBN: 978-81-929077-4-1.



28. Kanupriya & Malhotra, J. (2016), On the Selection of Mobility Optimised Routing Protocol for City Scenario using Multi Interface Car in VANET, IEEE International Conference on Advances in Computing, Communications and Informatics, Jaipur:1277-1282.
29. Kaur, N. Malhotra, J. & Saramgal, H. (2016), A survey of PHY and MAC technologies of high data rate WPAN, IEEE International Conference on Power Electronics, Intelligent Control and Energy Systems, Delhi Technological University, New Delhi: 1-5.
30. Singh, H. (2016), Behavior of Nano Composite Coatings with Carbon Nanotubes, International Conference on Advancements in Engineering & Technology.
31. Singh, H. (2016), Fabrication of Nanostructured Coatings, International Conference on Advancement & Futuristic Trends in Mechanical and Materials Engineering: 25-27.
32. Mahendroo, J. & Grewal, V., (2016) A Survey on Various Mechanisms and IP Traceback Schemes to Defend DDoS Attacks, International Conference on Advances in Emerging Technology, Vol 2:38-44.

#### **JOURNALISM & MASS COMMUNICATION**

33. Walia, Charan Kamal.(2016), Status of Women in Inter-Cultural Marriages, Women Empowerment, Skill Enhancement and Media: Prospects and Challenges, ISBN: 978-93-80570-26-6.

#### **LAWS**

34. Rupam Jagota, Chaturvedi, P.K. (2016), Social Reformative Justice: A Step Towards Maximum Happiness of The Greatest Number, The Motto of The Government Policies-An In depth Analysis, ISBN:978-81-7730-349-0.

## **CHAPTERS PUBLISHED IN BOOKS**

#### **COMPUTER SCIENCE AND ENGINEERING**

1. Kaur, P. D. and Sharma P. (2016), ‘Success Dimensions of ICTs in Healthcare’ in Computational Tools and Techniques for Biomedical Signal Processing, United States, Hershey. P.A-IGI GLOBAL, pp 149-173, ISBN No. 13: 9781522506607.
2. Singh, P. And Kaur, P.D. (2016), ‘Cloud Resources Optimization for Air Pollution Monitoring Devices and Avoiding Post Pillar Problem’ in Communications in Computer and Information Science, Springer-Verlag Berlin Heidelberg, Vol. 625, pp 173-187, ISBN No. 978-981-10-2738-3.
3. Kaur, M. and Kalra, S. (2016), ‘Security in IoT based smart grid through quantum key distribution’ in Springer Book Series on Advances in Intelligent Systems and Computing.

#### **ELECTRONICS AND COMMUNICATION ENGINEERING**

4. Singh, B., Singh, M. and Sharma, D., (2016), ‘1Chaotic Function Based ECG Encryption System in Handbook of Research on Healthcare Administration and Management Nilmini Wickramasinghe Epworth HealthCare, Australia & Deakin University, Australia, Published in the United States of America, chapter 13.

#### **LAWS**

5. Varinder Singh, Mayank Tiwari (2016), ‘The Giant Size of Corruption vis-a-vis Little Common Man’ in P.S Jaswal, G.I.S Sandhu, Manoj Sharma (eds) Menace of Corruption and Black Money in India: Issues and Perspectives, RGNUL, Patiala, ISBN: 978-93-84166-09-0.

## **PUNJABI**

6. Sangha, Sukhvinder Singh & R.K.Bhat (2016), 'Punjabi People-Linguistic Survey of India' in Omkar N, Koul & Roop Krishen Bhat (eds) The Languages of Punjab, Orient Blackswan, New Delhi, pp 3-67, Vol. XXIV, Part II, ISBN 978 81 250 62400.
7. Sangha, Sukhvinder Singh (2016), 'Krishan di Bhasha: Path te prasang' in Harjodh Singh (ed) Savrajbir da Naat Jagat, Chetna Prakashan, Ludhiana, pp 213-18, ISBN: 978-93-5112-188-6.

## **PUBLISHED BOOKS**

### **ELECTRONICS AND COMMUNICATION ENGINEERING**

1. Singh, B. (2016), Computational Tools and Techniques for Biomedical Signal Processing, Edited Book, (IGI Global), ISBN: 9781522506607.

## **INTERNATIONAL CONFERENCES ATTENDED**

### **JOURNALISM & MASS COMMUNICATION**

1. Charan Kamal Walia, Attended an International Conference on Youth Concerns & Challenges organised by ICYC at Kanya Maha Vidyalaya, Jalandhar, 25-26<sup>th</sup> March, 2016.
2. Namarta Joshi Attended & Panelist in International Conference on Mother tongue, Regional Languages, Communication and Societies, on the topic Punjabi Patarkari Diyan Samasyavan Te Sambhavnayan, organized by Doaba College, Jalandhar, 20-21<sup>th</sup> February, 2016.

