

## **INTRODUCTION OF DEPARTMENTS**

### **FACULTY OF ARTS & SOCIAL SCIENCES**

#### **HISTORY**

The Department of History was established in 1971. The Department offers the teaching courses at M.A.(Hons.), M.Phil (in abeyance) and Ph.D. level. It offers specialization in Medieval and Modern Indian History with major thrust on social, cultural, religious and economic history. The Department incorporates in its syllabi the latest research work being done on the subject. It pays special attention to the study of history as a value-oriented discipline and focuses on social and cultural life of the people of Punjab as its main area of research. It has produced a large number of doctoral theses and monographs related to the thrust areas.

#### **LIBRARY & INFORMATION SCIENCE**

The Department of Library & Information Science was set up in 1973 to cater to the manpower needs of the libraries in this region. Initially the Department provided programme leading to Bachelor of Library & Information Science, but since 1984-1985 it has been offering courses leading to Bachelor and Master Degrees in Library and Information Science. The Department also provides facilities for doctoral research since 1988. Special emphasis is laid on teaching of modern methods for information processing and use. The department has introduced a paper, in each class, on computer and IT applications in Libraries for students to work in automated libraries. The department has augmented teaching material supplied to students by adding more to the Departmental library. Total number of Textbooks in the Departmental Library has gone up to 1100. A computerized catalogue of the library books has been prepared using library software WINISIS and KOHA. Computer Laboratory of Ten Intel i3 PCs with LAN and Internet connectivity has been set up in the Department for providing practical training to the students in the use of computers and networks.

#### **POLITICAL SCIENCE**

The Department of Political Science specializes in (1) Indian Political System, (ii) State Politics with special reference to Punjab, (iii) International Politics with special emphasis upon South, South West and Central Asia. The Punjab Journal of Politics, annual research journal of the Department is being published regularly since 1977. It carries papers mainly from three areas, as given above. The Department has a programme of teaching and research guidance, leading to the award of M.A., M.Phil. and Ph.D. degrees.

#### **PSYCHOLOGY**

The teaching program of the department lays emphasis on fundamental and applied aspects of Psychology such as Experimental Psychology, Cognition, Motivation, Developmental Psychology, Industrial and Organizational Psychology, Counselling & Clinical Psychology, Statistics and Research Methods in Psychology, Psychological testing, Positive Psychology and Health Psychology. The department has well equipped laboratories for Experimental Psychology, Biofeedback, Psychological Testing and Projective Psychology. It also publishes annual Journal "Personality Study and Group Behaviour" regularly since 1981. This journal is abstracted in the Indian Psychological Abstracts, Guide to Indian Periodical Literature and even indexed on the Internet for information.

#### **SCHOOL OF SOCIAL SCIENCES**

School of Social Sciences was established in the year 2003.

#### **SOCIOLOGY**

The Department was set up in the year 1976. Since then it has been continuously progressing and has achieved excellence in teaching and research. The Department was recognized by the U.G.C. under its Special Assistance Programme (DRS-I) in 2004. After five years, in 2009 the Department was taken to DRS-II for another five years. Since 2014 the Department is running through the third phase of DRS with a grant of 82 lakhs. The Department boasts of having highly qualified and experienced faculty who specialize in diverse areas of Research. The faculty has made significant contributions to the discipline. As we are living in the era of

globalization, the discipline of Sociology endeavours to delve into the domain of both abstract and concrete of History, Polity and Economy, hence making its presence felt in all Social Science disciplines with its interdisciplinary approach. The Department offers M.A., M.Phil., and Ph.D. programmes.

## **FACULTY OF ECONOMICS & BUSINESS**

### **COMMERCE**

The Department of Commerce & Business Management which was established in 1984, was bifurcated on April, 2014 into two departments; Department of Commerce & University Business School. The Department of commerce offers Master in Commerce and Pre-Ph.D. Course. The strength of the department lies in a fine blend of experienced and competent faculty, state of the art infrastructure, latest teaching pedagogy and interactions with industry on regular basis, thereby, creating awareness about current market trends among students. The department strives to equip young professionals with updated skill set so to enable them to establish successfully themselves in all walks of life

### **PUNJAB SCHOOL OF ECONOMICS**

The School was established in 1974, continued its progress in both academic and research activities. The School was sanctioned UGC (SAP) at DRS-III level and for this purpose Rs.62.5 lakh were sanctioned for updating the research facilities. Latest research and text-books have been added to the Departmental library and the library continues to receive the various publications of World Bank in World Bank Depository Library. The School publishes the journal PSE Economic Analyst and is exchanged with journals of national/international repute.

