# **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 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 of Sociology was established in 1976 with a small faculty of one Reader and a Lecturer. The shortage of faculty was compensated by the visits of the well known and senior faculty members from other universities. This helped the Department to grow on a solid footing. The Department tried to conserve its research and intellectual base and took upon itself the responsibility of publishing its own journal, namely Guru Nanak Journal of Sociology in 1980. The journal has helped the Department to establish its own academic network in the country. The second stage of the development of the Department was between 1986 and 1995. The faculty

strength reached seven and diverse areas such as; Population Studies, Urban Studies, Sociology of Entrepreneurship and Sociology of Movements were the new areas of thrust. The Department has the distinction of organizing 5th and 15th Conferences of the North West Indian Sociological Association, 27th Conference of the Indian Sociological Association and one International Conference on Habitat Agenda. Faculty members of the Department have published 52 books and 390 research papers.

The UGC identified the Department for a grant in the area of Sociology of Environment in 1995. The UGC also recognized it under the Special Assistance Programme (SAP) and the department has entered DRS level III and got a grant of Rs. 82 lakhs for five years (2014-19). During the past few years a shift in the thrust areas of the Department has taken place. The new areas such as Diaspora Studies and Dalit Studies have been given special attention. In 2006 the Department achieved distinction by getting the autonomous Centre for the Study of Social Exclusion and Inclusive policy with a grant of 1.75 Crores for five years.

#### **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 updated the syllabi of all classes and planned to introduce M.A. (Business Economics) as per UGC nomenclature instead of M.B.E. 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 and appointment of one Project Fellow for undertaking project. The School organized 20th Annual Conference of the Indian Political Economic Association (IPEA) during November 4-6, 2016. During the year 2016, seven students of the School were awarded Ph.D. and three students cleared UGC (NET) examination. The School organized inter-class cleanliness competition in view of the Swachh Bharat Movement on September 29, 2016. During the year 2016, latest research and text-books have been added to the Departmental library with online data availability and the library continues to receive the various publications of World Bank in World Bank Depository Library. School organized discussions with officials of American Embassy on topic 'India-American trade relations' on 16.12.2016.

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 Economics (a six semester course after +2 level)
- M.Sc. (Hons. School) in Economics (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**

The University Business School (UBS) was established in the year 2014. The main objective of the MBA program is to equip the students with requisite knowledge and skills to meet the challenges of new order. The

emphasis is to develop professional managers for corporate sector, who will fasten the nation towards a more prosperous, just and humane society. The program is backed by very efficient faculty and highly effective academic infrastructure. The learning environment and extracurricular activities foster the development of holistic personality. Students are motivated to participate in various activities like mock test, group discussions, seminars and workshops to improve soft skills and enrich their personalities. For upgrading teaching and research facilities, University Business School has been provided with a new building with state of the art facility in 2016.

#### **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. Last year the department conducted

1Ph.D viva- voce,

1 Pre-Ph.D summary presentations.

12 Research Scholars were admitted into Pre.Ph.D in Education

#### FACULTY OF ENGINEERING & TECHONOLOGY

### **COMPUTER ENGINEERING & TECHNOLOGY**

Department of Computer Engineering and Technology was established on 1st April 2015 and earlier it was running as Department of Computer Science and Engineering. Department is offering B.Tech (CSE), M.Tech (CSE) as well PhD courses. Many new labs have been established in the department like programming lab-1 & 2, Hardware lab, Research and Media Lab, Physics and Chemistry Lab during 2016. Department has published 50 papers in International Journals and conferences and conducted many IT based workshops. All labs as well class rooms of the Department are equipped with ICT based tools to promote digitization in Higher Education. Many IT industry personalities have been invited to change and revise the curriculum of department. The students of the department are well placed in IT industry during session 2016.

### **COMPUTER SCIENCE**

Computer Science 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 1998. Students, after completion of M.C.A., have excellent job opportunities in software industry, management information system, department of any industry, education and various R & D institutions in government and private sector.