### **LAWS**

3. Varinder Singh, Attended International Conference on Drug and Development organised by University Institute of Legal Studies at Panjab University, Chandigarh, 8-9<sup>th</sup> April, 2016.
4. Nirmala Devi, Attended International Conference at Punjabi University Patiala, 16-17<sup>th</sup> November, 2016.
5. Mona Goel, Attended International Conference on Drug and Development organised by University Institute of Legal Studies at Panjab University, Chandigarh, 8-9<sup>th</sup> April, 2016.

## **PUNJABI**

6. Sukhvinder Singh, Attended 6<sup>th</sup> Vishav Punjabi Sahit Conference organized by Department of Punjabi Literary Studies at Punjabi University Patiala, 7-9<sup>th</sup> December, 2016.

## **NATIONAL CONFERENCES ATTENDED**

### **PUNJABI**

1. Sukhvinder Singh, Attended & chaired an academic session in 4<sup>th</sup> All India Linguistics and Folklore Conference of Punjabi Linguistics Association at Guru Kashi University, Talwandi Sabo, 20-21<sup>st</sup> April, 2016.
2. Sukhvinder Singh, Attended North-East and Northern Writers' Meet organized by Sahitya Akademi Delhi and Guru Nanak Dev University College Jalandha at Guru Nanak Dev University College Jalandhar, 7-8<sup>th</sup> October, 2016.
3. Sukhvinder Singh, Attended 4<sup>th</sup> Purbi Bharati Punjabi Conference and present a Key Note address on Maat Bhashawan Daa Samajik Vikaas Naal Mambandhy organized by Punjabi University Patiala in collaboration with Sikh Prabadhki Board Bhubaneswar at Bhubaneswar, 17<sup>th</sup> October 2016.

## **PAPERS PRESENTED IN INTERNATIONAL CONFERENCES**

### **COMPUTER SCIENCE AND ENGINEERING**

1. Paper entitled 'Subjective Well-Being Prediction from Social Networks: A Review' presented in International Conference on Parallel, Distributed and Grid Computing organised by Department of CSE/IT held at J.P. University, Solan, India, 22-24<sup>th</sup> December, 2016.
2. Paper entitled 'A Novel Scheme for Data Security in Cloud Computing using Quantum Cryptography' presented in International Conference on Advances in Information Communication Technology & Computing organized by Govt Engineering College Bikaner held at Govt Engineering College Bikaner, India, 12-13<sup>th</sup> August, 2016.
3. Paper entitled 'Social Media Trends and Prediction of Subjective Well-Being: A Literature Review' presented in International Conference on Computer Communication and Computational Sciences organised by Aryabhata College of Engineering & Research Centre, Ajmer, 12-13<sup>th</sup> August, 2016.
4. Paper entitled 'Elliptic Curve Cryptography for Real Time Embedded Systems In IOT' presented in 5<sup>th</sup> Edition of International IEEE Conference on Wireless Networks & Embedded Systems organised by Chitkara University, Punjab, 14-15<sup>th</sup> October, 2016.
5. Paper entitled 'Security Threats in Big Data' presented in 3<sup>rd</sup> International Conference on Computing Sciences organized by Lovely Professional University, Phagwara, 8<sup>th</sup> April, 2016.

### **JOURNALISM & MASS COMMUNICATION**

6. Charan Kamal Walia, Paper entitled 'Sustainable Development and Environment Protection' organised by ICYC at Kanya Maha Vidyalaya, Jalandhar, 25-26<sup>th</sup> March, 2016.
7. Namarta Joshi, Paper entitled 'Media Credibility: Victim of Political and Power Interests' presented in 11<sup>th</sup> Global Communication Association Conference on Ombudsman: Media and Social Responsibility' organized by the University of Mysore, Mysore, Karnataka, 28-29<sup>th</sup> January, 2016.
8. Namarta Joshi, Paper entitled 'Nostalgia Through Celluloid-Memories Rekindled presented in International Association for Media and Communication Research Annual Conference on Memory, Commemoration and Communication: Looking Back , Looking Forward organized by University of Leicester, United Kingdom, 27-31<sup>st</sup> July, 2016.

### **LAWS**

9. Rupam Jagota, Paper entitled 'Role of Enforcement Agencies in Controlling Drug Abuse: Socio Legal Perspective' presented in International Conference on Drug Development organized by University Institute of Legal Studies at Panjab University , Chandigarh, 8-9<sup>th</sup> April, 2016.
10. Inderpreet Kaur, Paper entitled 'Human Rights Approach in The Ideologies of Mahatma Gandhi' presented in UGC Sponsored One Day International Seminar on Debating Gandhi organised by DAV College Amritsar, 8<sup>th</sup> October, 2016.