For updating teaching and research facilities, the School is equipped with Modern Computer Lab and other infrastructural facilities including Laptop/Desktop to every faculty member. The School offered the following courses:

- B.Sc. (Hons. School) in Eco. (a six semester course after +2 level)
- M.Sc. (Hons. School) in Eco. (a four semester course after graduation)
- M.A. (Business Economics) (a four semester course after graduation)
- Ph.D. Programme in (i) Applied Economic Theory (ii) Monetary Economics (iii) International Economics (iv) Agricultural Economics (v) Industrial Economics (vi) Economics of Development and Planning (vii) Regional Economics (viii) Public Finance and (ix) Environmental Economics

### **UNIVERSITY BUSINESS SCHOOL**

This prestigious Business School has been established to provide quality management education to young enterprising graduates who are looking for a career in the field of business administration. The University Business School prides itself in state of art infrastructure and highly qualified and experienced faculty. The placement cell of the University actively collaborates with reputed national and multinational companies which regularly visit the Campus and recruit our students. University Business School is offering four specializations - Marketing, Finance, Human Resource Management and International Business. Two courses of MBA are also offered in Financial Analysis and Marketing Management. University Business School started MBA (Five Year Integrated Course) in session 2014-15 and Bachelor of Tourism and Travel Management (BTTM) courses from the session 2016-17. University Business School is introducing a specialized applied management courses MBA (Human Resource Development) course from session 2018-19.

## **FACULTY OF EDUCATION**

### **EDUCATION**

The Department of education was established in 2013 with the objective to produce teachers who can serve the society and nation to prepare the children for tomorrow's future. The department offers courses leading to the degrees of M.Ed., M.A (Education) and Ph.D. The department has well equipped educational psychology,

educational technology, Guidance & Counselling and computer laboratories. It has been actively involved in various research programmes and with its dynamic organisation and structure, will continue to do so in future.

## **FACULTY OF ENGINEERING & TECHNOLOGY**

### **COMPUTER ENGINEERING & TECHNOLOGY**

The Department of Computer Engineering and Technology is engaged in cutting edge research in the areas of Wireless Sensor Networks, Cloud Computing, Big Data, Data Sciences, Image Processing and Parallel Computing. The department has dedicated research lab equipped with latest computers, high end server and with high speed Internet established under UGC 12th Plan. The department faculty has excellent publications in SCI indexed, Scopus Indexed as well as other reputed journals. The department has more than 300 publications in numerous journals and conferences. The department has dedicated research faculty as well as research scholars. The department has conducted workshops on IOT, Cloud Computing, Big Data, Data Science using STATISTICA Tool and Research Application Programming Using MATLAB, Computer Networks in collaboration with TCS, University of Jean Spain as well as Grid Analytics India Pvt. Ltd. Apart from this department has conducted many webinars to enhance the research.

### **COMPUTER SCIENCE**

Computer Science & Technology is an inter-disciplinary subject having direct applications in diverse areas. Keeping in with the policy of the University, to provide higher technical education to the people of the region and to prepare the human resource to face the upcoming technological challenge, the Department of Computer Science & Engineering (Computer Science & Applications till 1994), was established in the year 1988. Students after completion of MCA (Five Year Integrated Course) and MCA (Three Year Course) have excellent job opportunities in software industry, management information system's department of any industry, education and various R & D institutions in government and private sector.

### **ELECTRONICS TECHNOLOGY**

The Department of Electronics Technology was established in 1983 at GNDU, Amritsar. Since its commencement, the primary objective of the Department has been to impart quality education and research at the undergraduate, postgraduate and doctoral level in various areas of Electronics Technology. In addition to the well-equipped curriculum based laboratories, the Department has many state of the art facilities for current edge research and development in optical communication, VLSI, microwave materials, and nano devices. In the region, the Department has been the most trusted destination of prestigious companies for placements and therefore, the Department has an impeccable placement record. The students of the department have been employed with world's top corporate like Google, facebook, Intel, Texas Instruments, ST Microelectronics, Infosys, TCS, Capgemini, Accenture, Bharti Telecom, Vodafone etc.

