Academic Audit (2020-21)



Gurukula Kangri (Deemed to be University), Haridwar

(NAAC "A" Grade Accredited Deemed to be University u/s 3 of UGC Act 1956)

Report On Academic Audit Gurukula Kangri (DU), Haridwar



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Academic Audit
Gurukula Kangri (DU), Haridwar

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Academic Audit Report of Gurukula Kangri (Deemed to be University), Haridwar (2020-21)

Introduction

Gurukula Kangri Vishwavidyalaya was established in 1902 and granted the status of 'Deemed to be University' in 1962. It is one of the first three Institutions in the country to be granted this status with 100% funding from UGC/Govt. of India. GKV has a lush green 213.48 acres campus area. There are total three campuses; two (Main and FET campus, KGC Haridwar) are in Haridwar and one at Dehradun (KGC, Deharadun). GKV has a very rich central library with about 2,50,0000 books in different subjects, 166 e-books, 1068 Journals, 17185 e-journals and it also has more than 500 rare manuscripts. It has a rich museum, which contains objects of historical and cultural importance.

Faculties and Departments: GK (DU) has 20 Departments spread under 8 Faculties: Oriental Studies, Humanities, Science, Life-Science, Technology, Engineering and Technology, Management Studies, Medical Science & Health. It is one of the well-known centres of Oriental studies in India and is famous for the teaching of Veda, Sanskrit, Yoga and Indian Philosophy. The Departments conduct courses in the following subjects: Veda, Sanskrit, Ancient Indian History and Culture & Archaeology, Philosophy, Physical Education, Yogic Science, Jyotir Vigyan & Vedic Karmkand, Hindi, English, Psychology, Mathematics, Chemistry, Physics, Zoology, Botany, Microbiology, Environmental Science, Computer Applications (MCA), Managements Studies- MBA, MBA (BE), BBA; Engineering (B.Tech.)- Computer Sc., EE, E&CE, ME; B.Pharma; B.P.Ed. and M.P.Ed. Vishwavidyalaya is also running diploma courses in Yoga and Hindi Journalism. In addition, the Vishwavidyalaya has Ph.D. programme in almost all PG subjects. Details of the courses are as follow:

1. UG/PG Courses

S. No.	UG Course	S.No.	Ph.D.
1	B.A. (Hons. Sanskrit/Philosophy)	1	M.A. Sanskrit
2	Vedalankar- B.A. (Hons. Veda)	2	M.A. English
3	B.A.	3	M.A. Psychology
4	B.Tech. (CSE, ECE, ME, EE)	4	M.A. Yogic Science
5	B.P.Ed.	5	M.A. History
6	B.Sc. (Maths Group)	6	M.A. Hindi
7	B.Sc. (Bio. Group)	7	M.A. Philosophy
8	B.Sc. Hons. (Bio Medical Science)	8	M.A. Veda
9	B.Pharm.	9	M.A. Jyotirvigyan and Vedic Karmkand
10	B.B.A.	10	M.Sc. Mathematics
11.	B.P.E.S.	11	M.Sc. Physics
S. No.	Diploma/Certificate	12	M.Sc. Chemistry
1	P.G. Diploma in Hindi Journalism	13	M.Sc. Microbiology
2	P.G. Diploma in Yogic Science	14	M.Sc. Env. Science & Env. Tech.
3	Certificate in Yoga	15	M.C.A.
		16	M.B.A.
		17	M.B.A. (B.E.), M.B.A. (B.F.)
		18	M.P.Ed.

	Name of Course-Ph.D.	Name of Course- Ph.D.	
Ph.D.	1. Sanskrit	12. Microbiology	
	2. Veda	13. Environmental Science	
	3. Ancient Indian History Cult. & Arc.	14. Management	
	4. English	15. Computer Science	
	5. Psychology	16. Zoology	
	6. Philosophy	17. Botany	
	7. Yogic Science	18. Physical Education	
	8. Hindi Literature	19. Engineering (CSE, ECE)	
	9. Mathematics	20. Pharmaceutical Sciences	
	10. Chemistry	21. Applied Sciences (Phy, Chem, Maths)	
	11. Physics		

