

The Annual Quality Assurance Report (AQAR) of the IQAC

Part – A

1. Details of the Institution

1.1 **Name of the Institution:** Guru Nanak Dev University

1.2 **Address Line 1:** G.T. Road

City/Town: Amritsar

State: Punjab

Pin Code: 143 005

Institution e-mail address: vcgndu@gmail.com

Contact Nos.: 0183-2258811

Name of the Head of the Institution: Prof. Ajaib Singh Brar

Tel. No. with STD code: 0183-2258811

Mobile: 96460-30460

Name of the IQAC Co-ordinator: Prof. Navdeep Singh Sodhi

Mobile: 95014-73321

IQAC e-mail address: iqacgndu@gmail.com

1.3 **NAAC Track ID:** PBUNGN10009

1.4 **NAAC Executive Committee No. & Date:** EC(SC)/04/RAR/87 dated 10-12-2014

1.5 **Website address:** www.gndu.ac.in

Web-link of the AQAR: http://gndu.ac.in/gndu2014/qlinks_pdf/Annual_report2015-16.pdf

1.6 Accreditation Details

<i>S. No.</i>	<i>Cycle</i>	<i>Grade</i>	<i>CGPA</i>	<i>Year of Accreditation</i>	<i>Validity Period</i>
1	1 st Cycle	Five Star	N.A	2000	2005
2	2 nd Cycle	A	3.50	2007	2012
3	3 rd Cycle	A	3.51	2014	2019

1.7 **Date of Establishment of IQAC:** 25/11/2002

1.8 **AQAR for the year:** 2015-16

1.9 Details of the previous year's AQAR submitted to NAAC after the latest Assessment and Accreditation by NAAC

This AQAR (2015-16) is the second report after the Assessment and Accreditation by NAAC Peer Team in November, 2014. AQAR (2014-15) was submitted on 9 December, 2015.

1.10 Institutional Status

University	State
Affiliated College	No
Constituent College	No
Autonomous college of UGC	No
Regulatory Agency approved Institution	Yes
Type of Institution	Co-education & Urban
Financial Status	Grant-in-aid, UGC 2(f) & UGC 12B

1.11 Type of Faculty/Programme

Arts	Yes
Science	Yes
Commerce	Yes
Law	Yes
PEI (Phys Edu)	Yes
TEI (Edu)	Yes
Engineering	Yes
Health Science	Yes
Management	Yes
Others (Specify)	Physical Planning and Architecture

1.12 Name of the Affiliating University (*for colleges*): N.A.

1.13 Special status conferred by Central/State Government

Autonomy by State/Central Govt./University	Yes
University with Potential for Excellence	Yes
DST Star Scheme	No
UGC-Special Assistance Programme	Yes
UGC-Innovative PG programmes	No
UGC-COP Programmes	No
UGC-CPE	No
UGC-CE	No
DST-FIST	Yes
Any other (<i>Specify</i>)	CPEPA-Life Sciences

2. IQAC Composition and Activities

2.1 No. of Teachers: 11

2.2 No. of Administrative / Technical Staff: 2

2.3 No. of students: 2

2.4 No. of Management representatives: 3

2.5 No. of Alumni: Nil

2.6 No. of any other stakeholder and community representatives: 2

2.7 No. of Employers/Industrialists: Nil

2.8 No. of other External Experts: 1

2.9 Total No. of members: 21

2.10 No. of IQAC meetings held: 1

2.11 No. of meetings with stakeholders:

Number	14
Faculty	2
Non-Teaching Staff	6
Students	1
Alumni	1
Others	4 (Internal Committee against Sexual Harassment, Teachers' Association, Officers' Association, Non-Teaching Employees' Association)

2.12 Has IQAC received any funding from UGC during the year? No

2.13 Seminars and Conferences (only quality related):

UGC - Human Resource Development Centre of the Guru Nanak Dev University, Amritsar organised following courses:

Short Term Course on Teacher Educators	07.07.2015 to 13.07.2015
Workshop on Research Methodology for Ph.D Post Doctoral Scholars and Teaching Faculty	06.01.2016 to 12.01.2016
Workshop on Gender Sensitization & Diversity Management for Ph.D/Post Doctoral Scholars and Teaching Faculty	02.03.2016 to 08.03.2016
Principal's Meet	27.11.2015

2.14 Significant activities and contributions made by IQAC:

- a. Acted as a Nodal Agency, while participating in Surveys for University ranking in the country, through different survey agencies.
- b. Compiled 46th Annual Report-2015 of the University.
- c. Encouraged/emphasised the monitoring of the Teaching & Learning processes by taking feedback from students at departmental levels.
- d. Actively associated with Gender Champions programme at the University level.
- e. Encouraged the use of interactive audio-visual systems in class rooms for improving teaching-learning methods.
- f. Initiated Class Committee meetings at departmental levels.
- g. Initiated “Orientation Day” by respective Head of the Departments within a week of start of new academic session with special emphasis on educating the newly admitted students about CBCEG System.
- h. Institutionalized the “Mentoring System” in University Campus by allotting faculty members as Mentors to new students for guiding them in matters regarding their day to day activities in the University.
- i. Initiated “Helpdesk” for hostellers by through NCC office and Dean Students’ Welfare at the counselling venue during admission process.

2.15 Plan of action by IQAC/Outcome:

Some of the important plans of action and their achievements by IQAC are as follows:

<i>Plan of Action</i>	<i>Achievements</i>
a) Documentation of various activities in the University.	a) Compiled 46 th Annual Report-2015 of the University.
b) To participate in Surveys for University Ranking at the National level.	b) Acted as a Nodal Agency for participating in various surveys like National Institutional Ranking Framework (NIRF), The Week, ACU Measures – The Association of Commonwealth Universities.
c) Preparation of self-reviewed AQAR: 2014-15.	c) Compiled AQAR 2015-16 of the University.
d) Monitoring of Teaching & Learning Processes.	d) Initiated the practice of taking Faculty Evaluation Feedback from students.
e) To work on the recommendations of NAAC Peer Team.	e) Effective implementation of the NAAC Committee recommendations is under process.

Academic Calendar of the year is attached as Annexure II.

2.16 Whether the AQAR was placed in statutory body:

The report will be placed in the Advisory Committee of IQAC and in University Senate Meeting.

Part – B

Criterion – I

1. Curricular Aspects

1.1 Details about Academic Programmes

<i>Level of the Programme</i>	<i>Number of existing Programmes</i>	<i>Number of programmes added during the year</i>	<i>Number of self-financing programmes</i>	<i>Number of value added / Career Oriented programmes</i>
PhD	37	-	-	-
PG	53	-	-	-
UG	23	-	-	-
PG Diploma	01	-	-	-
Advanced Diploma	05	-	-	-
Diploma	08	-	-	-
Certificate	08	-	-	-
Others	23	-	-	-
Total	158	-	-	-

Interdisciplinary	54
Innovative	-

1.2 (i) Flexibility of the Curriculum:

<i>Flexibility of the Curriculum</i>	Yes
<i>Choice Based Credit System</i>	Yes
<i>Core</i>	Yes
<i>Elective Option</i>	Yes
<i>Open Options</i>	Yes

The University has adopted a Credit-Based Continuous Evaluation Grading System (CBCEGS), under which programme of studies have three types of courses i.e. Core courses, Elective/Optional courses and Interdisciplinary (ID)/Outside Department courses. There is a provision for students to opt for courses over and above the prescribed credits to allow for enrichment.

(ii) Pattern of programmes:

<i>Pattern</i>	<i>Number of programmes</i>
<i>Semester</i>	155
<i>Trimester</i>	-
<i>Annual</i>	03

1.3 Feedback from stakeholders (on all aspects):

Alumni	Yes
Parents	Yes
Employers	Yes
Students	Yes

Mode of feedback:

Online	No
Manual	Yes
Co-operating schools (for PEI)	N.A.

**Note: At present a formal feedback on a Performa is taken only from the students for their respective courses and teachers. The evaluation of the same is being conducted by IQAC. This exercise, however, has made the IQAC realize the importance of online feedback system and the same has been launched in the 2016-17 academic session.*

1.4 Whether there is any revision/update of regulation or syllabi, if yes, mention their salient aspects:

Yes, major revisions are made annually in the syllabi of every department.

Salient aspects:

All syllabi have been revised, reviewed and updated keeping in view the following:

- a. UGC guidelines and University norms.
- b. Syllabi of National level competitive examinations.
- c. Current and prospective needs of industry and society.

1.5 Any new Department/Centre introduced during the year. If yes, give details:

No

Criterion – II

2. Teaching, Learning and Evaluation

2.1 Total No. of permanent faculty:

<i>Total</i>	<i>Assistant Professors</i>	<i>Associate Professors</i>	<i>Professors</i>	<i>Others</i>
314	168	45	101	-

2.2 No. of permanent faculty with Ph.D: 238

2.3 No. of Faculty Positions Recruited (R) and Vacant (V) during the year:

<i>Assistant Professors</i>		<i>Associate Professors</i>		<i>Professors</i>		<i>Others</i>		<i>Total</i>	
<i>R</i>	<i>V</i>	<i>R (filled)</i>	<i>V</i>	<i>R (filled)</i>	<i>V</i>	<i>R</i>	<i>V</i>	<i>R (filled)</i>	<i>V</i>
-	203	45	113	101	69	-	-	146	385

2.4 No. of Guest and Visiting faculty and Temporary faculty:

Guest and Visiting faculty	Nil
Temporary faculty	586 (approx.)

2.5 Faculty participation in conferences and symposia:

<i>No. of Faculty</i>	<i>International level</i>	<i>National level</i>	<i>State level</i>
Attended Seminars/ Workshops	76	145	27
Presented papers	91	153	03
Resource Persons	19	86	13

2.6 Innovative processes adopted by the institution in Teaching and Learning:

One of the ways to adopt innovative processes in teaching and learning is by integrating these in the curriculum design and development. In order to ensure innovations, emphasis is put on building aptitude and providing intellectual autonomy to the students as well as emphasising the methodological practices of experimentation and data collection via practical training. For this, the various courses in different disciplines of sciences, engineering and technology have mandatory practical training as part of the curriculum. A lot of emphasis is made on computer based learning via building computer laboratories and giving practical training in social sciences.