## **FACULTY OF HUMANITIES & RELIGIOUS STUDIES**

### **GURU NANAK STUDIES**

The Department of Guru Nanak Studies was set up in 1971 in accordance with the provisions of the Article IV of Guru Nanak Dev University Act, 1969 as follows:

*To make provision for study and research on the Life and Teachings of Guru Nanak Dev and their cultural and religious impact in the context of Indian and World Civilizations.*

The Department of Guru Nanak Studies is an inter-disciplinary department with its main focus on Sikh Studies and Comparative Study of Religion. The department offers two Post Graduate Courses in Religious Studies and Philosophy and M.Phil. Course in the subject of Religious Studies. Besides teaching, research guidance is provided to regular as well as part-time students pursuing for their Ph.D. The U.G.C has sanctioned grant of 60 lacs for the department under DRS-II (Special Assistance Programme) for the next five years. Journal of Sikh Studies, a refereed journal of international repute has been a regular feature of the department since 1974.

A new Journal Dharam AdhyanPatrika (Punjabi) has been started from 2012. National and International Seminars and Conferences are organized by the department for dissemination of research activities on the Sikh Studies and allied fields in the wider perspective. Candidates admitted in M.A. Philosophy, M.A. Religious Studies and M.Phil.(Religious Studies) will be exempted of tuition fees.

## **FACULTY OF LANGAUGES**

### **ENGLISH**

The Department offers course leading to the degree of M.A. in English. Facilities for Doctoral research are also available in areas such as British and American Literature, Indian Literature in English and Linguistics. The Department also publishes a research journal PUNJAB JOURNAL OF ENGLISH STUDIES annually. The Department has a rich and valuable collection of books and journals in its library which caters to the need of the students and scholars pursuing research in various aspects of language and literature

### **FOREIGN LANGUAGES**

Following their entry in the GNDU in 1977 as a part of English Department, the foreign languages have traversed a long path since then. In fact, Russian was the first language to be introduced in the University as a part of the English Department. Later on, foreign languages were clubbed with Urdu & Persian, which led to the existence of another department known as Department of Classical, Indian & Foreign Languages. Such an arrangement continued till 1994, when the department of Foreign Languages was carved out of it. Subsequently, the other foreign languages like, French & German were incorporated. The department has been successfully catering to the demands of younger generation of this part of the country by imparting them from the basic to the advanced communication skills in these languages. The department in collaboration with Alliance Franchise & Goethe Institute occasionally conducts diverse academic, cultural activities to the benefit of the students at large. On March 16, 2016 a musical concert by a well-known French musical group was hosted on the university campus, which was hugely appreciated by one and all. Ms Nidhi Chopra, a representative from Alliance Francaise, Chandigarh interacted with the students of the department. A two day symposium was held on the campus in collaboration with Goethe Institute, New Delhi on April 16-17, 2016. On Dec 09, 2016 the department hosted Ms Laura, Programme Coordinator, who interacted with the students & teachers of the department & satisfied their queries regarding the pedagogical skills in the foreign language teaching.

### **HINDI**

The Department of Hindi is one of the oldest and leading Departments in our University established in 1969. Besides M.A., Post Graduate Diploma in Translation, M.Phil., it provides research facilities leading to Ph.D. It specializes in Aesthetics, Stylistics, Drama & Theatre, Sociology of Literature, Axiology, Gurbani, Linguistics, Ancient, Medieval and Modern Literature & Hindi Literature of Punjab. The courses are regularly modernized in line with the latest literary trends. The Department of Hindi offers Post Graduate Diploma In Translation (PGDT) (Hindi-English & English- Hindi). This is a Job Oriented Course which offers excellent chances of employment. It includes the theory and practice of good translation and covers all disciplines of knowledge. More than 258 Researchers of the Department have been awarded the degree of Ph.D. & near about 370 have been awarded the Degree of M.Phil. More than 400 students of the Department are serving as the Professors, Readers & Lecturers in different Universities, Governments and Non-government Colleges in all over India particularly in Punjab, Haryana, Himachal Pradesh, Maharashtra, Kerala and Union territories i.e. Chandigarh, Pondicherry and Andaman & Nicobar Islands. Our students are also working as correspondents of many important newspapers of India. Our many students of M.A. Translation are well-placed as Hindi Officers in different Nationalized Banks as Hindi Translators in Indian Air Force and Income-Tax Departments. Many of our students has been working in different sectors i.e. teaching, media, banking, insurance etc. Ten teachers have won National Awards and honours. The members of faculty have completed six Major Projects and five Minor Projects. The teachers of the Department publish extensively. Publication of the faculty includes 125 Books and about 1030 research papers and articles. The Department has prepared Hindi Lekhak Kosh of Hindi writers belonging to Punjab. Twelve books are also translated by the Faculty Members. The Department publishes a regular Research Journal Pradhikrit. 23 issues of research journal 'Pradhikrit' are already published and 24th in

press. The Department has organized 34 National and Regional Seminars/Conferences and seven Refresher Courses. Celebration of Hindi Diwas is the regular feature of the Deptt. Notable feature of the Department includes formation of 'Prem Chand Hindi Sahitya Parishad' for literary development of students. Weekly Departmental Seminars are organized by the Parishad. The Department also provides necessary and latest information through Wall Magazine.