Salient features

- All P.G. Courses and U.G. Courses are following CBCS System as per UGC guidelines.
- ❖ All UG, PG and Research labs are well equipped. Computational facilities with internet /Wi-Fi are also available to all students and faculty members.
- ❖ A well-established IQAC exists to ensure the quality of academics and research.
- ❖ Fully conforming to the relevant regulations/norms of the UGC and other statutory bodies (AICTE/NCTE/PCI) regarding minimum standards of instruction.
- Many of the students are getting fellowships under various categories recognized by Govt. of India
- Curricula of modern subjects like Sciences, Engineering, and Pharmaceutics with Vedic blend (e.g. Vedic Mathematics, Vedic Management, Vedic Physics, Vedic Chemistry, Vedic Science and Engineering, and concepts of environment in Veda) have been noted for their difference from curricula of other institutions in terms of their relevance to Indian culture and values.
- The central evaluation system exists in the Vishwavidyalaya with a coding system for scripts.
- ❖ GKV has adopted continuous internal evaluation system in the form of sessional examinations (30%) in all UG and PG courses as per latest UGC guidelines.
- Staff and Students Grievance Redressal Mechanism are in place.
- ❖ The fee structure is exercised in a responsible manner keeping in mind students' interest, quality considerations and the provisions of the UGC guidelines. There is no capitation fee or donation for any of the courses run by GKV.
- The faculty of GKV are being honoured with awards at various national and International platforms.
- The Vishwavidyalaya gets sponsored funding from DST/UGC/CSIR/DRDO/UCOST/ICSSR/M/O Environment & Forests and UGC in the form of research projects.
- GKV has instituted various scholarships for the meritorious students viz. Merit scholarship for MA Philosophy and Sanskrit, Scholarship for MA Veda students, Rai Bhadur Shiv Charan Das Sabarwal Scholarship for poor and brilliant students of Vedalankar, Dr. Tulsi

- Ram Ramabai Charitable Scholarship for MA Veda and Vedalankar students, Gold medals for first position in each PG course etc.
- Indian Science Congress Association (ISCA) has opened its Regional Chapter at GKV, the only chapter in Uttarakhand.

Memorandum of Understanding (MoU): GKV has signed MoU with various universities and institutions viz. Johannes Gutenberg University Mianz, Germany; Bulgarian Science Academy, Bulgaria; Academic Initiative IBM, India Pvt. Ltd.; Arya Bhatt Research Institute of Observational Sciences (ARIES), Nainital, Uttarakhand; University of Tartu, Estonia, Europe, BHEL, Haridwar, GB Pant Institute of Himalayan Environment & Development, Almora.

Corporate Affairs & Outreach Cell (Placement Cell): In professional courses like MCA, MBA, M.Sc., B.Tech., B.Pharm., BBA etc. with different specializations, the companies listed in "Fortune-500 Companies", continue to search talent from GKV. Top companies like TATA, Dabur, HCL, Birla, Ranbaxy AIS, Asian Paints, IIFL and many more have been recruiting students every year from GKV.

The GKV has been accredited with 'A' grade with CGPA: 3.13 by the National Accreditation and Assessment Council (NAAC) in 2015 during second cycle of assessment, while the third cycle of assessment is in process.

1. Academic Audit Team:

A meeting of the committee to carry out the academic audit of the University was held from 29-30 October, 2021. The committee consisted of the following members:

- 1. Prof. S.R. Verma
- 2. Prof. Sachin Maheshwari, and
- 3. Prof. A.P. Dimri

Dates of Academic Visit: 29-30 October, 2021

1. General observations:

The committee for academic audit interacted with the Head and faculty members of the various departments. The committee members collected the details in the prescribed format about academic activities, course curriculum, research projects/ awards/publications and outreach activities. The academic performance of most of the departments as judged by interaction and documentary evidences was found satisfactory. Faculty members are active in teaching and research both. However, some of the departments are very active in research such as Botany & Microbiology, Zoology & Environmental Science, Physics, Chemistry, and Pharmaceutical Sciences as indicated by their citation index and impact factor of journals. Other departments, active in academic work, have also good publications and, need to strengthen for quality work in research.

2. Main Campus:

Specific Observations

A. Faculty of Management Studies

- The Faculty of Management Studies runs the courses of MBA, MBA (BE), and BBA. The syllabi of these courses are revised periodically; the faculty has been involved in organizing several outreach activities. A good number of online lectures and around 50 online conferences have been arranged during the Academic Year 2020-21.
- The faculty members are active in research and they have published 10 research papers during AY 2020-21. However, the h-index and citations of the faculty members are not that attractive; they should focus on this.
- One PhD thesis has been awarded during AY 2020-21.
- There are 02 regular and 09 adhoc/guest faculties in the department.
- The placement of students is relatively good.