2.7 Total No. of actual teaching days during this academic year: 186

2.8 Examination/ Evaluation Reforms initiated by the Institution:

Under Right to Service Act photo copy of marked answer book can be provided to concerned student on demand. This has brought more transparency into the evaluation system. Video conferencing facility has been set up in all Evaluation Centres for monitoring and surveillance. To achieve e-governance, more applications and informational links have been added to the university website. Admission of private candidates and issuing of roll numbers has been made online. Fast processing and timely declaration of results has been achieved. Under Right to Service Act, fortnight RTS report of Issued Migrations Certificates, Number of Dispatch of D.M.C. and degrees is sent to DC office. Examinations related queries received from Student Grievance Redressal Cell are solved. Follow up of examinations related queries asked in Sangat Darshan routinely held by Honorable Chief Minister, Punjab is also undertaken.

2.9 No. of faculty members involved in curriculum restructuring/revision/syllabus development as member of Board of Study/Faculty/Curriculum Development workshop:

<i>Members of All Faculties</i>	<i>Board of Studies (UG)</i>	<i>Board of Studies (PG)</i>	<i>Common Board (UG & PG)</i>	<i>Board of Control</i>
171	51	86	18	233

All the faculty members of the University are involved in the above exercise either directly or indirectly in a very systematic and institutionalised process. The basic purpose of this exercise is to make the students competitive and to increase their employability. The effort is also oriented towards the development of knowledge, skill and aptitude among the students. For this process, the Meeting Branch of the University formally requests all the HODs to initiate the process. The HODs fix meetings and start the process among the members of the faculty well in advance so that adequate preparations are made. Prior to the meeting of the Board of Control (BOC) / Board of Studies (BOS), the HOD's of each department initiate the process by meeting with the faculty and getting their inputs for curriculum restructuring /revision/syllabus development. These inputs are considered in the meetings of the BOC / BOS..

2.10 Average percentage of attendance of students: Above 75%

2.11 Course/Programme wise distribution of pass percentage:

The requisite information is provided in the Annexure III.

2.12 How does IQAC Contribute/Monitor/Evaluate the Teaching & Learning processes:

The University plans and organises the teaching, learning and evaluation schedule by preparing the Academic Calendar every year. The students are made aware of the course contents by making available the syllabi of various courses on the University's website, To make the whole process more effective, the University under CBCS has introduced the

evaluation of teachers by the students which is monitored by IQAC. In this academic year, the students evaluated the teachers via a manual feedback system. However, the importance of online feedback system has been realised as the manual system makes it difficult to analyse the data and the same is being considered for the future.

2.13 Initiatives undertaken towards faculty development:

<i>Faculty / Staff Development Programmes</i>	<i>Number of faculty benefitted</i>
Refresher courses	155
UGC – Faculty Improvement Programme	Nil
HRD programmes	Nil
Orientation programmes	77
Faculty exchange programme	Nil
Staff training conducted by the university	Nil
Staff training conducted by other institutions	Nil
Summer / Winter schools, Workshops, etc.	249
Others	30

2.14 Details of Administrative and Technical staff

<i>Category</i>	<i>Number of permanent employees</i>	<i>Number of vacant positions</i>	<i>Number of permanent positions filled during the year</i>	<i>Number of positions filled temporarily</i>
'A' Class Non-teaching Administrative Staff	87	101	03	15 (Contract Basis)
B- Class-Clerical Cadre	409	152	7	--
'C' Class Non-teaching Administrative Staff	340	267	04	01 (Contract Basis)
Technical staff	295	376	17	72 (Contract Basis)

Criterion –III

3. Research, Consultancy and Extension

3.1 Initiatives of the IQAC in Sensitizing/Promoting Research Climate in the institution:

Research climate in the University is promoted by a Research Committee. The IQAC makes efforts in synchronizing the University's positive and pro-active policy of encouraging researchers to apply for funding from various agencies. Research schemes and projects are facilitated in various ways at the University level. Sanction and purchase procedures have been streamlined. Interdepartmental research collaborations are also encouraged. Awareness among the faculty and students regarding the various fellowships and research grants is increased. Faculty members are encouraged to organize conferences, seminars and workshops. The University has a strong culture of inviting eminent researchers to visit the campus. Such visits entail lectures and interaction with students and researchers. The University also invites distinguished persons, from India as well as abroad, to deliver lectures especially on the University's Foundation Day and the Annual Convocation Day.

3.2 Details regarding major projects:

Major Projects (UGC)

	<i>Completed</i>	<i>Ongoing</i>	<i>Sanctioned</i>	<i>Submitted</i>
<i>Number</i>	7	4	16	2
<i>Outlay in Rs. Lakhs</i>	52.39	30.36	191.78	0.12

Major Projects (DST)

	<i>Completed</i>	<i>Ongoing</i>	<i>Sanctioned</i>	<i>Submitted</i>
<i>Number</i>	6	17	8	1
<i>Outlay in Rs. Lakhs</i>	235.2	387.3	367.66	0.27

Major Projects (DBT)

	<i>Completed</i>	<i>Ongoing</i>	<i>Sanctioned</i>	<i>Submitted</i>
<i>Number</i>	4	8	2	4
<i>Outlay in Rs. Lakhs</i>	141.38	71.85	32.1	4.2

Major Projects (CSIR & State Government)

	<i>Completed</i>	<i>Ongoing</i>	<i>Sanctioned</i>	<i>Submitted</i>
<i>Number</i>	4	10	5	-
<i>Outlay in Rs. Lakhs</i>	49.41	702.00	26.78	-

3.3 Details regarding minor projects: Nil

3.4 Details on research publications:

	International	National	Others
Peer Review Journals	750	165	05
Non-Peer Review Journals	04	25	02
e-Journals	109	08	-
Conference proceedings	165	56	02

3.5 Details of Impact Factor of publications:

Range	0 – 8.19
Average*	1.73
h-index**	13
Nos. in Scopus***	430

*Average of articles published in journals with impact factors.

**h-index of papers published in 2015 as on 7th February, 2017.

***Nos. in Scopus in 2015.

3.6 Research funds sanctioned and received from various funding agencies, industry and other organisations:

<i>Nature of the Project</i>	<i>Duration Year</i>	<i>Name of the funding Agency</i>	<i>Total grant Sanctioned (Rs.)</i>	<i>Received (Rs.)</i>
<i>Major projects</i>	2015-16	UGC	2,16,30,316	1,52,27,816
	2015-16	DST	5,39,66,797	3,22,37,397
	2015-16	DBT	77,38,237	77,38,237
	2015-16	CSIR	33,00,283	33,00,283
<i>Minor Projects</i>			-	
<i>Interdisciplinary Projects</i>			-	
<i>Industry sponsored</i>			-	
<i>Projects sponsored by the University / College</i>			-	
<i>Students research projects (other than compulsory by the University)</i>			-	
<i>Any other (Specify)</i>			-	
Total	-	-	8,66,35,633	5,85,03,733

3.7 No. of books published:

With ISBN No.	20
Without ISBN No.	01
Chapters in Edited Books	75

3.8 No. of University Departments receiving funds from:

UGC-SAP	15
CAS	1
DST-FIST	3
DPE	Nil
DBT Scheme/funds	01

3.9 For colleges: N.A.**3.10 Revenue generated through consultancy: Rs. 3,38,40,000/-****3.11 No. of conferences organized by the Institution:**

Level	International	National	State	University
Number	04	14	04	24

3.12 No. of faculty served as experts, chairpersons or resource person's: 234**3.13 No. of collaborations:**

Level	International	National
Number	1	1

3.14 No. of linkages created during this year: 2**3.15 Total budget for research for current year in lakhs:**

From Funding agency	585.04
From Management of University/College	1429.06
Total	2014.1

3.16 No. of patents received this year:

<i>Type of Patent</i>		<i>Number</i>
National	Applied	3
	Granted	1
International	Applied	-
	Granted	-
Commercialised	Applied	1
	Granted	-

3.17 No. of research awards/ recognitions received by faculty and research fellows of the institute in the year

Total	International	National	State	University	Dist	College
56	26	25	2	2	1	-

3.18 No. of faculty from the Institution:

Who are Ph.D Guides	110
Students registered under them	174

3.19 No. of Ph.D. awarded by faculty from the Institution:159**3.20 No. of Research scholars receiving the Fellowships (Newly enrolled + existing ones) (CSIR, UGC, CSSGGS, DBT, DST)**

JRF	SRF	Project Fellows	Any other
113	126	17	238

3.21 No. of students Participated in NSS events:

University level	State level	National level	International level
800 volunteers	-	-	-

3.22 No. of students participated in NCC events:

University level	State level	National level	International level
50	05	-	-

3.23 No. of Awards won in NSS: Nil

3.24 No. of Awards won in NCC:

University level	State level	National level	International level
13	-	-	-

3.25 No. of Extension activities organized

University forum	NCC	NSS
09	05	23

3.26 Major Activities during the year in the sphere of extension activities and Institutional Social Responsibility

Lifelong Learning

The Department of Lifelong Learning organised one day workshops on Gift Wrapping skills, Advance & Non surgical techniques in hair and skin care, Art and Craft, Advance Skin Lightening treatment for pigmentation and Advance Makeup. Special Lecture on “Creative designing and innovative ideas” by Prof. Zaidi, Applied Art Designer, Jamia Millia Islamia University, New Delhi and another special lecture on “Importance of Creativity & Innovation” by Prof. (Dr.) S.S. Gill, Ex. Vice-Chancellor, BFHSU, Faridkot were conducted. Certificate course in Cutting & Tailoring of six months duration for female inmates at Central Jail, Amritsar is conducted by the department twice in a year. The department also organised a fete “*Libaas-e-Noor*” and an exhibition “*Rang-e-Parirahan*” during the session 2015-16.

National Service Scheme

NSS volunteers have undertaken frequent cleaning of University Campus under “*Swachh Bharat Abhiyan*”. Similarly, they have cleaned city’s Railway Station on 13th October, 2015. With the support of Traffic Police, Amritsar, NSS volunteers monitored the speed of vehicles with a radar gun in the campus on 3rd February, 2016 to educate the students to avoid over speeding. They have also conducted “Blood Donation Camp” and tree plantation drive in the campus. NSS units have celebrated “International Women Day” and organised a lecture on “Women Empowerment” on 8th and 9th March, 2016, respectively. NSS volunteers also celebrated Yoga Day on 21st June, 2016.

National Cadets Corps

NCC units organised “*Swachh Bharat Abhiyan*” and seminars on “Startup India”, “Blood Donation” and “Organ Donation”.