### **SANSKRIT, PALI & PRAKRIT**

The Department of Sanskrit started functioning in July, 1983 and admits students for M.A., M.Phil. Courses in Sanskrit. It also provides facilities for research leading to the Ph.D. Degree. Two students participated in inter-university sanskrit debate at Ujjain. Organised a National Seminar: "Life and Philosophy of Guru Gobind Singh Ji in Sanskrit Literature" on 24 March, 2017.

### **SCHOOL OF PUNJABI STUDIES**

It was established in 01-Jul-1979. It is Multi-Disciplined Department concerned to Teaching and Research. Teaching, Research Programme and Various Projects related to Punjabi Language, Literature, Culture and Folklore are running in this department. There are various Courses like B.A. (Hons. School) Punjabi, M.A. Punjabi, M.Phil. Punjabi and PhD running under Teaching Programme. There are approximately 40 Regular Research Fellow studying in the department. The major part of research concerned to Folklore and Culture is done through Field Work. Research Fellow collects the concerned date or information and new innovative techniques related to folklore and Culture by moving in field of various sub-regions of the state. Such Research Work is also done for Regional Punjabi Languages. SAP-DRS-III UGC Programme is also running in this Department and also running projects related to University with Potential for Excellence (UPE). Scheme

### **URDU AND PERSIAN**

Department of Urdu and Persian were established in 1974 in the School of Punjabi Studies. In 2002, department was established as a full fledged department. At present department is running Certificate Course in Urdu, Persian and Arabic, Diploma course in Urdu and Persian and Advance Diploma Course in Urdu and Persian. All these Courses are part time evening courses under semester system. Any of these part-time Certificate, Diploma or Advance Diploma Course can be done along with any major degree that the candidate may be pursuing or wish to pursue in the University or college regularly or privately. The department also provides research facilities in Urdu and Persian for research scholars and students especially in the field of classical, medieval and modern literature. Presently, there are four Ph. D. scholars in the department, three in Urdu and one in Persian. Three Ph. D. candidates have successfully completed their thesis and have submitted for evaluation. Inter disciplinary courses for Under Graduate, post graduate, M. Phil and Ph. D. students are available in this department in Urdu and Persian, both. Apart this, the department also helps the Departments of Customs, Jail, B.S.F and Courts etc. in translating and interpreting Urdu, Persian and Arabic into English, Punjabi and Hindi. The department also helps the Enforcement and Anti-Hijacking Agencies in interpretation and interrogation.

### **FACULTY OF LAWS**

#### **LAWS**

The department of Laws at GNDU, Amritsar was established in the year 1972 having LL.B Course and in 1983, teaching of LL.M was started. The Department having Bachelor of Laws (LL.B) three year courses, B.A.LL.B (Hons.) Five Year Courses and Master of Laws (LL.M) one year course. There is also provision for research leading to PH.D Degree. The Department is providing Inter-Disciplinary courses to undergraduate (about 115) and postgraduate (about 110) students from other departments of the University. The department has a team of highly educated, committed, dedicated and motivated teachers. Besides teaching they are actively and tirelessly engaged in research in their perspective fields. The Department Library has a collection of about 19,315 books and manuscripts. The Library is also having a collection of Law Commission Reports. The Library is also subscribing to Indian Law Institute Newsletter. The department also has a subscription to SCC ONLINE. The department has its own National Service Scheme (NSS) unit for inculcating the qualities of leadership and brotherhood in the budding lawyers. The department has also established an Alumni Association and the directory

of Alumni is being maintained on regular basis. The department has its own Student Grievance committee, literary and academic committee, cultural committee and sports committee. The department celebrated different national occasions in the department.