#### **ELECTRONICS TECHNOLOGY**

The Department of Electronics Technology was founded in July, 1983. It supports the most coveted courses in the entire region. It is graced with a distinguished faculty and well equipped laboratory facilities. The Department provides a well-designed course curriculum and has an accordant interaction with industry experts. The Department also supports Ph.D. programme with extensive research activities in area like microelectronics, Microwave materials, Fiber Optics Communications (Components & Sensors) and Nano Electronic devices. The Department has on-campus recruitment programmes for placements in prestigious companies. Electronics Students Forum, a student body of the Department organizes various extra-curricular events like Group

Discussion, Vocab-a-Mania, extempore, and debates on contemporary issues &many other related activities to bring out the hidden talents within the students. The students of our department have outperformed in interdepartmental sports meet as well as inter-departmental cultural festival conducted at university level. The department invited many Industry magnets to interact with the students and share their valuable experiences with the students and also guiding them how to start up some new venture. The industry persons were invited on a regular basis for conducting various workshops related with Embedded Systems, Micro controllers, Internet of Things (IOT), Big Data and cloud as well as Mobile computing.

#### **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 Adhyan Patrika (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. The Department of English organized an International Congress on English Grammar (ICEG-2016) in collaboration with Systemic Functional Linguistics Association Hyderabad from February 8-12, 2016. The Department of English organized a two-day National Seminar on Language Shift and Endangered Languages: Issues, Effects and Responses from March 25-26, 2016..

#### 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, Gurubani, 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 254 Researchers of the Department have been awarded the degree of Ph.D. & near about 356 have been awarded the Degree of M.Phil. More than 370 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 Andeman & Niccobar islands. Our students are also working as correspondents of many important newspapers of India. Our many students of M.A. Translation are well-places as Hindi Officers in different Nationalised Banks as Hindi Translators in Indian Air Force and Income-Tax Departments. Many of our students have 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. Publications of the faculty include 120 Books and about 1020 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 organised 33 National and Regional Seminars/Conferences and seven Refresher Courses. Celebration of Hindi Diwas is the regular feature of the Deptt. The Department has also organised Refresher course, Freedom Run March, celebrated Matribhasa Diwas and Hindi Diwas in the year 2016.

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.

#### 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 (about115) 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

The Department of Biotechnology was established in the year 1991 with financial support from University and DBT, Govt. of India. Ever since the Department has made rapid strides in both teaching and research, and has made its presence felt at the national and international levels. : The Department is imparting theoretical and practical training to the students of M.Sc. Biotechnology in basic and applied aspects. The Department has well equipped teaching/research and computer laboratories for imparting training to the students. This Department is a constituent of National Network of thirty four centres imparting job-oriented training to the students. The Department of Biotechnology admits students to the Postgraduate Biotechnology Programme through a Combined Entrance Examination (CEE) conducted by Jawaharlal Nehru University, New Delhi and by the entrance examination conducted by Guru Nanak Dev University, Amritsar. The students selected through CEE conducted (except Punjab Domicile students) by JNU, New Delhi are awarded a scholarship of Rs. 5000.00 P.M. throughout the two years of their study.

### **BOTANICAL & ENVIRONMENTAL SCIENCES**

Established in the year 1990 as a constituent of the erstwhile Faculty of Sciences (now Faculty of Life Sciences), the history of the Department of Botanical and Environmental Sciences goes back to 1973 when Guru Nanak Dev University established the Department of Biology, of which plant sciences was an integral constituent.

#### **HUMAN GENETICS**

The Department of Biology was established in 1973 under the specific recommendations of the University Grants Commission to impart education and to conduct research in emerging disciplines of biological sciences. It was redesigned and elevated to the School of Life Sciences in 1988 with five major disciplines: Botanical Sciences, Human Biology and Human Genetics, Microbiology, Molecular Biology and Biochemistry, and Zoological Sciences. The discipline of Human Biology and Human Genetics came into existence as a separate department in 1990 and was renamed as Department of Human Genetics in 1993. The Centre for Genetic Disorders was set up in the department in 1990 under a grant of Rs 1.57 Crores sanctioned to Prof. Dr Jai Rup Singh by the Department of Biotechnology, Govt. of India. As per the undertaking given to Govt. of India, the Guru Nanak Dev University took over the Centre after 5 years. The centre for Genetic Disorders was merged with the Department of Human Genetics w.e.f April 1, 2010. Since its inception, the centre has been providing diagnostic services to cases suspected of chromosomal anomalies and guidance regarding future options to patients and families with genetic diseases. In 2016, major activities undertaken by the department apart from teaching and scientific research included scientific trip of students to science city, Jalandhar, departmental literary competition.