Criterion – IV

4. Infrastructure and Learning Resources

4.1 Details of increase in infrastructure facilities:

Facilities	Existing	Newly created	Source of Fund	Total
Campus area	33,66,983 sqft	1,42,303 sqft	-	3509286 sqft
Class rooms	235 in main campus	17 (University Business School building in main campus)	Construction of building, furniture, development works from University sources	Rs. 8.00 Crore
		03 (Asia House Building)	Grants from MPLAD Fund	Rs. 50.00 Lacs
Laboratories	226 in main campus.	02 (University Business School building in main campus)	Construction of building, furniture, development works from University Sources	As mentioned above.
Seminar Halls	07 in main campus	02 (University Business School building in main campus)		
No. of important equipments purchased (≥ 1.0 lakh) during the current year.	Annexure IV	92 (Teaching Departments in Main Campus and Four RCs)	University Budget, UGC, CSIR, UPE, DST, ICAR, DBT, AICTE, TEQIP, MPLAD	92
Value of the equipment purchased during the year (Rs. in Lakhs)	-	Rs. 3.29 Crore	University Budget, UGC, CSIR, UPE, DST, ICAR, DBT, AICTE, TEQIP, MPLAD	Rs. 3.29 Crore
Others	-	-	-	-

4.2 Computerization of administration and library

All the offices and central library are well equipped with computer, internet facilities along with WiFi.

4.3 Library services

	Existing		Newly added		Total	
	No.	Value	No.	Value	No.	Value
Text Books	33064	-	3331	19,32,903	36395	-
Reference Books	7377	-	638	407828	8015	-
e-Books	-	-	-	-	-	-
Journals	178 (Foreign-69 Indian-109)	70,35,638	-	-	178	93,06,675 (70,35,638+ 7,23,486+ 15,47,551)
e-Journals	a) 169 Journals + 7000 Conference Proceedings b) 15000+ through INFLIBNET	7,23,486 Free	-	-	-	
Digital Database	Scopus <i>Provided by INFLIBNET (Freely available)</i> 1. SciFinder Scholars 2. MathSciNet 3. Royal Society of Chemistry (6 Databases) 4. ISID (Institute for studies in Industrial Development) 5. JCCC(J- Gate) 6. Web of Science	15,47,551	-	-	01	
CD & Video	2108 (CDs with Books) 1324 (CDs with Ph.D Thesis/ M.Phil Dissertations)	Free	125 176	-	2233 2100	Free
Other (specify)	-	-	-	-	-	-

4.4 Technology up gradation (overall)

	<i>Total Computers</i>	<i>Computer Labs</i>	<i>Internet</i>	<i>Browsing Centres</i>	<i>Computer Centres</i>	<i>Office</i>	<i>Departments</i>	<i>Others</i>
Existing	1427	All the departments, offices and central library are well equipped with computers along with internet facilities.						
Added								
Total								

4.5 Computer, Internet access, training to teachers and students and any other programme for technology up gradation (Networking, e-Governance etc.)

- a) All the teacher rooms are well equipped with computers, printers and internet facility.
- b) Teachers and students have full access to internet and e-journals.
- c) Staff Development Programmes are regularly organized by UGC-Human Resource Development Centre of the University.

4.6 Amount spent on maintenance in lakhs:

ICT		
Campus Infrastructure and facilities	12692.18	2080.72
Equipment	(Total expenditure of the University excluding salary)	(Expenditure from grants from different funding agencies)
Others		
Total	14772.9	

Criterion – V

5. Student Support and Progression

5.1 Contribution of IQAC in enhancing awareness about Student Support Services

IQAC tries to increase the student's awareness about the Student Support Services by ensuring the allotment of Teacher mentors in each Department through the help of HODs. The students are encouraged to contact their respective mentor for any kind of guidance and help. In addition, the office of the Dean, Students' Welfare looks after the well-being of the students during their stay in the campus. The Placement Department provides career counselling and guidance by organising special lectures as well as the visits of various corporate/industrial houses for campus placement. To make the system more transparent and accessible to all stakeholders, the University uploads important information on its website. Similar support systems also exist in the regional campuses:-

5.2 Efforts made by the institution for tracking the progression

The Guru Nanak Dev University Alumni Association makes keen efforts to register all alumni as its members. In this regards, it has been made mandatory for all the final year students to obtain no due from the associations' office. Brief profiles of some the renowned alumni have been listed on the alumni website.

5.3 (a) Total Number of students

<i>UG</i>	<i>PG</i>	<i>Ph.D.</i>	<i>Others (Diploma/Certificate)</i>
6739	5203	1230	322

(b) No. of students outside the state: 961

(c) No. of international students: 02

- Demand ratio: 2.23
- Dropout %: 0.22%

Men	No	%
	6089	45.12

No	%
7405	54.88

Women

Last Year						This Year					
General	SC	ST	OBC	Physically Challenged	Total	General	SC	ST	OBC	Physically Challenged	Total
8691	1776	13	527	34	11041	9961	2162	23	634	23	12803

5.4 Details of student support mechanism for coaching for competitive examinations (If any)

All India Services Pre-Examination Training Centre and Centre of Preparation for Competitive Examinations provides coaching and other necessary facilities for training the students for competitive examinations.

No. of students beneficiaries: 604

5.5 No. of students qualified in these examinations

NET	SET/SLET	GATE	CAT	IAS/IPS etc	State PCS	UPSC	Others
10	0	0	0	02	11	0	43

5.6 Details of student counselling and career guidance

The teachers from various faculties in the University, who are attached with the All India Services Pre-Examination Training Centre and Centre of Preparation for Competitive Examinations for coaching and other services, are always available for the counselling and guidance of the students. In addition, as mentioned above, mentors have been assigned in each department for career guidance and student counselling.

No. of students benefitted: 66

5.7 Details of campus placement

<i>On Campus</i>			<i>Off Campus</i>
<i>Number of Organizations Visited</i>	<i>Number of Students Participated</i>	<i>Number of Students Placed</i>	<i>Number of Students Placed</i>
33	1735	798	38

5.8 Details of gender sensitization programmes

- The activities related to Gender Sensitization have mainly been carried out with the help of 'UGC-Human Resource Development Centre' of Guru Nanak Dev University, Amritsar.
- A workshop on 'Gender Sensitization and Diversity Management' for PhD/Postdoctoral Scholars/ and Teaching faculty was organised under the aegis of UGC-HRDC from 2 March, 2016 to 9 March, 2016.
- The Convener Internal Committee against Sexual Harassment (ICASH) delivered key-note address on "Issues in Gender Sensitization" and also acted as resource person on the topic "Diversity in the Context of Gender".
- The Convener, ICASH delivered a lecture to Gender Champions on "Gender Sensitization: the role and responsibilities of Gender Champions" at Khalsa College, Amritsar on 2 February, 2016.
- The Convener ICASH also delivered lecture on the 'Concept of Gender Champions' as introduced by UGC in all educational institutions of higher

education to teachers attending ‘Special Summer School’ on 2 June, 2016 organised by UGC-HRDC, Guru Nanak Dev University, Amritsar.

- f. Posters providing information on ‘Gender awareness issues’ besides giving telephone numbers of Helpline were displayed in all the departments as well as at strategic places within the campus in the interest of the students.
- g. Information regarding the structure and functioning of the Internal Committee against Sexual Harassment (ICASH) is presented on the University’s website.
- h. A complaint form is available on the website to register complaint. Any victim of harassment from any of the campuses of the University can lodge a complaint to the duly constituted internal committees against sexual harassment.

5.9 Students Activities

5.9.1 No. of students participated in Sports, Games and other events

University level	National level	International level
78	3	4

No. of students participated in cultural events

University level	National level	International level
85	48	2

5.9.2 No. of medals /awards won by students in Sports, Games and other events

Sports	University level	National level	International level
	23	2	-

Cultural	University level	National level	International level
	85	48	2

5.10 Scholarships and Financial Support

	Number of students	Amount (Rs.)
Financial support from institution	1086	5,19,18,590
Financial support from government	1063	60,27,026
Financial support from other sources	18	1,62,340
Number of students who received International/ National recognitions	-	-

5.11 Student organised / initiatives

Fairs	University level	National level	International level
	11	-	-

Exhibitions	University level	National level	International level
	02	01	-

5.12 No. of social initiatives undertaken by the students: 51

5.13 Major grievances of students (if any) redressed:

The University has Grievance Redressal Cell, responsible for dealing with the general grievances of the students. The Grievance Redressal Cell of the University has launched a website/portal for streamlining the Grievance Redressal activities in the session 2016-17. The nodal officer of the cell also looks after the grievances received via UGC portal. The cell has following members:

1. Dean Academic Affairs, Chairperson
2. Dean Students' Welfare
3. Head of Concerned Department/Office
4. Faculty/Staff Member of Concerned Department/Office (to be appointed by DAA/VC)
5. Special Invitee, if any (with the prior permission of DAA/VC as per circumstances)
6. Nodal Officer, Grievance Redressal Cell, Convener

Criterion – VI

6. Governance, Leadership and Management

6.1 State the Vision and Mission of the Institution

As an institution, this University exists on the universal principles of academic excellence and is providing continuous service to the country by imparting skills, knowledge and aptitude that are congruent with our cherished goals and needs. Therefore, the University intends to develop its faculty, curricular design, teaching, learning and research priorities, administration and resources by being up to date. This can be done by introducing certain changes, bringing modifications in the existing structures and strengthening healthy practices.

There have been four components of the mission of the University as stated in the Act. These are:

- a) Dissemination and production of knowledge in science and technology and other branches.
- b) Teaching and research on the philosophy of Guru Nanak Dev Ji.
- c) Promotion of research in Punjabi language and literature.
- d) Supporting and spreading education among the educationally backward communities.

Vision: The University aspires to be an important institution of learning and research, both at the national as well as international levels. It aims to achieve these goals through the following actions:

- a) Providing state of the art infrastructure, research facilities, qualified faculty and good ambience in the University campus.
- b) Integrating teaching and research programmes to promote holistic development of the students.
- c) Providing better access to education to underprivileged sections of the society through the development and expansion of the University through regional campuses and constituent colleges.
- d) To constantly engage the students in various activities to help them develop communication skills and leadership qualities and to make them understand public responsibilities, and the ability to work as a team for nation-building. This will lead to their overall development and growth.
- e) Building strong research infrastructure through the development of world-class laboratories and enriching the University library and the departmental libraries.