## **FACULTY OF LIFE SCIENCES**

### **BIOTECHNOLOGY**

Department of Biotechnology, GNDU, Amritsar was established in the year 1991 with financial support from DBT, GOI and University. Since its inception, the department has made rapid strides in teaching and research in the field of Biotechnology. The only centre in the state of Punjab supported by DBT, GOI to offer M.Sc. Biotechnology program. Offers M.Sc. and Ph.D. programs in Biotechnology. M.Sc. students admitted through Combined Entrance Examination (CEE) receive a fellowship of Rs. 5,000/- per month from DBT, GOI. Highly qualified faculty members with specialization in different areas of Biotechnology. State-of-art facilities and well-equipped laboratories to impart training in core areas of Biotechnology. DBT, GOI sponsored Distributed Information Sub Centre (Sub DIC) established in 1995 to support bioinformatics work. Ranked 4th among 47 Sub DIC by DBT, GOI for its research contributions. Department is actively engaged in research in frontier areas of Biotechnology and has received substantial research grants worth more than 11 crores from DBT, CSIR, DST, ICMR, DRDO, AICTE, IFCPAR, TWAS and other funding agencies. DST-FIST Grant of Rs.1.5 crores sanctioned for infrastructure development. Published several research papers in International Journals of repute. Received incentive awards from DBT, GOI for publishing in high impact factor journal. Large number of M.Sc. students qualifies CSIR-UGC NET, GATE, DBT-JRF, ICMR-JRF etc. Research scholars of the department have been awarded prestigious international fellowships like Nehru-Fulbright Doctoral, DBT-AIST, DAAD, IBRO-APRC and BELSPO etc.

### **BOTANICAL & ENVIRONMENTAL SCIENCES**

The Department of Botanical and Environmental Sciences was establishment in year 1990. Faculty comprises of five Professors, four Associate Professors and one Professor Emeritus. The department is well known in the areas of Plant and Environmental Sciences and produced more than 60 PhD and more than 40 Research Scholars are working on diverse fields. Botanical Garden (10 hectares) financially supported by Ministry of Environment, Forests & Climate Change under Assistance to Botanic Gardens Scheme. Further, Department is recognized by (i) Department of Science & Technology (DST), Govt. of India under DST-FIST (Level-1) [90 lakh] and (ii) University Grants Commission (UGC), New Delhi under DRS-1 [1.07 crore].

### **HUMAN GENETICS**

The Department of Human Genetics came into existence as a separate department in 1990 and has due recognition from UGC for DRS and from DST for SAP programmes. The faculty comprises a team of dynamic and versatile members who are well versed with the latest trends and techniques in their areas of specialization. The department admits students to B.Sc. (Honours School), M.Sc.(Honours School) , M.Sc. and Ph.D. programmes. The diverse areas of Human Genetics are integrated into the course curricula providing students the skills to fit into the academic and technological spheres at the national and international levels. Also, diagnostic services and genetic counselling are routinely provided to cases suspected of genetic conditions. Research includes genetic screening of various complex diseases. Databases for different genetic diseases have been set-up and are continuously expanded to include the genetic variations prevalent in this region. The department has significant research output as reflected in the published work of the faculty and which has also been included in International databases.

Numerous activities and events were organized by the department in 2017 under the aegis of the Society of Human Genetics viz. “Sukhmani Sahib” path on January 13, 2017 to seek the blessings of Almighty at the beginning of the new year, followed by the Lohri festival as “Dhiyan di Lohri” in which students participated in various cultural activities; Women’s Day on March 8, 2017 in which students participated in poster making and essay writing competitions on “Women Empowerment” and “Eve Teasing”. The Down Syndrome Day was celebrated on March 21 and a lecture by Dr. Shiv Grewal of NIH, USA on “Epigenetic Control of the Genome and Its Implications for Human Diseases’ was organized on March 22. A farewell was arranged for out-going

students in April. Students were sensitized about environment deterioration on World Environment Day (June 5). To commemorate the 70th year of India's Independence and 75th year of the Quit India movement, a guided tour was organized for the students to Punjab State War Heroes' Memorial and Museum on July 26, 2017 and students were also sensitized towards the freedom struggle and Quit India movement through speeches and screening of videos on August 19, 2017; a welcome party for the freshers was also organized on the same day. Celebrations on Teacher's day were held and a poster making competition was organized on September 11, 2017 on the topic entitled "CRISPR-CAS". To commemorate the "International Day of Non violence", a slogan-writing contest on "Communal Harmony" and an elocution competition on "Youth Empowerment" were held on September 26, 2017. Students also made Genealogical Tree of Mahatma Gandhi.

## **MICROBIOLOGY**

The Department offers M.Sc. (Hons) in Microbiology and M.Sc. (Hons) Fermentation & Microbial Technology on credit based system. These courses are comprehensively designed to train the students theoretically and practically for fermentation and microbiology studies befitting to research institutions/industries. The department is on active interaction list with the reputed fermentation industries and top research institutes of India. The faculty is actively engaged in research and upgradation of syllabus. The students from the department have been placed in the industries, teaching and research institutions. A number of research projects from various agencies like DBT, CSIR, UGC, DST, DAE, ICMR & ICAR have been completed and are going on in the department. The department has produced 45 Ph.D. students till date who have occupied good positions in teaching and research in India and abroad including USA, Canada, South Africa, Europe and Australia. Based on these achievements of the faculty, the department has received grants for improvement of infrastructure under DST-FIST and UGC-SAP schemes.