B. Faculty of Humanities

The Faculty of Humanities has three departments: English, Hindi and Psychology

Department of English

- Department of English was established in 1962. It has 3 Professors and 1 Assistant Professor.
- The Department of English has been offering B.A., M.A. and Ph.D. programmes.
- One faulty member is a member of India Polity Foundation, New Delhi.
- There are around 300 UG, 05 PG and 09 PhD students in the department.
- Faculty members have published 07 research articles in 2020.
- One of the faculty member acted as NAAC assessors.
- The Department has contributed to Hindu Encyclopedia. The Department is also publishing a Journal, The Vedic Path.
- The Department has organized Seminars/Workshop Second Haridwar Literature Festival, 10-12 Jan. 2020

Department runs following Innovative Courses:
 Texts of Indian Intellectual Tradition Bhartrahari's, Vakyapadiya, Panini's Ashtadhyayi,
 Patanjali's Yogasutra in contemporary Contexts, Sanskrit literary theories and the aspects of translation, Application of Sanskrit literary theories to Literature written in English

Extraordinary Contribution of the department:

- Encyclopedia of Hinduism- (15 Vols): Worked as Subject Associate Editor
- Encyclopedia of Indian Poetics, A UNESCO project: Worked as Consulting Editor
- Knowledge Tradition and Practices of India, A CBSE Project: Contributed Modules on Drama &Theatre, Music, Architecture
- Shastri Fellowship (twice) by D'FAIT, Canada

Faculty Recognition:

Member, TAC, National Council for Science & Technology Communication, DST, Govt of India, Adviser to UPSC and different state PSCs, Member, Advisory board of many research journals, Member, Academic Council, India Policy Foundation, New Delhi, 2014- cont., Consulting Editor, Encyclopaedia of Indian Poetics, A Sahitya Academy Project, Member, Institute of Scientific Research on Vedas (I-SERVE), Delhi Chapter 2013, Assessor, NAAC Bangalore.

However, the Department of English should focus on some outreach activities. The department should explore consultancy projects also.

Department of Hindi

- Department of Hindi was established in 1962. It has 01 Professor, 02 Assistant professors and some contractual faculty members.
- The Department of Hindi has been offering B.A., M.A., Ph.D. programmes. The Department is also offering P.G. Diploma in Journalism
- The Department has admitted 25 students in M.A. first semester and 75 students are admitted in B.A. 1st year. 13 PhD students are registered in the Department of Hindi.
- Faculty members of the Department has published 02 research papers
- Two PhD theses has been submitted and 02 PhD were awarded
- The Department of Hindi should focus on standard publications. They should also focus on outreach activities.

Department of Psychology

- Department of Psychology was established in 1962. It has 2 Professors, 01 Associate professor and 1 Assistant Professor.
- The Department of Psychology has been offering B.A., M.A. and Ph.D. A total of 11 Ph.D. students are registered in the Department of Psychology.
- Department of Psychology published 10 papers during AY 2020.
- The Department of Psychology has a potential for undertaking extension activities like clinical and psychological counseling.

The department has experienced faculty. The students are taught applied fields of psychology such as psychopathology, clinical psychology, counselling psychology, rehabilitation psychology, health psychology, cognitive processes, psycho-diagnostics and intensive input in research and statistics is given The students are prepared for wide range of career options such as teaching, research, counselling, psychotherapy and administrative positions. The department has a well-equipped psychology lab consisting of biofeedback devices, behavior therapy equipment, psychology experiments and huge collection of psychological tests. More than two thousand books are available in the Central Library in the field of psychology.

As such the department has very good resources for undergraduate, postgraduate students and research scholars. However, there is a lack of proper infrastructure. For example, the laboratory of the department is fragmented and the material is placed in two different rooms having limited space. There is a need of Labs to properly house the apparatus and test material of the psychology lab. Additionally, a hall is also required to conduct academic and training programs and workshops.

C. Faculty of Oriental Studies

There are five departments in the faculty- Veda, Sanskrit, Philosophy, Ancient Indian History Archeology& Culture and Shraddhanand Vedic Shodh Sansthan. All of them are engaged in indological research and teaching. Graduate courses are B.A. and B.A. Honors (Vedalankar & Vidyalankar). All the departments also offering courses of M.A. & Ph.D. in their respective subjects.

Department of Philosophy

- The Department of Philosophy was established in 1964.
- The Department offers B.A., B.A. Hons., M.A. and Ph.D. in Philosophy. 11 Ph.D. students are registered in Philosophy.
- The syllabi are regularly updated.
- Coursewise Students Strength
 B.A. Hons. Phil.- 31, B.A. Prog. -34, M.A. -27, Pre. Ph.D. Course Work -04, BKT -432
- No. of sanctioned teaching post: 06
- No. of Regular Faculty: 03
- No. of Adhoc/Guest Faculty: 01
- No. of non-teaching (technical and non-technical) staff: 01
- No. of papers presented in conferences/ webinar by the faculty members: 18
- No. of Ph.D. Awarded: 01
- No. of awards to faculty members: 01

The strength of the department is the preservation of Vedic Philosophy and Innovation and Research in this area. However, the department has shortage of classrooms, conference room and seminar hall and unavailability of funding for extracurricular activities.