Following areas have been identified for the future research of the University:

- i. Focus Area: Materials Science: (a) Materials for Energy Conversion and Storage; and (b) Electronic and Optoelectronic materials.
- ii. Holistic Area: Health Care, Drug Development and Sports Medicine
- iii. Holistic Area: Environmental Management (in respect of Punjab)
- iv. Holistic Area: Comparative Literature, Languages and Cultural Formations
- v. Holistic Area: Development and Nation-Building
- vi. Genetic basis of cancer and Type2 *Diabetes mellitus* in Punjab

6.2 Does the Institution has a management Information System

Management Information System (MIS) is being used in some individual branches such as Examination Branch, Accounts Branch, Library, etc. They are using their own in-house developed and customised software.

6.3 Quality improvement strategies adopted by the institution for each of the following:

6.3.1 Curriculum Development

- a. The University has a systematic and institutionalised process for the design and development of curriculum by various bodies i.e. Board of Control (BOC)/Board of Studies (BOS), Faculty meeting and Academic Council.
- b. Various Expert Committees are constituted for the design of new courses.
- c. Inputs are also taken from various National Curricular Resources like UGC, AICTE, DST, DBT, etc. as well as from industry for the start of new courses in order to assure the employability, innovation, and to promote research component.
- d. Encourages the introduction of new programmes of studies.

6.3.2 Teaching and Learning

- a. The University plans and organises teaching, learning and evaluation schedule by preparing the Academic Calendar.
- b. Course outlines and recommended readings are uploaded on the University website.
- c. The learning techniques are constantly improved and changed on the initiatives of the faculty members and these are made part of the curricular design.
- d. Proactive policy of inviting experts and people of eminence to give lectures. Well known scholars delivered public lectures on the topic of their choice to students all through the academic year.
- e. The University organises seminars/conferences in which the students participate.
- f. Encourages blended learning by using e-learning resources. The use of multimedia in many courses has become part of the teaching-learning process.
- g. Students are encouraged to write assignments, make presentations and have practical exposure to ground realities outside of the University set up.
- h. Under the CBCS, the evaluation of the teachers by the students has been introduced for improving the teaching process in the University.

6.3.3 Examination and Evaluation

An integrated examination platform for pre-examination processes – Time Table generation, OMR, student list generation, invigilators, squads, attendance sheet, and online payment gateway exists in the University. It has a well-developed system functioning under the Conduct Branch. Similarly, the post-examination processes involving attendance capture, OMR-based exam result, auto processing, generic result processing, and certification are well managed under different sections of the Examination Branch in which Secrecy and Certificate sections are involved.

For doctoral level candidates from the department of engineering and technology, life sciences, physical planning and architecture, sciences, sports medicine and physiotherapy and the department of psychology, the thesis is evaluated by two Indian examiners and one foreign examiner. For all other departments, three examiners from India or abroad in the concerned specialisation evaluate the thesis. For all examinations under CBCS, teachers are responsible for the evaluation, and it is mandatory for them to show the evaluated answer books to the students and satisfy their queries, if any.

6.3.4 Research and Development

- a. The University has a Research Committee responsible for the promotion and development of research:
 - i. Vice-Chancellor (Chairman)
 - ii. Dean, Academic Affairs
 - iii. Director Research
 - iv. Dean, Faculty of Life Sciences
 - v. Dean, Faculty of Sciences
 - vi. Dean, Faculty of Arts & Social Sciences
 - vii. Dean, Faculty of Languages
- b. The University has a positive and pro-active policy of encouraging research by facilitating the implementation of Research Schemes/Projects.
- c. Interdepartmental research collaborations are also promoted.
- d. The University has a strong culture of inviting eminent researchers to enable interaction with their researchers.

6.3.5 Library, ICT and physical infrastructure / instrumentation

Library

- a. The University library has an Advisory Committee called 'Library Committee' having following composition:
 - i. Dean, Academic Affairs (Chairperson)
 - ii. All Heads of the University Teaching Departments
 - iii. Deans of the Faculties
 - iv. Two members of Academic Council to be nominated by the Vice-Chancellor for two years
 - v. One member of the Syndicate
 - vi. Two persons to be nominated by the Vice-Chancellor for two years
 - vii. University Librarian acts as Secretary
- b. Functions and Strategies of Library Committee are as under:
 - i. Suggestions are given by members for the improvement of services to the readers.

- ii. Frames regulations regarding the use of the library and scrutinizes its annual budget.
- iii. Approves rates, terms and conditions for the purchase of books and subscriptions to journals, periodicals, etc.
- iv. Conducts awareness programmes for its users.
- v. Students using digital lab are personally contacted to know about their problems while accessing e-resources.
- vi. Students are advised to send feedback through e-mail. Feedback is properly analysed and discussed with concerned section in the library.

ICT

The University has been continuously endeavouring to promote technology at all levels, viz. teaching, research, administration and support services. The use of online resources and multimedia for teaching, and installation of latest laboratory equipment has been undertaken to facilitate teaching and research. In the case of administration, the online availability of all kinds of forms, prospectus, the University Calendar, and the deposition of fee directly in the Banks anywhere in India are some of the technological steps undertaken to make administration more efficient.

Physical Facilities

- a. Construction and Maintenance Department of the University is responsible for monitoring the construction and maintenance of physical infrastructure.
- b. The infrastructural development is kept in tune with the growing needs of the University.
- c. Ensures optimal utilisation of the physical facilities through various committees.
- d. Puts all efforts to create conducive ambience for the faculty, researchers, students and its residents.
- e. Departmental laboratories are provided with latest instruments and other related infrastructure as per their necessity.
- f. Central instrumentation facility is upgraded from time to time.
- g. The library is constantly updated through the purchase of latest books, journals and online resources.
- h. All departments have been provided with facilities like, office room, common room and separate rest rooms for women students and staff.
- i. Special attention is being given to make the buildings differently abled-friendly.
- j. The University campus has well maintained auditoriums, for its academic and cultural needs.
- k. As far as sports are concerned, an area of 25 acres of land is earmarked for playfields on the University Campus.

6.3.6 Human Resource Management

The University has an institutionalised process of managing human resources. Teachers are encouraged to academically recharge and rejuvenate through participation in orientation courses, refresher courses, workshops, seminars and conferences. As and when required they are given appropriate leave such as study leave, duty leave, sabbatical leave, special casual leave for various academic purposes. There is also a provision in the calendar of the University that under certain circumstances the teachers could transform their medical leave into academic leave. The University has also provision to give travel grants to teachers so as to enable them to attend national and international seminars/conferences.

6.3.7 Faculty and Staff recruitment

All the Departments are asked well in advance about their faculty requirements for the next academic session. Based on their requirements, the new faculty is appointed by following the UGC guidelines for appointments. Special cognisance is taken to recruit faculty in emerging areas of research in social sciences, sciences and engineering courses.

6.3.8 Industry Interaction / Collaboration

The University has University-Industry Linkage Programme for having personal interactions with the industry to know their aspirations from the University and vice-versa so as to develop strategy for mutual benefits.

6.3.9 Admission of Students

Admission notices are published in both regional and national newspapers and on the University's website. The admission process of the University ensures transparency. The University Prospectus is made available on the website of the University with comprehensive information regarding the criteria of admission to various courses, number of seats, dates of filling the admission forms and the deadline for depositing the admission fee. All applications for admission along with admission fee are submitted online.

6.4 Welfare schemes for:

a) Teaching and Non-teaching

Among various welfare schemes, the first is the group insurance scheme under which a very small amount of money is deducted from the salary, but at the time of illness of the employee lump sum money is given to him/her. The University's Medical Committee periodically diagnoses the employees who suffer from chronic illnesses such as diabetes, hypertension, etc. and provide reimbursement of their expenses on medicines. In addition, provision of various kinds of loans exists in the University; for example, house construction loan, loan for purchase of vehicle, and class IV employees are given loan to buy food grains after *Rabi* crops are harvested. The University also provides for the interest free loan from the Provident Fund of the concerned employee in cases of certain contingencies.

b) Students

Regular cultural programmes are organised in the campus and the office of the Director, Youth Welfare looks after the cultural activities in coordination with the office of Dean Students' Welfare. An Inter-departmental cultural festival *Jashan* is organised every year. The University boasts of the availability of the best sports facilities for the students. Twenty four hours services of Health Centre are available to the students for any medical issues. To help students academically following types of Scholarships are also offered: Grant of Full Fee/Half Fee Concession, Grant of Facilities to Physically handicapped students, Sports incentives, Employee ward Concession, Brother-Sister Concession, Riots affected/terrorist affected Concession, Full Fee and Funds Concession to very poor students, Fee Concession to Children of Gallantry Award Winner and Poor Aid Fund.

6.5 Total corpus fund generated: Rs. 42,01,09,430

6.6 Whether annual financial audit has been done: Yes

6.7 Whether Academic and Administrative Audit (AAA) has been done?

Audit Type	External		Internal	
	Yes/No	Agency	Yes/No	Authority
Academic	Yes	NAAC	-	-
Administrative	Yes	NAAC	-	-

6.8 Does the University declare results within 30 days?

For UG Programmes	Yes
For PG Programmes	Yes

6.9 What efforts are made by the University for Examination Reforms?

Online application for absentee, award entry for practical and re-evaluation has been launched by the University to bring in more transparency and to speed up the result declaration process.

6.10 What efforts are made by the University to promote autonomy in the affiliated/constituent colleges?

For promoting autonomy to affiliated /constituent colleges, appropriate support and encouragement is provided both at the academic as well as administrative end. The University interacts with the affiliated colleges through the mediation of the College Development Council which is headed by the Dean. Meetings of the Council are periodically held. The University remains in constant touch with its affiliated colleges and informs and encourages them to apply for various grants. For the development of the curriculum for these colleges, the participation of the college faculty is ensured. The University has been encouraging the colleges to apply for the autonomous status and so far

only one college, namely, Khalsa College, Amritsar, has got the autonomous status. However, the University Act and Statutes do not provide for conferment of degrees by autonomous colleges.

6.11 Activities and support from the Alumni Association

The Alumni of the University have risen to great heights in diverse fields in the country and abroad. They are holding key positions in the Judiciary, IFS, IAS, PCS, Indian Police Services, Federal Services and Punjab Civil Services. Our alumni have made equally credible achievements in academics occupying the posts of Vice Chancellors of the universities and have also excelled in research in their respective fields and in multinational industries. Recently, one of our alumni has received the “NRI of the Year Award” in the Philanthropy Category by “Times Now”, the news channel.