## **MOLECULAR BIOLOGY & BIOCHEMISTRY**

The School of Life Sciences was carved out of the Department of Biology in 1988 with five major disciplines: Botanical Sciences, Human Biology and Human Genetics, Microbiology, Molecular biology and Biochemistry and Zoological Sciences. Subsequently in 1990, these five major disciplines were separated as independent departments. The department takes up fundamental and applied aspects of Molecular Biology and Biochemistry in its teaching and research programmes. The department admits students to the programmes leading to the awards of M.Sc. and Ph.D. degrees. The current numbers of seats are 50 in M.Sc. and the number of students admitted in Ph.D. varies from year to year. Admissions were made on the basis of entrance test. The students are evaluated on the basis of continuous evaluation of their performances under credit based evaluation and grading system. The research activity of the faculty members encompasses very diverse areas like: infectious diseases such as Tuberculosis & Malaria, complex genetic diseases and lectinology.

## **PHARMACEUTICAL SCIENCES**

The Department of Pharmaceutical Sciences was established in 1995 at Guru Nanak Dev University, Amritsar with a clear vision to produce trained professionals to meet the ever-growing demand in Pharmaceutical Industry and Academia. The department offers a four year B. Pharmacy Degree course, two year, M. Pharm. Course and Ph .D programme. The department is approved by Pharmacy Council of India (PCI), New Delhi and All India Council of Technical Education (AICTE), New Delhi. GPAT qualified PG students of the department are getting the fellowship of Rs. 12400/- per month from AICTE, under PG scholarship scheme. Recently Department got accreditation under DST-FIST (Fund for Improvement of S&T Infrastructure) scheme from Department of Science & Technology (DST), New Delhi. Received Financial Assistance grants Under DST-PURSE scheme, CSIR, SERB, and DST sponsored project. The department has focused on quality teaching and research in cutting edge areas with strong prominence towards industrial application. Department is equipped with modern facilities for effective practical training of the students, which include HPLCs, FTIR, UV-VIS spectrophotometer, ultrasonicator, rotary tableting machine, dissolution apparatus, Franz diffusion cell, student physiograph, deep freezer and stability testing chamber, Rheometer, Rat Cuff Kit (Non-invasive blood pressure measurements), Particle Size Analyzer, Spray Dryer, Auto analyzer, stability chamber, refrigerated centrifuge and Buchi rotary evaporator. Recently, department signed an MoU with National Institute of Pharmaceutical Education and Research (NIPER), Mohali. The objective of the MoU is to join hands for research in development

of new drugs and update students on latest developments in field of Pharmaceutical sciences. The Department organized three days workshop on 'Analytical Techniques', One day seminar on the topic "Importance of Intellectual Property in Innovation Management" and one day seminar on 'Creating Entrepreneurship Awareness'. Many of our alumni hold prominent positions in the industry and academia both in India and abroad

## **ZOOLOGY**

The Department of Zoology was established in the year 1990. The faculty members of the department have expertise in diverse areas of Zoology. The Department offers courses leading to the Degrees of M. Sc. (Hons.) and Ph.D. The syllabi are updated regularly as per the UGC guidelines to keep the students abreast with the latest developments in the field of Zoology. The Department maintains a museum housing a range of animal diversity and an animal house for research work. Each research laboratory is equipped with modern facilities including internet facility for the students to explore the recent developments in fields of Insect Physiology and Biochemistry, Aquatic Biology, Insect Plant interactions, Nematology, Cytogenetics and Solid Waste management. The department is sponsored by DST-FIST and UGC-SAP. In the year 2016, Major activities undertaken by the department apart from teaching and research included three invited lectures by the Eminent Scientists and celebration of National Science Day.

## **FACULTY OF PHYSICAL EDUCATION**

### **PHYSICAL EDUCATION**

The Department of Physical Education (Teaching) was established in 1980 with the sole aim to provide excellent opportunities and capabilities to the sports persons having outstanding carrier and to produce good Physical Education Teachers. It started with two courses viz. B.P.Ed. & M.P.Ed. A new under graduate course B.P.E.S. has been started from the session 2017-18 in the department. The admission to the courses is based on Physical Fitness Test (Qualifying), and merit of Written Entrance Test & Sports Achievements. The students of this Department participate in various University, All India Inter-University, National and International Competitions. Our students contribute very significantly to the sports performance of the Guru Nanak Dev University. A Research lab was established in the Department in the 2005 and it has benefited the students in acquiring knowledge on the emerging trends in the field of Sports and Physical Education.