Department of Sanskrit

- The Department of Sanskrit was established in 1962. The Department runs B.A., B.A. Hons., M.A. and Ph.D. courses.
- The Department has total five faculties (03 Professors and 02 Asst. Professors).
- A total of 21 Ph.D. students are registered in Sanskrit.
- The Department of Sanskrit has been focusing research on different aspects of Philosophy in Sanskrit Literature.
- The Department of Sanskrit conducts a programme 'Sanskrit Samvad' annually.
- The Department has published 06 research papers in UGC CARE listed journals.
- Three PhD theses have been submitted and 01 PhD were awarded during AY 2020-21.

Department of Ancient Indian History, Archeology and Culture

- The Department was established in 1962. The Department has a Museum of Ancient Indian History, Archeology and Culture with a large number of rare collections. It is very well maintained. It has separate galleries for old coins, letters and scripts of famous personalities like Mahatama Gandhi, Pt. Jawaharlal Nehru, C.F. Andrews and the Himalaya.
- The department of Ancient Indian history, Culture and Archaeology has a distinction of being one of the few in the country to offer a course on archaeology and museology at the undergraduate and post graduate level. The department employs various mechanisms for the further generation of knowledge such as field explorations and awareness of cultural heritage. Major area of research is Indology, it also focuses on related areas of cultural growth of India down the ages. Department has one of the best library having more than 4500 books including journals of primary sources.
- The Department runs the courses- B.A., M.A. and Ph.D. Programmes.
- The Department has 03 Professors, 01 Asst. Professor and 01 Adhoc/Guest faculty
- The Department has undertaken several excavations and obtained many artifacts, coins, statues and remaining including those of Harappa era.
- One PhD thesis has been awarded during AY 2020-21.

Basic Information about the department:

• Courses run by the department:

Bachelor of Arts (History), Bachelor of Arts (Archaeology & Museology), Generic course for Honor Student (History), Master of Arts (Ancient Indian History, Culture and Archaeology), PhD (Ancient Indian History, Culture and Archaeology)

• Students strength (Course wise):

Bachelor of Arts (History): 183; Bachelor of Arts (Arch. & Museology): 09; Generic course for Honor Student (History): 10; Master of Arts (Ancient Indian History, Culture and Archaeology): 38; PhD (Ancient Indian History, Culture and Archaeology): 11

- No. of sanctioned teaching post: 06
- No. of Regular Faculty: 04
- No. of Adhoc/Guest Faculty: 01
- No. of publications in UGC listed journals: 06

- No. of papers presented in conferences by the faculty members:05
- No. of Ph.D. Awarded: 01

The department is situated on the prime location of the bank of Ganges. This area has high potential as culturally and historically. Department conducted various archaeological explorations and excavation in this region. Yet, there is vast scope to do lots of work in the upper Gangetic plain.

The department conducts explorations, field training and educational tours for students. However, the department need more faculty to teach various micro-specialized papers. The department should introduce new diploma course in field of Cultural and Heritage tourism.

Department of Veda

- The Department of Veda was established in the year 1965. Department runs B.A., B.A. Hons., M.A. Diploma and Ph.D. programms.
- Five new Ph.D. students are registered in the Department of Veda during AY 2020-21.
- The Department of Veda has been publishing a research Journal Vaidika Vag Jyotih regularly.
- The faculty members are publishing good research papers.
 - Basic Information about the department:

Students Strength (Course Wise): PhD-05, M.A. Vedic Literature-17, B.A. Hons. (Vedalankar)- 12, Karmakand Diploma: Vedic Paurohitya-11

- No. of sanctioned teaching post: 07
- No. of Regular Faculty: 04
- No. of Adhoc/Guest Faculty: 01
- No. of non-teaching (technical and non-technical) staff: 02
- No. of books/edited books/chapters in books: Books-01, Ed. books-03
- No. of papers presented in conferences/seminars by the faculty members: 03
- No. of Ph.D. Awarded: 01
- No. of research projects completed/ongoing: 01

Strength of the department includes rectify and clarify the illusionary thoughts expressed by critics on Vedas, by referring to the existing logical proof and arguments in Shastras, to extract the knowledge-scientific or otherwise hidden in Vedas and to publish the original Vedic findings. Department has proposed to prepare special edition on Vedic doctrine, containing detailed arguments for notified Vedic research outcomes. Department wants to accelerate from Brahma to Jaimini School of Vedic thoughts for removing the illusions prevailing about Vedas. It is also proposed to publish critical edition of work carried out on Vedas by citing the facts that originally existed in Vedic books, rarely available.