Guru Nanak Dev University Alumni Association was setup in the year 2007. In the beginning, the offline membership facility was available and later on an online portal was also launched. The University has rededicated itself to the cause of the “Alumni Association” by launching a new website <http://gndualumni.net/> to strengthen the relationship with alumni settled in India and abroad. The website is updated with the achievements of the Alumni and the University from time to time. The website has become a platform for the Alumni to stay together through Alumni Association. In the current year, communication via SMS has also been initiated.

The Executive Council of the Association discusses progress/activities in its meetings. In addition, regular meetings with Teacher-in-charges of all the departments are also held. The Office of Dean Alumni Association organized the second University Level Alumni Meet on March 18, 2016. More than hundred alumni participated in this meet and shared their experiences and views with other participants. On this occasion, Dr. Gurtej Singh Sandhu, Director of Advanced Technology Developments at Micron Technology Inc., USA, the alumnus of Department of Physics, selected as the Distinguished Alumnus of Guru Nanak Dev University, for the Year 2016. He has pioneered a number of process technologies and has more than 800 U.S. Patents to his credit. He is also a fellow of IEEE.

6.12 Activities and support from the Parent – Teacher Association

Parents are informed regarding their wards as and when the need arises. Sometimes they are also requested to visit the University.

6.13 Development programmes for support staff

Short-Term Courses for the professional development are organized by UGC-Human Resource Development Centre from time to time.

6.14 Initiatives taken by the institution to make the campus eco-friendly

For the conservation of environment in the University various initiatives taken over a period of time are indicated below:

- i. Rain water harvesting channels are constructed in the administrative block and parking lots.
- ii. Organic manure production by vermi-composting of litter and kitchen waste introduced.
- iii. Sound proofing of the main generator located in the middle of academic complex undertaken to reduce noise levels <75 db.
- iv. Solar water heating systems are installed in the Guest House and Hostels.
- v. Solar street lights installed at main and regional campuses.
- vi. Conservation of plant diversity in the botanical garden.
- vii. First University in North India to achieve the target of zero discharge with the installation of waste water treatment plant of 2.5 million litres per day capacity using its low cost technology.

Criterion – VII

7. Innovations and Best Practices

7.1 Innovations introduced during this academic year which have created a positive impact on the functioning of the institution. Give details.

Following innovations have been introduced over a period of time which created a positive impact on the functioning of the university:

- i. Introduction of Choice-Based Credit System.
- ii. Transparency in evaluation by showing answer books to the students after evaluation.
- iii. Establishment of Emerging Life Science Block – The Central Instrumentation Facility.
- iv. Extending knowledge to communities through the Department of Lifelong Learning.
- v. Introduction of Capacity Enhancement Programme.
- vi. Recruitment of ex-servicemen to provide re-employment opportunities as security personnel.

7.2 Provide the Action Taken Report (ATR) based on the plan of action decided upon at the beginning of the year.

The University prepares a schedule for its various activities like admission, teaching, examination, vacations, etc. to be followed in the academic session. The Office of Dean (Academic Affairs) monitors the effective implementation of this schedule.

7.3 Give two Best Practices of the institution.

The requisite information is provided in the Annexure V.

7.4 Contribution to environmental awareness / protection.

NSS units run “*Swachh Bharat Abhiyan*” in the University. These units also conduct tree plantation drive in the campus.

7.5 Whether environmental audit was conducted?

No

7.6 Any other relevant information the institution wishes to add.

This University is promoting education in the fields of Sciences, Arts, Management, Information Technology, Industrial Technology, Environment, Planning and Architecture. To fulfil its commitment, the tuition fee charged from the students of the departments of Guru Nanak Studies and the School of Punjabi Studies has been waived off. Guru Nanak Dev University has emerged amongst the top ranking institutions of the country, as per the National Institutional Ranking Framework of the Ministry of Human Resource Development, Government of India. In its first such ranking, Guru Nanak Dev University secured 25th rank in the country amongst all Universities & Institutes (both Govt & private). It is important to mention here that the Guru Nanak Dev University is regularly ranked among the top universities of the country, according to academic surveys

conducted by various independent agencies. Recently, the University secured 7th rank in the category of multidisciplinary universities in North Zone as per the survey conducted by popular news magazine 'The Week'. The Ministry of Human Resource Development, Government of India has selected this University for establishment of a Centre under GIAN (Global Initiative of Academic Networks) Programme. The University is going to start University Institute of Technology (UIT) which will offer courses like Civil, Mechanical, Electrical and Chemical Engineering in the main campus. The University has always strived hard to make the benefits of Higher Education accessible to the rural masses. In consonance with this policy, a few colleges were set up in rural areas like Chungh, Mithra, Verka, Narot Jaimal Singh, Sathiala, Patti, Kishankot, Sujanpur, Pathankot, Nakodar and Phillaur under the Punjab Govt./UGC scheme beside three University Colleges running successfully at Nairi (Pathankot), Jalandhar and Mukhandpur. Four Regional Campuses—Gurdaspur, Jalandhar, Sathiala and Fattu Dzinga are also doing well. The University has established Emerging Life Sciences Block which has expensive scientific equipment for quality research. The newly constructed Sri Guru Granth Sahib Bhawan reflects the Sikh architecture. In this Centre, research work related to the studies of Sri Guru Granth Sahib is systematically undertaken. An Astro Turf for hockey, a swimming pool of international standards, a velodrome, a Gymnasium hall, shooting range and many other state-of-the art sports facilities are the prized possessions of the University.

8. Plans of institution for next year

- a) Keeping in view the cherished objective of the University in promoting research in areas of basic and applied sciences, it is planned to link research and teaching in applied sciences with the anticipated future developments. Future is predicted upon the present, and the present guides us to certain areas that are likely to become more important in basic and applied sciences. These are information technology, nanotechnology, biotechnology and health sciences, to name the few. The plan is to develop modern and updated infrastructure and highly qualified and competent faculty in these sciences. Focus will be on developing multi-disciplinary collaborative projects.
- b) The primary future orientation is to develop a strong research and teaching base by promoting research in the social and economic areas that have recently emerged and likely to weigh heavily on the Indian state and society. It is proposed to link the future research in social sciences with policy implications.
- c) Punjab has been the land of Gurus and the Sufi saints. They have been the citadels of a composite religious tradition in which equality of communities and men were the core values. We plan to continue to further strengthen our research and teaching in the areas of religious studies, secularism and Sufi and Sikh literature.

Prof. Navdeep Singh Sodhi
Director,
Internal Quality Assurance Cell,
Guru Nanak Dev University,
Amritsar.

Prof. Ajaib Singh Brar
Vice-Chancellor,
Guru Nanak Dev University,
Amritsar.

Abbreviations:

CAS	-	Career Advanced Scheme
CAT	-	Common Admission Test
CBCS	-	Choice Based Credit System
CE	-	Centre for Excellence
CGPA	-	Cumulative Grade Point Average
COP	-	Career Oriented Programme
CPE	-	College with Potential for Excellence
CPEPA	-	Centre with Potential for Excellence in Particular Area
DPE	-	Department with Potential for Excellence
DSW	-	Dean Students' Welfare
GATE	-	Graduate Aptitude Test
GOC	-	General Orientation Course
HOD	-	Head of the Department
NET	-	National Eligibility Test
PEI	-	Physical Education Institution
SAP	-	Special Assistance Programme
SF	-	Self Financing
SLET	-	State Level Eligibility Test
TEI	-	Teacher Education Institution
UPE	-	University with Potential for Excellence
UPSC	-	Union Public Service Commission

Academic Calendar for the Session 2015-16

1.	Summer Vacations	01.06.2015 to 03.07.2015
2.	Semester-I	06.07.2015 to 20.11.2015
3.	Examination Schedule	23.11.2015 to 14.12.2015
4.	Winter Vacations	21.12.2015 to 01.01.2016
5.	Semester-II	04.01.2016 to 02.05.2016
6.	Examination Schedule	Starts from 06.05.2016

Annexure III

Course/Programme wise distribution of pass percentage

Title of the Programme	Total no. of students appeared	Percentage of Students as per the following CGPA out of 10.0				
		CGPA > 8.42 (75% and above)	CGPA 6.75 - 8.42 (60% to < 75%)	CGPA 5.62 - 6.74 (50% to < 60%)	CGPA < 5.62 (< 50%)	Pass
B.Sc. (Hons.School) Chemistry, 2nd Semester	76	40.79	31.58	17.11	5.26	95
B.Sc. (Hons.School) Chemistry, 4th Semester	81	35.80	39.51	17.28	3.70	96
B.Sc. (Hons.School) Chemistry, 6th Semester	81	27.16	51.85	8.64	4.94	93
B.Sc (Hons.School) Economics, 2nd-Semester	63	15.87	31.75	22.22	12.70	83
B.Sc (Hons.School) Economics, 4th-Semester	52	21.15	48.08	25.00	1.92	96
B.Sc (Hons.School) Economics, 6th-Semester	47	21.28	55.32	19.15	4.26	100
Masters of Business Administration (FYIC), 2nd-Semester	86	20.93	32.56	23.26	13.95	91
Masters of Business Administration (FYIC), 4th-Semester	76	15.79	36.84	31.58	14.47	99
Master of Computer Applications (FYIC)/(FY & SMIC), 2nd-Semester	112	16.96	22.32	27.68	20.54	88
Master of Computer Applications (FYIC)/(FY & SMIC), 4th-Semester	92	10.87	40.22	36.96	11.96	100
B.Tech. (Food Technology)- 2nd Semester	57	22.81	38.60	14.04	15.79	91
B.Tech. (Food Technology)- 4th Semester	49	12.24	32.65	26.53	22.45	94
B.Tech. (Food Technology)- 6th Semester	37	24.32	27.03	43.24	5.41	100
B.Tech. (Food Technology)- 8th Semester	40	10.00	42.50	32.50	15.00	100
B.Tech. (Sugar & Alcohol Technology)-8th Semester	25	8.00	24.00	52.00	12.00	96
B.Tech. (Textile Chemistry)-8th Semester	15	13.33	46.67	40.00	0.00	100
B.Tech. (Computer Science & Engg.)-2nd Semester	199	23.12	35.68	23.12	14.07	96
B.Tech. (Computer Science & Engg.)-4th Semester	165	40.61	35.76	18.18	5.45	100
B.Tech. (Computer Science & Engg.)-6th Semester	165	47.27	44.85	7.88	0.00	100
B.Tech. (Computer Science & Engg.)-8th Semester	173	53.18	39.88	6.36	0.58	100
B.Tech (Electronics & Comm. Engg.)-2nd Semester	171	12.28	36.26	30.99	11.70	91
B.Tech (Electronics & Comm. Engg.)-4th Semester	158	27.85	48.10	17.09	4.43	97
B.Tech (Electronics & Comm. Engg.)-6th Semester	173	27.17	57.80	14.45	0.58	100
B.Tech (Electronics & Comm. Engg.)-8th Semester	176	27.27	61.93	10.80	0.00	100
B.Tech. (Urban & Regional Planning)-2nd Semester	22	31.82	45.45	22.73	0.00	100
B.Tech. (Urban & Regional Planning)-4th Semester	34	17.65	32.35	38.24	5.88	94
B.Tech. (Urban & Regional Planning)-6th Semester	38	18.42	42.11	31.58	7.89	100
B.Tech. (Urban & Regional Planning)-8th Semester	20	5.00	50.00	45.00	0.00	100