### **PUNJABI**

11. Sukhvinder Singh, Paper entitled 'Tone Rules and Tone Sandhi in Punjabi' presented in International Conference on South Asian Languages and Literatures organized by University of Hyderabad, Hyderabad, 7-9<sup>th</sup> January, 2016.

## **PAPERS PRESENTED IN NATIONAL CONFERENCES**

### **COMPUTER SCIENCE AND ENGINEERING**

1. Paper entitled 'A Survey of Effective Hot Spot Mitigation Techniques in Wireless Sensor Networks' presented in 1<sup>st</sup> National Conference on Advances in Computer Science organised by GNA University, Phagwara, 9<sup>th</sup> April, 2016.

## **JOURNALISM & MASS COMMUNICATION**

2. Namarta Joshi, Paper entitled 'Domestic Violence: The Hidden Truths and Media Interventions' presented in National Conference on Women Empowerment, Skill Enhancement and Media: Prospects and Challenges organized by Vivekananda School of Journalism and Mass Communication, VIPS, New Delhi, 22-23<sup>rd</sup> April, 2016.
3. Charan Kamal Walia, Paper entitled 'Status of Women in Inter-Cultural Marriages' presented in National Conference on Women Empowerment, Skill Enhancement and Media: Prospects and Challenges organized by Vivekananda School of Journalism and Mass Communication, VIPS, New Delhi, 22-23<sup>rd</sup> April, 2016.
4. Namarta Joshi, Paper entitled 'Domestic Violence: The Hidden Truths and Media Interventions' presented in National Conference on Women Empowerment, Skill Enhancement and Media: Prospects and Challenges organized by Vivekananda School of Journalism and Mass Communication, VIPS, New Delhi, 22-23<sup>rd</sup> April, 2016.

## **LAWS**

5. Varinder Singh, Paper entitled 'Winnability Factors in elections' presented in National Seminar on Winnability Factors in Punjab Elections organised by St. Soldier law College, Jalandhar, 19<sup>th</sup> December, 2016.
6. Mona Goel, Paper entitled 'Walking Dead: Socio-Legal Implication of Drug Abuse' presented in International Conference on Drug and Development organised by University Institute of Legal Studies, Panjab University, Chandigarh, 8-9<sup>th</sup> April, 2016.
7. Rupam Jagota, Paper entitled 'Women's Rights in a Diversified World: An Unending Saga of Myth & Reality' presented in National Conference on Law as a Catalyst of Social Change in Present Scenario organized by Department of Laws, Maharishi Markandeshwar University, Mullana, Ambala, 11<sup>th</sup> March, 2016.
8. Rupam Jagota, Paper entitled 'Gender Parity: An Attempt at Evolving Strategies to Accept the Change' presented in National Seminar on Virtual Realities and Emerging Inequalities organized by Army Institute of Law, Mohali, 24<sup>th</sup> September, 2016.
9. Rupam Jagota, Paper entitled 'Social Reformative Justice : A Step Towards Maximum Happiness of The Greatest Number' presented in National Seminar on Maximum Happiness for The Greatest Number-The Motto of The Government Policies: An Indepth Analysis organized by Chotanagpur Law College, Ranchi, 19<sup>th</sup> November, 2016.
10. Rupam Jagota, Paper entitled 'Emergence of Winnability Factors in the wake of demonetization in Punjab Elections' presented in National Seminar on Winnability Factors in Punjab Elections organized by St Soldier Law College, Jalandhar, 19<sup>th</sup> December, 2016.

## **PUNJABI**

1. Sukhvinder Singh, Paper entitled 'Punjabi Language and Punjabi Media in a National on Punjabi Bhasha, Sabhyachar ate Media: Antar Samvad' organized by PG Department of Punjabi SD College for Women Moga, 30<sup>th</sup> January, 2016.
2. Sukhvinder Singh, Paper entitled 'Non Scheduled Languages of Punjab: A Case Study of Language Endangerment and Decay' presented in National Seminar on Language Shift and Endangered Languages: Issues, Effects, and Responses organized by Department of English Guru Nanak Dev University, Amritsar 25-26<sup>th</sup> March, 2016.

## **ATTENDED WORKSHOPS/SEMINARS/SYMPOSIA/ ORIENTATION COURSES/REFRESHER COURSES**

### **ELECTRONICS AND COMMUNICATION ENGINEERING**

1. Randhawa, D.K., Attended Short Term Course on 'Recent Advances in Nanostructured Materials' organised by Dr B R Ambedkar NIT Jalandhar, 19-23<sup>th</sup> September, 2016.
2. Malhotra, J., workshop on 'Internet of Things (IoT)' organized by Thapar University, Patiala, 24-25<sup>th</sup> April, 2016.