#### 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 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. 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.

The department has ongoing research programmes in medicinal chemistry, synthetic organic chemistry, development and characterization of novel drug delivery system based Pharmaceutical formulations. These programmes are funded by various national funding agencies.

### 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 UGC-SAP.

In the year 2016, Major activities under taken 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. one year & M.P.Ed two years duration. The admission to the courses is based on Physical Fitness Test (Qualifying), and merit of academic & sports performance. 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

The Department was established in the year 1986 as a part of Guru Ram Das School of Planning and Architecture and was the first institute in Punjab to start the five years integrated B.Arch. Degree course. It started working independently as Department of Architecture in 1989 and is the oldest & premier institute in the region. Over the years, the department has evolved into a leading institution in the region by virtue of having excellent human resources as well as technical infrastructure.

### INFRASTRUCTURE FACILITIES

The department is equipped with state of the art laboratories such as Computer labs (with latest ARCHICAD software), Arts and Graphics Lab, Surveying Lab, Building Material Testing Lab, Material Museum, Thesis & Report Section as also a Seminar Hall with seating capacity of 120. The Department of Architecture and GRD School of Planning are housed in a single building with Architecture Department occupying 2  $\hat{A}^{1/2}$  floors of the 4 storied building (approx floor area 3700 sq.m). The provision of the common facilities like Auditorium, Seminar halls, guest house and world class sports infrastructure is available at the University level.

### THRUST AREA

With academics as its main intent, the department has also leapfrogged in the areas of research and consultancy in the last few years by securing research projects and providing architectural consultancy to State Government and GNDU for various projects. The mission of the department is to develop a holistic vision of the students towards various issues of physical environment by evolving an integrated design approach incorporating the understanding of different disciplines that come together in conceptualization of creative ideas. The department also initiated two years full time Master in Architecture (M.Arch.) programme in 2011 with specialization in Urban Design. From time to time, the syllabi and scheme of B.Arch. & M.Arch (Urban Design) courses are exhaustively reviewed and revised in the light of national/international professional needs and trends.

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

Guru Ramdas School of Planning was established in 1972 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 in 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 imparting education and training in the field of Urban and Regional Planning. The School so far has trained more than 600 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. Alumni of the School have been appointed as Chief Town Planners of Jammu & Kashmir, Himachal Pradesh, Haryana, Punjab, Rajasthan, Arunachal Pradesh and leading other reputed institutions throughout the country.

### **FACULTY OF SCIENCES**

### CHEMISTRY

The Department of chemistry came into existence in the year 1971 and over a period of time, it has emerged as one of the premier Departments not only of the university, but has also acquired prestigious status even at National level. The Department offers courses of B.Sc. (Hons. School), M.Sc. (Hons. School) and M.Sc. (Hons.) Chemistry. The department has adopted Credit based Continuous Evaluation Grading system in order to make the examination process transparent and for continuous evaluation of the students. The research activities of the Department focus on synthetic organic chemistry, supra molecular chemistry, structural inorganic chemistry, drug design, material science, electrochemistry, chemistry of surfactant, chemistry of oils and fats, theoretical chemistry, thermodynamics and analytical chemistry. The Department has been adopted by the UGC under its special assistance programme (SAP) and by DST under its programme for improvement of Science and Technology (FIST). State of the art instruments like NMR, X-ray diffractometer, HRMS, UV, Flourescence and Atomic absorption spectrometer, HPLC, DLS, SEM, TEM, AFM, DSC, Polarograph, Mossbauer spectrometer etc. are available for research and teaching.

### 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

### **SPORTS MEDICINE & PHYSIOTHERAPY**

The Department of Sports Medicine and Physiotherapy was established in August 23, 1995 and has been recognised as Centre for Excellence in Sports Sciences by the UGC, and one of the major research centres in this field. This is the only department in India, which offers Ph.D. program in Sports Medicine and Sports Physiotherapy. It 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 VO2 calculation.

## FACULTY OF VISUAL ARTS & PERFORMING ARTS

### **MUSIC**

The Music Department was set up in 1992.Department offers 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 Primarily for Hindustani Classical Music Vocal and Instrumental. Besides this, it aims to update the modern trend followed by Dance, Theatre, Sound, Studio & Music Therapy.