Bachelor of Architecture-2nd Semester	79	8.86	62.03	22.78	5.06	99
Bachelor of Architecture-4th Semester	74	0.00	56.76	33.78	8.11	99
Bachelor of Architecture-6th Semester	76	2.63	52.63	35.53	9.21	100
Bachelor of Architecture-8th Semester	72	1.39	43.06	44.44	11.11	100
Bachelor of Architecture-10th Semester	67	2.99	67.16	26.87	2.99	100
B.Sc.(Hons.School)Human Genetics, 2nd Semester	23	21.74	39.13	30.43	4.35	96
B.Sc.(Hons.School)Human Genetics, 4th Semester	32	21.88	53.13	21.88	0.00	97
B.Sc.(Hons.School)Human Genetics, 6th Semester	33	6.06	51.52	33.33	9.09	100
B.Sc.(Honours School) Physics, 2nd Semester	82	29.27	30.49	18.29	2.44	80
B.Sc.(Honours School) Physics, 4th Semester	58	36.21	46.55	8.62	5.17	97
B.Sc.(Honours School) Physics, 6th Semester	47	19.15	63.83	17.02	0.00	100
B.Tech. (Electronics Communication System Engineering), 4th Semester	17	11.76	11.76	58.82	17.65	100
B.Tech. (Electronics Communication System Engineering), 6th Semester	36	8.33	63.89	27.78	0.00	100
B.Tech. (Electronics Communication System Engineering), 8th Semester	52	21.15	53.85	21.15	3.85	100
Bachelor of Pharmacy, 2nd Semester	42	28.57	40.48	16.67	9.52	95
Bachelor of Pharmacy, 4th Semester	45	31.11	31.11	22.22	8.89	93
Bachelor of Pharmacy, 6th Semester	44	25.00	61.36	13.64	0.00	100
Bachelor of Pharmacy, 8th Semester	47	29.79	44.68	23.40	2.13	100
Bachelor of Laws (Hons) (Three Year Course), 4th Semester	131	0.00	21.37	43.51	32.82	98
Bachelor of Laws (Hons) (Three Year Course), 6th Semester	125	2.40	37.60	42.40	16.80	99
B.A. LL.B. (Hons.)-FYIC, 2nd Semester	117	0.00	41.03	30.77	18.80	91
B.A. LL.B. (Hons.)-FYIC, 4th Semester	96	1.04	27.08	50.00	20.83	99
Bachelor of Library & Information Science (Hons.), 2nd Semester	26	3.85	50.00	30.77	15.38	100
B.A. (Hons. School) Punjabi, 2nd-Semester	32	15.63	18.75	28.13	25.00	88
B.A. (Hons. School) Punjabi, 4th-Semester	24	12.50	45.83	29.17	12.50	100
B.A. (Hons. School) Punjabi, 6th-Semester	25	16.00	36.00	32.00	12.00	96
B.Tech. (Computer Engineering), 4th Semester	48	12.50	52.08	18.75	16.67	100
B.Tech. (Computer Engineering), 6th Semester	44	25.00	45.45	27.27	2.27	100
B.Tech. (Computer Engineering), 8th Semester	56	28.57	60.71	10.71	0.00	100
B.A. (Hons.) Social Sciences, 2nd Semester	84	29.76	32.14	25.00	9.52	96
B.A. (Hons.) Social Sciences, 4th Semester	85	18.82	57.65	18.82	4.71	100
B.A. (Hons.) Social Sciences, 6th Semester	80	21.25	47.50	26.25	5.00	100

Bachelor of Laws (Three Year Course), 2nd Semester	136	0.00	33.09	29.41	29.41	92
Master of Computer Applications (FYIC)/(FY & SMIC), 6th-Semester	93	17.20	47.31	35.48	0.00	100
Master of Computer Applications (FY & SMIC), 10th-Semester	80	25.00	47.50	26.25	0.00	99
Master of Commerce, 2nd-Semester	119	12.61	46.22	30.25	10.08	99
Masters of Business Administration, 2nd-Semester	86	22.09	37.21	23.26	13.95	97
Masters of Business Administration, 4th-Semester	91	16.48	46.15	30.77	5.49	99
M.Sc.(Hons.School) Economics, 2nd-Semester	76	22.37	47.37	21.05	3.95	95
M.Sc.(Hons.School) Economics, 4th-Semester	76	22.37	64.47	11.84	0.00	99
Master of Business Economics, 2nd-Semester	19	15.79	52.63	15.79	5.26	89
Master of Computer Applications(TYC), 2nd-Semester	60	36.67	40.00	21.67	1.67	100
Master of Computer Applications(TYC), 4th-Semester	54	38.89	51.85	9.26	0.00	100
Master of Computer Applications(TYC), 6th-Semester	60	43.33	51.67	5.00	0.00	100
Master of Computer Applications (FYIC)/(FY & SMIC), 8th-Semester	83	21.69	51.81	22.89	2.41	99
Master of Computer Applications (FY & SMIC), 11th-Semester	1	0.00	0.00	0.00	100.00	100
M.Tech. (Urban Planning), 2nd-Semester	20	20.00	75.00	5.00	0.00	100
M.Tech. (Urban Planning), 4th-Semester	21	19.05	80.95	0.00	0.00	100
M.Sc. Biotechnology, 2nd Semester	18	22.22	55.56	11.11	0.00	89
M.Sc. Biotechnology, 4th Semester	19	26.32	47.37	26.32	0.00	100
M.Sc. (Hons.School) Chemistry, 2nd Semester	60	11.67	46.67	26.67	13.33	98
M.Sc. (Hons.School) Chemistry, 4th Semester	32	18.75	56.25	25.00	0.00	100
M.Sc. (Food Technology), 2nd Semester	29	37.93	44.83	17.24	0.00	100
M.Sc. (Food Technology), 4th Semester	25	24.00	44.00	24.00	8.00	100
M.Sc. (Hons) Environmental Sciences, 4th Semester	23	30.43	43.48	26.09	0.00	100
Master of Pharmacy, 2nd Semester	21	33.33	57.14	4.76	4.76	100
Master of Pharmacy, 4th Semester	24	41.67	58.33	0.00	0.00	100
Masters Degree in Sports Physiotherapy, 4th Semester	18	33.33	66.67	0.00	0.00	100
M.Sc. (Hons.) Physics, 4th Semester	59	57.63	42.37	0.00	0.00	100
M.Sc. (Hons.) Microbiology, 4th Semester	42	4.76	64.29	30.95	0.00	100
M.Sc. (Hons.) Molecular Biology & Biochemistry, 4th Semester	33	12.12	54.55	24.24	9.09	100
M.Sc. (Hons.) Zoology, 4th Semester	45	15.56	64.44	17.78	2.22	100
M.Sc. (Hons.) Fermentation & Microbial Technology, 4th Semester	10	20.00	60.00	20.00	0.00	100
M.Sc. (Hons.) Human Genetics, 4th Semester	5	0.00	40.00	60.00	0.00	100

M.Sc. (Hons.) Botany, 4th Semester	49	24.49	51.02	24.49	0.00	100
M.Tech. (Computer Science & Engineering) Two Year Course, 2nd Semester	58	36.21	39.66	15.52	6.90	98
M.Tech. (Computer Science & Engineering) Two Year Course, 4th Semester	41	80.49	17.07	0.00	2.44	100
M.B.A.(HONS.) Financial Services, 4th Semester	42	14.29	50.00	30.95	4.76	100
M.B.A.(HONS.) Marketing and Retail Management, 4th Semester	25	8.00	56.00	32.00	4.00	100
Master in Planning (Infrastructure), 2nd Semester	9	22.22	44.44	33.33	0.00	100
Master in Planning (Infrastructure), 4th Semester	17	35.29	47.06	17.65	0.00	100
Master of Computer Applications (TYC)(Software Systems), 4th Semester	15	66.67	26.67	6.67	0.00	100
Master of Computer Applications (TYC)(Software Systems), 6th Semester	20	60.00	40.00	0.00	0.00	100
Masters in Hospital Administration, 2nd Semester	19	15.79	73.68	10.53	0.00	100
Masters in Hospital Administration, 4th Semester	25	12.00	72.00	12.00	0.00	96
M.Sc. (Hons.) Chemistry, 4th Semester	50	8.00	58.00	26.00	2.00	94
M.Sc. (Hons.) Mathematics, 4th Semester	43	30.23	46.51	20.93	2.33	100
LL.M.(Hons.), 4th Semester	22	0.00	81.82	18.18	0.00	100
Master of Arts in Political Science (Hons), 4th Semester	48	14.58	47.92	35.42	0.00	98
Master of Arts in Sociology (Hons.), 4th Semester	20	0.00	35.00	40.00	25.00	100
Master of Arts in Psychology (Hons.), 4th Semester	26	26.92	42.31	23.08	7.69	100
Master of Arts in English (Hons), 4th Semester	38	10.53	36.84	39.47	13.16	100
Master of Arts in Music (Instrumental) (Hons.), 4th Semester	14	64.29	35.71	0.00	0.00	100
Master of Arts in Music (Vocal) (Hons.), 4th Semester	21	47.62	52.38	0.00	0.00	100
M.Phil. Punjabi , 2nd Semester	20	40.00	60.00	0.00	0.00	100
M.Phil. Music (Vocal & Inst.), 2nd Semester	29	75.86	17.24	0.00	0.00	93
M.Phil. Sanskrit, 2nd Semester	9	33.33	55.56	0.00	0.00	89
M.Phil. Hindi, 2nd Semester	20	0.00	100.00	0.00	0.00	100
Master of Arts in Punjabi (Hons.), 4th Semester	49	40.82	53.06	6.12	0.00	100
Master of Arts in Religious Studies (Hons.), 4th Semester	14	35.71	57.14	7.14	0.00	100
Master of Arts in Sanskrit (Hons.), 4th Semester	5	80.00	20.00	0.00	0.00	100
Master of Arts in History (Hons.), 4th Semester	29	10.34	65.52	24.14	0.00	100
Master of Arts in Hindi (Hons.), 4th Semester	31	25.81	61.29	12.90	0.00	100
M.Tech. (Software System), 4th Semester	42	61.90	33.33	4.76	0.00	100
M.Phil. Religious Studes, 2nd Semester	12	75.00	25.00	0.00	0.00	100
Master of Commerce(Hons), 4th-Semester	116	13.79	47.41	29.31	8.62	99