### **JOURNALISM & MASS COMMUNICATION**

3. Charan Kamal Walia, Attended 28 days Orientation Course at Human Resource Development Centre, Guru Nanak Dev University, Amritsar, 25 May-21 June, 2016.

### **LAWS**

4. Varinder Singh, Attended workshop on Digital India organised by Guru Nanak Dev University, Amritsar, 24<sup>th</sup> August, 2016.
5. Rupam Jagota, Attended UGC Sponsored Refresher Course in Law organized by Human Resource Development Centre, Guru Nanak Dev University, Amritsar, 23<sup>rd</sup> June-13<sup>rd</sup> July, 2016.
6. Rupam Jagota, Attended UGC Sponsored Faculty Development Programme on Advanced Techniques in Research organized by Hans Raj Mahila Maha Vidyalaya, Jalandhar, 25-31<sup>st</sup> March, 2016.
7. Mona Goel, Attended Orientation Course at Human Resource Development Centre, Guru Nanak Dev University, Amritsar, 15<sup>th</sup> December-11<sup>th</sup> January, 2017.

## **INVITED LECTURE/EXTENSION LECTURES/TALKS/ CHAIRING A SESSION/DISCUSSANT**

### **ELECTRONICS AND COMMUNICATION ENGINEERING**

1. Malhotra, J., Invited Lecture titled 'Wireless Access Networks: Dreams & Challenges' at SGGGS Khalsa College, Mahilpur, Hoshiarpur, 26<sup>th</sup> November 2016.

### **JOURNALISM & MASS COMMUNICATION**

2. Namarta Joshi, Panelist on International Conference on Mother tongue, Regional Languages, Communication and Societies, on the topic Punjabi Patarkari Diyan Samasyavan Te Sambhavnavan , organized by Doaba College, Jalandhar, 20-21<sup>st</sup> February, 2016.

### **LAWS**

3. Varinder Singh, Invited lecture titled 'Fundamental Duties under the Indian Constitution' at Nehru Yuva Kendra, Jalandhar, 10<sup>th</sup> January, 2016.
4. Inderpreet Kaur, Invited lecture titled 'Gender Inequality and Law' in Nehru Yuva Kendra at district level Youth Convention, Red Cross Bhawan Jalandhar, 7<sup>th</sup> January, 2016.
5. Rupam Jagota, delivered lectures titled 'Rights of Women & Children, Juvenile Justice & Care Act, 2000, POCSO ACT, 2012' presented in Convention on Rights of Child and CEDAW Conference organized by Centre for Law Justice & Governance on Human Rights at MGSI of Public Administration, Jalandhar, 5<sup>th</sup> August, 2016.

### **PUNJABI**

6. Sukhvinder Singh, talk on 'Current Challenges to Punjabi Language' at World Punjabi Conference organized by Kendri Punjabi Lekhak Sabha and Ilam at Kala Bhawan, Chandigarh, 19-21<sup>th</sup> February, 2016.

7. Sukhvinder Singh, delivered lectures titled 'Punjabi Language' at PG Department of Punjabi, Doaba College Jalandhar, 5<sup>th</sup> March, 2016.
8. Sukhvinder Singh, delivered lectures titled 'Punjabi Articulation and Accent and Language Evolution, Structure and Function' at UGC Human Resource Development Centre, Guru Nanak Dev University, Amritsar, 10<sup>th</sup> June, 2016.
9. Sukhvinder Singh, delivered lectures titled 'Punjabi Phonology' at PG Department of Punjabi, GTB National College Mullanpur Dakha, 23<sup>rd</sup> September, 2016.

### **ORGANISED – SEMINAR/CONFERENCES/WORKSHOPS/INVITED LECTURES/COURSES/SYMPOSIA**

#### **JOURNALISM & MASS COMMUNICATION**

1. Invited lectures were organised on International Women's Day, 8<sup>th</sup> March 2016, where eminent women personalities from different fields deliver lecturers.
2. Prof. Balwinder Singh, Sargam Radio, Canada delivered a lecture on 29<sup>th</sup> March, 2016.
3. Mr. Janmeja Singh Johal delivered a lecture on 'Photography and Photo Journalism', 27<sup>th</sup> September, 2016.
4. National Press Day was observed on 16<sup>th</sup> November, 2016, various media personalities participated in it.

#### **PUNJABI**

5. Department organized Bapu Vir Singh Muttal Memorial Lecture on 2<sup>nd</sup> March, 2016, Dr. Waryam Singh Sandhu gave an endowment lecture on The Creative process of Punjabi Short Story Writing.