## **FACULTY OF PHYSICAL PLANNING & ARCHITECTURE**

### **ARCHITECTURE**

Department of Architecture, Guru Nanak Dev University is a premier institute of Architecture in the state of Punjab that started Five year B.Arch Degree programme in 1986. The department started two years Master of Architecture (Urban Design) in 2011 and initiated Master of Architecture (Sustainable Built Environment) programme in 2018. The Department also offers PhD in Architecture on both regular and part-time basis.

The department boasts of its highly qualified faculty having vast academic and professional experience as also its excellent physical infrastructure. In addition to teaching, the department also undertakes research projects (from UGC, AICTE, etc) and provides consultancy services to state government and other institutions for various architectural projects. The students of the department get absorbed in the government/private offices, research, teaching and/or private practice.

### **GURU RAMDAS SCHOOL OF PLANNING**

Guru Ramdas School of Planning was established to impart education and training at Post Graduate level in the field of City and Regional Planning. Initially, the School conducted two years Master's Degree in City and Regional Planning (MCRP). Later on, the nomenclature of the course was changed to Master of Technology in Urban Planning (M. Tech. U.P.). At present, School conducts three academic programmes, one at the Under Graduate level i.e. B. Tech. (Urban and Regional Planning) which is of 4 years (8 semesters) and the others at the Post Graduate levels i.e. M. Tech. (Urban Planning) and Master of Planning (Infrastructure) which are of 2 years (4 semesters) each. The School has emerged as one of the pioneer professional institutions in the country for education and training in the field of Urban and Regional Planning. The School so far has trained more than 700 town planners at Masters and Bachelor levels. The graduates from this School are serving in different capacities



in various government and private town planning and allied organisations at National and State level in India and abroad. The Alumni of the School have served as Chief Town Planners of Jammu & Kashmir, Himachal Pradesh, Haryana, Punjab, Rajasthan, and Arunachal Pradesh. They are also leading other reputed public and private sector institutions throughout the country.

## **FACULTY OF SCIENCES**

### **CHEMISTRY**

The Department of Chemistry at Guru Nanak Dev University, Amritsar started functioning in the year 1971 and over a period of time has emerged as one of the premier teaching and research departments in the country. The Chemistry Department offers courses in Chemistry for undergraduate science and engineering students, two year programme in M.Sc (Hons. School) Chemistry, M.Sc. Chemistry and M.Sc. Applied Chemistry (Pharmaceuticals) and Ph.D programme in Chemistry. The department and central instrumentation facility has several state-of-the-art instruments to support research in the areas of Supramolecular and Materials Chemistry, Organic Synthesis, Nanomaterials, X-ray Crystallography, Analytical and Electrochemistry, Ionic Liquids, Medicinal and Green Chemistry, Drug Design, Organometallics and Theoretical Chemistry.

Several of our faculty members, students and alumni earned accolades nationally and internationally such as fellows of various scientific academies and awarded medals/prizes for their excellent contributions to research and teaching. The faculty members are actively involved in sponsored research projects, organizing conferences and delivering invited lectures in conferences. The department is served by 23 faculty and more than 65 PhD students and project fellows. Owing to such magnificent growth, the department has been granted the status of 'Centre for Advanced Studies' and maintained continuous flow of grants under FIST (DST), PURSE (DST), CAS-II (UGC) and UPE (UGC) programmes. The department is committed to produce highly knowledgeable students for pursuing careers with industry and academia.

### **FOOD SCIENCE AND TECHNOLOGY**

The Department of Food Science and Technology was established in 1994 with the objective of generating highly skilled manpower to meet the requirements of food processing industry. The M.Sc (Food Tech) program was started in 1994 and after its success was followed by B.Tech (Food Tech) program in 1995. The department also offers research guidance leading to Ph.D degree. The department is well equipped with sophisticated instruments to carry out advance research in Food Science. Faculty members are providing consultancy & analytical services to Food Industry and Government welfare programs. The department has close association with well known MNC's like Nestle India Ltd., Pepsi Foods (P) Ltd., Glaxo Smithkline Beechem Consumer Healthcare Ltd., Cadbury's India Ltd., Joyco, Heinz, etc. Several students after completing degree from the department have got admissions in M.S Degree programs and Fellowships in internationally reputed institutions.