Master of Business Economics (Hons), 4th-Semester	26	23.08	42.31	23.08	7.69	96
M.Sc. (Hons. School) Physics, 2nd-Semester	32	56.25	21.88	21.88	0.00	100
M.Sc. (Hons. School) Physics, 4th-Semester	32	68.75	28.13	3.13	0.00	100
Master of Arts in Philosophy (Hons.), 4th-Semester	13	61.54	30.77	7.69	0.00	100
Post Graduate Diploma In Mental Health Counselling, 2nd Semester	10	30.00	70.00	0.00	0.00	100
M.Tech. (ECE*) Specialization (Communication Systems), 2nd Semester	31	41.94	51.61	6.45	0.00	100
M.Tech. (ECE*) Specialization (Communication Systems), 4th Semester	29	48.28	48.28	3.45	0.00	100
M.Sc. (Honours School) Human Genetics, 2nd Semester	20	40.00	45.00	5.00	10.00	100
M.Sc. (Honours School) Human Genetics, 4th Semester	18	22.22	55.56	16.67	5.56	100
Master of Arts in Education (Hons.), 4th Semester	10	40.00	50.00	10.00	0.00	100
Master in Architecture (Urban Design), 2nd Semester	5	0.00	40.00	40.00	20.00	100
Master in Architecture (Urban Design), 4th Semester	4	25.00	0.00	75.00	0.00	100
M.P.A. Music (Vocal), 2nd Semester	27	55.56	44.44	0.00	0.00	100
M.P.A. Music (Instrumental), 2nd Semester	14	42.86	57.14	0.00	0.00	100
Master of Arts in Psychology, 2nd Semester	37	32.43	45.95	16.22	2.70	97
M.B.A. Financial Services, 2nd Semester	46	21.74	60.87	15.22	2.17	100
M.B.A. Marketing and Retail Management, 2nd Semester	31	6.45	22.58	45.16	25.81	100
Master of Arts in Political Science, 2nd Semester	46	10.87	58.70	26.09	4.35	100
M.Sc. Chemistry, 2nd Semester	53	11.32	32.08	41.51	11.32	96
Master of Arts in English, 2nd Semester	47	2.13	27.66	23.40	25.53	79
Master of Arts in History, 2nd Semester	28	3.57	50.00	42.86	3.57	100
Master of Arts in Hindi, 2nd Semester	27	0.00	70.37	25.93	3.70	100
Master of Arts in Philosophy, 2nd-Semester	11	81.82	18.18	0.00	0.00	100
Master of Arts in Religious Studies, 2nd Semester	11	90.91	9.09	0.00	0.00	100
Master of Arts in Sanskrit, 2nd Semester	8	75.00	25.00	0.00	0.00	100
Master of Arts in Sociology, 2nd Semester	23	4.35	13.04	43.48	39.13	100
M.Sc. Molecular Biology & Biochemistry, 2nd Semester	49	14.29	53.06	18.37	10.20	96
M.Sc. Human Genetics, 2nd Semester	15	26.67	33.33	33.33	6.67	100
LL.M. (One Year Course), 2nd Semester	35	0.00	0.00	0.00	100.00	100
Master of Arts in Punjabi, 2nd Semester	50	36.00	58.00	2.00	4.00	100
M.Sc. Microbiology, 2nd Semester	43	9.30	41.86	30.23	16.28	98
M.Sc. Fermentation & Microbial Technology, 2nd Semester	20	10.00	15.00	20.00	50.00	95

M.Sc. Physics, 2nd Semester	60	26.67	55.00	15.00	3.33	100
M.Sc. Zoology, 2nd Semester	45	26.67	37.78	24.44	8.89	98
M.Sc. Environmental Sciences, 2nd Semester	25	12.00	56.00	24.00	4.00	96
Master of Library & Information Science, 2nd Semester	16	12.50	56.25	31.25	0.00	100
M.Sc. Botany, 2nd Semester	48	33.33	50.00	16.67	0.00	100
Master of Arts in Education, 2nd Semester	8	12.50	75.00	12.50	0.00	100
M.Sc. Mathematics, 2nd Semester	51	11.76	35.29	15.69	19.61	82
Master in Physiotherapy (Sports), 2nd Semester	20	0.00	90.00	10.00	0.00	100
Post Graduate Equivalence Bridge Course in Business Administration, 1st Semester	2	50.00	0.00	50.00	0.00	100
Pre Ph.D. Course in Commerce, 2nd Semester	9	77.78	22.22	0.00	0.00	100
Pre Ph.D. Course in Food Technology, 2nd Semester	3	66.67	33.33	0.00	0.00	100
Pre Ph.D. Course in Sociology, 2nd Semester	9	11.11	88.89	0.00	0.00	100
Pre Ph.D. Course in English, 2nd Semester	1	100.00	0.00	0.00	0.00	100
Pre Ph.D. (Planning), 2nd Semester	3	100.00	0.00	0.00	0.00	100
Pre Ph.D. Course in Hindi, 2nd Semester	1	100.00	0.00	0.00	0.00	100
Pre Ph.D. Course in Architecture, 2nd Semester	2	100.00	0.00	0.00	0.00	100
Pre Ph.D. Course in Business Administration, 2nd Semester	3	66.67	33.33	0.00	0.00	100

List of Existing Important Equipment

UPE: Material Science

High Resolution Transmission Electron Microscope
Vibrating Sample Magnetometer
Pulse Laser Deposition System
Vector network Analyser
Spectroscopic Ellipsometry
Dynamic Light Scattering
Brunauer-Emmett-Teller (BET) surface analyzer
Semiconductor IV-CV Characterisation Systems
Software Virtual Nano Lab Silvaco Quantum 3D
PVD System (Multi target) with electron beam gun
SAXS and high temperature stage

UPE: Health Care, Drug Development and Sports Medicine

NMR spectrometer (500 MHz)
Motion Analysis Equipment
Flash Chromatography

UPE: Environmental Management

Next Generation Sequencer
Accessories of SEM
Atomic Absorption Spectrometer
Amino Acid Analyser
CHNSO Analyzer
Preparative/ Semi-prep. HPLC
Ion Chromatography
Freeze Drier
Mobile Environmental Analysis lab
Software for Remote Sensing
Five parts Haematology Analyser
Standard Radon Equipment

CPEPA

Cytogenetic Workstation
Real Time PCRs (2 nos)
Ultracentrifuge

PURSE

Automated DNA Sequencer 24 capillary
Scanning Electron Microscope (SEM)

DBT

Inverted Microscope with Fluorescent Attachment

University Funds

Confocal Microscope
LC MS system
Scanning Electron Microscope

Flow Cytometer

List of Equipment in the Departments:

Faculty of Life Sciences

Department of Biotechnology

1. Gel Documentation System
2. High Speed Centrifuge
3. Deep Freezer -80°C
4. UV-VIS Spectrophotometer
5. CO₂ Incubators
6. Stereo Microscope
7. qRT-PCR Machine
8. Walk-in Cold Room
9. Cryomicrotome
10. ELISA Plate Reader
11. Inverted Microscope
12. Upright Fluorescent Microscope
13. HPLC
14. Incubator Shaker
15. Refrigerated Centrifuge
16. AKTA Prime Plus
17. 3100 Offgel Fractionator
18. Protein Purification System
19. Distillation Unit
20. Laminar Flow Hoods
21. Lyophilizer
22. Pulse field Electrophoresis Apparatus
23. Fermenter
24. Real time PCR System
25. Automatic Liquid Scintillation Counter
26. Horizontal Laminar Flow
27. Laminar Air Flow Cabinet
28. Transillunator
29. Microprocessor Photosynthesis Control Panel
30. Gene Pulser Excel Electrophoration System
31. GL 115 Pathology Work Station

Department of Botanical & Environmental Sciences

1. AAS
2. GCMS
3. Gel Docs
4. PCR
5. Deep freezer -40°C, -80°C
6. CO₂ incubator
7. Lyophilizer
8. Inverted microscope
9. Infra Red Gas Analyzer
10. Rotary evaporator
11. Centrifuge
12. Spectrophotometer

13. Vapour pressure osmometer
14. Fluorescent microscope
15. Seed Germinator
16. Colony Counter

Department of Human Genetics

1. DNA Sequencer ABI-PRISM 377
2. Fluorescent Microscope
3. Cytogenetic Work Station Fluorescent Microscope BX51 (CytovisionSoftware)
4. Cytogenetic Work Station with AHBT3 Olympus Microscope (VysisSoftware)
5. Water Purification System Elix 3 (Millipore)
6. Trinocular Inverted Microscope
7. Photographic System Model PM 30 (Olympus)
8. Electronic Balance
9. Icematic Flaker
10. Stadiometer
11. Harpenden-Type Calliper
12. Lange's Skinfold Callipers
13. Electronic Weighing Machine Gym Model
14. Blood Analyzer Semi Automatic
15. Blotting System
16. Refrigerated Centrifuge
17. Body Fat Analyzer
18. Laminar Hoods
19. B.O.D. Incubator
20. Deep Freezer -20°C
21. Gel Documentation System
22. Hybridization Incubator
23. Thermocyclers
24. CO₂ Incubators
25. ELISA Systems
26. RT-PCR
27. Electrophoretic Systems
28. Nano-Drop
29. Thermobrite
30. Personal Exposimeter
31. Cytospin
32. Deep Freezer-80°C

Department of Microbiology

1. High Performance Liquid Chromatography
2. Fast Protein Liquid Chromatography
3. Lyophilizer
4. Two Dimensional Gel Electrophoresis
5. Gradient PCR
6. Bench Scale Fermentor
7. Centrifuge C-24BL
8. Gas Chromatography
9. Flash Chromatography
10. Rota Vapour

11. Sonicator
12. Freezer-20°C
13. Freezer-80°C
14. Plant Growth Chamber
15. Spectrophotometer UV1601
16. Fluorescent Plate Reader
17. Protein Purification System
18. Incubator Shakers
19. Anaerobic Chamber

Department of Molecular Biology & Biochemistry

1. Water Purification System
2. Refrigerator Centrifuge
3. Thermocycler
4. UV-VIS spectrophotometer
5. Microscope Fluorescence
6. FPLC
7. 2D Electrophoresis
8. Gel Documentation System

Department of Pharmaceutical Sciences

1. Particle size Analyser
2. Rheometer
3. Brookfield Viscometer
4. Non Invasive Blood Pressure Measuring
5. HPLC
6. J.R.
7. Diffusion Cell
8. Dissolution apparatus autosampler
9. Probe Sonicator
10. Freezer Drier
11. FTIR
12. UV Spectrophotometer
13. Rotary tablet machine
14. Rotary Evaporator

Department of Zoology

1. Turbidity meter and Thermoreactor
2. Muffle furnace 150x150x300mm
3. Double Beam UV-VIS spectrophotometer
4. Nikon Trinocular Research Microscope Model E20 with accessories
5. Benchtop freezer dryer
6. Water Purification System with prefilter, ultrapure, RO System
7. Humidity Chamber
8. Microplate Reader
9. Wildlife Photography equipment
10. Microprocessor based UV Visible Spectrophotometer
11. BOD incubator
12. Automatic Microplate Absorbance Reader
13. Vertical Laminar Flow Cabinet
14. Horizontal Laminar Flow
15. Deep Freezer -40°C

16. Refrigerated Incubator Shaker

Faculty of Sciences

Department of Chemistry

1. JEOL-FT NMR–AL 300 MHz spectrophotometer
2. Varian fluorospectrophotometer
3. Varian IR spectrophotometer
4. (TGA)/ differential scanning calorimetric analyzer (DSC)
5. CHNS analyzer
6. Polarized optical microscope (POM)
7. Chiral HPLC
8. Bruker's Apex-II CCD diffractometer
9. UV-vis spectrophotometer
10. Biotage initiator microwave
11. HP-TLC
12. X-ray powder diffractometer
13. Tensiometer
14. Fluorescence life time TSPC

Department of Food Science & Technology

1. UV/VIS Spectroscopy
2. Freeze Drier
3. Differential Scanning Calorimeter
4. Rapid Visco-Analyzer
5. Spray Drier
6. GPC
7. Hunter Color Lab.
8. Water Activity Meter
9. HPLC
10. Farinograph
11. Viscoamylograph
12. Alveograph
13. Falling Number Apparatus
14. McGill Sheller/Polisher
15. Komat Oil Expeller
16. Hammer Mill
17. Barbender Flour Mill
18. Reel Type Baking Oven
19. Fermenter with Refrigeration Unit
20. Brookfield Viscometer
21. Dough Mixer
22. Cabinet Driers
23. Texture Analyser
24. Dynamic Rheometer
25. Evaporator
26. Fluidized Bed Drier
27. Single Screw Extruder
28. FTIR
29. Mixograph
30. Atomic Absorption Spectrometer
31. Instron Universal Testing Machine

32. Bioreactor
33. Electrophoresis

Department of Physics

1. X-Ray Diffraction
2. Photoluminescence
3. UV-Visible
4. FTIR
5. Atomic Absorption Spectroscope
6. Atomic Force Microscope
7. Raman Spectrophotometer
8. RF Sputtering Unit
9. Planetary Ball Mill
10. Thermal Evaporation Unit
11. Sputtering Unit
12. Source Meter
13. High Temperature Furnace
14. LCR Meter

Faculty of Sports Medicine & Physiotherapy

Department of Sports Medicine & Physiotherapy

1. Biomechanical EMG Analyser
2. Isotonic Strength Performance System
3. Computer Multimedia Projector
4. Dual Biaxial Electronic Cyclometer
5. Gas Analyser (VO₂ Max)
6. Ergometer Cycle
7. Reaction / Movement Time Panel
8. Isotonic Strength Performance System
9. Treadmill Test
10. Semi Automatic Blood Chemistry Analyser
11. Biofeedback System Procomp 5
12. Multiple Site Bone Strength Sonometer
13. USB A/D Converter
14. Zephyr Bioharness Team System
15. Ultrapure Water Purification System
16. Fixed Channel for MyoSystem
17. Body Comparison Analyser
18. Portable Lactate Analyser
19. Computerize Spirometer
20. Mini Omni Bone Sonometer
21. Neurovision Hardware Software Kit
22. On field Motion Analysis System
23. Stability Platform with Digital Control
24. Cervical Spine Evaluation & Training System
25. Telemetric VO₂ Max System
26. Functional Monitoring & Physical Activity System

27. Isometric Evaluation System for Upper Body
28. Gait Analysis System
29. 16 – Channel Telemetric EMG System
30. Anthropometric Rods
31. Harvest SmartPrep 2 MCS
32. Arthometer for Knee
33. Microwave Therapy
34. Isokinetic System
35. Centrifuge plus Rotor Head
36. Digital UV Spectrophotometer

Best Practice: I**Title of the Practice: University Health Centre**

University Health Centre was established in 1973 with the purpose to provide medical facilities to teaching fraternity, students as well as non-teaching staff, retirees/pensioners and residents of the campus. Health Facilities available in the University Health Centre are; Morning and evening medical OPD which remains open even on gazetted/declared holidays, 24x7 Emergency, Daily Dental and Ayurvedic OPD, A full-fledged Physiotherapy Centre, Started night medical facility to girl students by establishing a medical room in the Girls' Hostel, where a Staff Nurse remains available from 8 p.m. to 8 a.m. even on Sundays and holidays, Para-Medical Staff deputed to sports ground as and when tournaments are organized in the University campus, Ambulance facility is also available. In view of directions of the Punjab Pollution Control Board, for bio-medical waste disposal, University is registered with the Punjab Pollution Control Board and has entered into an agreement with its authorized firm by paying annual charges. Non-biomedical waste is also disposed off in a scientific manner in the electrically operated incinerator installed in the University Health Centre.

Diagnostic Medical Facility and Radiology Wing:

Full fledged Clinical Laboratory (all tests done on Fully Automated Random Access Chemiluminiscense Analyzer, Five Part Differential Haematology Cell Counter, Automated Random Access Blood Chemistry Analyzer, Electrolyte Analyzer, Coagulometer, Urine Chemistry Analyzer), Treadmill Test (TMT), Pulmonary Lab (Spirometry), ECG (done on Fully Computerized Digital Electrocardiograph), Digital EEG, Digital X-ray, Bone Mineral Density and Whole Body Composition (DEXA Scan), Mammography, Dental X-ray (RVG), Orthopentomogram (OPG), Diagnostic Ultrasonography (including Endocavitary & 4D Scan), Whole Body Colour Doppler (including Echocardiography), All X-ray equipments registered with Atomic Energy Regulatory Board (AERB), Govt. of India for 5 years, The rooms in which the X-ray equipments are installed, built as per AERB guidelines with Lead sheets in the walls and the doors, Radiation protective devices (Lead aprons, Lead gloves, Thyroid Shield, Gonadal Shield, Lead Screens, Lead Glass) available, Staff associated with the use of X-ray equipments provided Personal Radiation Monitoring Devices (TLD Badges) through BARC Accredited lab, All the three Ultrasound machines registered under PNDDT Act. with the Civil Surgeon, Amritsar.

List of Equipments installed in the Health Centre;

State-of-the-art 800 mA Fluoroscopic X-ray unit, Hot Air Oven, DCA Vantage HBA₁C Analyzer, Semiautomatic Blood Chemistry Analyzer, Fully Computerized Dental Chair with RVG unit, DEXA Machine: Bone Mineral Density Test and the Whole Body Composition, Fully Computerized Digital Mammography machine, Ortho Pentomography Unit (OPG), Whole Body Colour Doppler Machine, Fully Automated Random Access Chemilumeniscense Analyzer, Pulmonary Function Tests (Spirometry) and Treadmill Test

(TMT), Fully Automated Laboratory Clinical Digital Analogue Converting Analyzer, Fully Automatic Five Parts Hematology Cell Counter Lab Analyzer, Electrolyte Analyzer, and Coagulometer, Digital EEG Unit, Quality Assurance (QA) test of all the machines is done periodically to assess the quality and accuracy of the tests being conducted in the Health Centre. For this purpose, preventive maintenance and servicing is being done by the qualified engineers of the manufacturing firm on the AMC/CAMC/Warranty every year.

Income

The lab and radiological investigations and other tests are available in the Health Centre for University patients on very marginal rates as being charged by the Punjab Govt. A sum of approx. Rs. 20.25 lacs from lab investigations, X-ray, Ultrasound, ECG has been collected during 2015. Income has been got audited from the audit department and fully tallied with the register and receipt.

Future Vision and Infrastructure Development of the Health Centre

The construction work of phase-2 expansion plan of the University Health Centre costing about Rs. 24 lacs and comprising indoor complex including construction male, female and isolated wards, has been approved during the XII Plan of UGC, which is expected to start shortly. The Health Centre also plans to introduce Microbiology (Blood Culture and Urine Culture) and Histopathology tests. For conducting these tests, patients are being referred to outside labs. This facility will not only save the University exchequer but also would be convenient for the patients to get their tests under one roof of the University Health Centre lab at Punjab Govt/PGI rates. There is also a proposal to set up a counselling centre in the health Centre to provide counselling to students suffering from various exam related stress problems and other mental ailments.

Best Practice: II

Title of the Practice: Capacity Enhancement Programme

Guru Nanak Dev University passed resolution vide Syndicate meeting 30-10-2012 para No. 30 to change nomenclature of Distance Education Programme to Capacity Enhancement Programme. This program aimed to impart education to students especially girls near their doorsteps including remote rural and border areas. The ordinances, syllabi, examinations, evaluation etc. of this programme are the same as of regular programme. Unrestricted mobility of students between this programme and conventional modes of education is the merit of this programme. The quality in delivery of educational instructions is ensured by way of regular inspection and supervision of Associate Institutes. Students of Associate Institutes are encouraged to participate in extra curriculum activities and they also take part in Cultural/Youth Welfare programmes and festivals in the University.

Objectives:

Under this programme, a number of technical, professional, arts, commerce, P.G. Diplomas, Certificate Courses and P.G Degree level courses have been started. The courses run in Associate Institutes are parallel to courses offered in the regular mode of education. Under Capacity Enhancement Programme, during the session 2016-17, the number of Associate Institutes is 58 with students enrolment of 8672.