### **MATHEMATICS**

The Department of Mathematics, established in 1970, has a team of nine faculty members (including one emeritus fellow, UGC) with expertise in diverse areas of Mathematics/statistics subjects. It offers courses leading to M.Sc. Degree in Mathematics and Ph.D. Degree in Mathematics/Statistics. This department also looks after the Mathematics/statistics component in the other University departments. This department provides research facilities in the areas of approximation Theory, Functional Analysis, Applied Functional Analysis, Wavelet Analysis and Applications, Operations Research, Multiple Comparisons, Ranking & Selection procedures, Queuing Theory, Survey Sampling Theory, Instabilities in fluids, Analytical Number Theory and Non-Commutative Ring Theory. The department has been regularly organizing International Conferences, refresher courses in Mathematics and lectures by eminent mathematics from different parts of the world.

### **PHYSICS**

The Department of Physics, established in 1979, has a team of faculty members with expertise in diverse areas of Physics. It offers courses leading to the degree of B.Sc. (Hons. School), M.Sc. (Hons. School), M.Sc. (Hons.) and Ph.D in Physics. The objective of these courses is to promote Physics at under/post-graduate levels,

to generate enlightened manpower to cater the needs of teaching, research and allied establishments. It also caters to the needs of Science of Engineering departments of the University. Another main objective is to promote research in basic and applied thrust fields of Physics. Special Papers in Radiation Physics, Reactor Physics, Material Sciences, Plasma Physics, Geophysics, Digital Communication etc are being offered to the Post Graduate students. Experimental research facilities leading to Ph.D. degree have been established in the areas of Material Sciences, Polymer Physics, Nuclear Geo-Physics based Seismotectonic studies, Radiation Physics, Environmental Radioactive studies, Solid State Nuclear Track Detectors (SSNTD), Thin Films, High Energy Physics, Plasma Physics, Gas Sensors etc. In theoretical Physics, the department has researchers working in the areas of Nuclear Theory, Plasma Physics, Laser Plasma interactions and Transport Phenomenon in Gases.

## **FACULTY OF SPORTS MEDICINE & PHYSIOTHERAPY**

### **MYAS-GNDU DEPARTMENT OF SPORTS SCIENCES AND MEDICINE**

This department has been established in collaboration with the Ministry of Youth Affairs and Sports (MYAS), Government of India (GOI) in order to generate human resource specialized in the field of Sports Sciences in December 2017. Guru Nanak Dev University (GNDU) has been sanctioned a grant of 25 crores to establish and optimise the functioning of this department. In order to achieve this department will run dedicated courses in Sports Sciences including Sports Nutrition, Sports Psychology, Exercise and Sports Physiology, Sports Biochemistry and Sports Physiotherapy. Students will receive on field training and attachments to teams to enable them to apply theory to practice. The department has memorandum of understanding (MoU) with following Universities abroad for research and faculty exchange: Post Graduate Institute of Medicine, University of Colombo, Bloomsburg University, Pennsylvania, USA, Human Performance Lab, University of Graz, Austria, Karl Franzens Medical University, Graz, Austria and University Sains Malaysia, Malaysia, Sports Authority of India, Sri Guru Ram Das Institute of Medical Sciences & Research and Fortis Escorts Hospital, Amritsar.

MYAS-GNDU Department of Sports Sciences and Medicine formerly known as the of Sports Medicine and Physiotherapy (established in 1994) has one of the most comprehensive research laboratories in the fields of Neurophysiology, Motion Analysis, Human Performance, Sports Psychology, Exercise Physiotherapy, Kinanthropometry, Exercise Physiology, Isotonic and VO<sub>2</sub> calculation. Regarding the teaching aspect, this Department was the first to introduce Masters in Sports Physiotherapy in South-Central Asia which is now continuing as Masters in physiotherapy (Sports Physiotherapy) as well as the first University to offer a Ph.D program in Sports Medicine and Physiotherapy in this part of Asia

### **PHYSIOTHERAPY**

Department of Physiotherapy is renamed from its earlier name “Sports Medicine & Physiotherapy” which was established in 1995. Being a student of Bachelor of Physiotherapy one can assess, evaluate and diagnose various Physiotherapy related conditions. After completion of BPT, the students can practice independently or perceive higher education.

## **FACULTY OF VISUAL ARTS & PERFORMING ARTS**

### **MUSIC**

The Music Department was set up in 1992 and is running M.P.A Music Vocal, M.P.A. Music Instrumental, M.Phil Music (V&I) & Ph.D. courses. The aims and objectives of the department are to train the students for different fields of Vocal and Instrumental along with other modern trends as well as Hindustani Classical Music.