However, department has lack of infrastructure for departmental growth.

Shradhanand Vedic Shodh Sansthan

- The Sanstahn was established in the year 1990 at GKV. It has only one Professor.
- Vedic Shodh Sansthan has been focusing on research only.
- This Sansthan also works on translating the works of the foreign scholars on Vedic research.
- Seven students are enrolled in PhD and 02 PhD has been awarded during AY 2020-21.

D. Faculty of Life Science

Faculty of Life Science has two major departments- Zoology & Environmental Sciences; and Department of Botany & Microbiology.

Department of Zoology and Environmental Sciences

- The Department of Zoology was established in 1961 with undergraduate level teaching. Postgraduate course in Microbiology was started along with Department of Botany in 1984. In 1995, UGC granted M.Sc. Environmental Science course to the Department (now called Department of Zoology and Environmental Science).
- The Department has 08 regular faculty members (03 Professors and 05 Asst. Professors) and 01 Adhoc/Guest faculty. However, few posts are vacant.
- The Department also conducts Ph.D. programme since 1995. 25 Ph.D. students were registered in the Department during AY 2020-21.
- Faculty members are active in research, which is reflected by their citations and impact factors.
- The Department has published 28 research papers in 2020. Six PhD were awarded and 02 PhD thesis were submitted during AY 2020-21.
- The Department has 03 on-going/completed projects with the Faculty members.

The department has experienced faculty members. Infrastructure and basic instrumentation facility is up to mark. However, department need upgradation of equipment's. A rainwater harvesting system can also be made inside the premises of the department. A remote sensing lab should be established in future.

Department of Botany and Microbiology

- The Department of Botany and Microbiology was established in 1962.
- Courses run by the department: B.Sc., M.Sc. and PhD. The Student's strength (Course wise- I year): UG-84, PG-48, Ph.D.-14
- No. of sanctioned teaching post: 10 (Professor 02, Associate Professor 02, Assit Professor 06). The Department has 03 Professors and 05 Astt. Professors.
- The Department conducts Ph.D. programme since 1995. Currently 24 Ph.D. students are registered in the Department.
- Six PhD were awarded and 06 PhD thesis were submitted during AY 2020-21.
- Total 35 research papers were published by the faculty members in 2020.
- Faculty members are very active in research, which is reflected by their citations and impact factors.

There is 100% placement of PG students in various industries and institutions. Maximum students are placed through placement cell and by the alumni of the department. Students have qualified various national level examinations like NET etc. There are large opportunities for skill development training and internship in the department. Department has introduced Vedic Microbiology as a new paper in the curriculum. This is the first department in India to start Vedic microbiology which will connect the ancient science with modern science. Department has good record of Patent filing.

Department should start a short term course in Microbial and Herbal Products. Department can also initiate new MoUs with other institutions of repute in India and abroad.

E. Faculty of Medical Sciences and Health

Faculty of Medical Sciences and Health has three departments- Yogic Science, Physical Education and Sports; and Pharmaceuticals

Department of Yogic Science

- The Department of Yogic Science was established in the year 2001.
- The Department runs the programms of B.A., M.A., P.G. Diploma and Ph.D.
- The department has one Professor, one Associate Professor and one Asst. Professor.
- The Department has published 02 research papers during 2020.
- A total of 22 Ph.D. students are registered in Yogic Science.
- Eight PhD were awarded and 04 PhD thesis were submitted during AY 2020-21.

Department of Physical Education and Sports

- The Department was established in 2000 under self-financed mode.
- The Department runs the programms of B.A., B.P.E.S., B.P.Ed. and M.P.Ed.
- The Department has two regular and 05 adhoc/guest faculties.
- The Department has published 02 research papers in 2020.

Department has strong leadership and opportunity of expansion. There was a good working environment in the department.

However, the department is not active in research funding. It should submit national/state level grant proposals for Research. Also, the department require more permanent faculty and need more indoor as well as outdoor sports facilities and to develop stadium facility. Sports medicine and physiotherapy lab for quick response and management of sports injuries is also required.

Department should start the PG Diploma in Adventurous and Water Sports, Certificate course in sports nutrition. There should be sound efforts to establish sports academy.

Department of Pharmaceuticals

- The Department was established in 2007.
- The Department runs B. Pharma., D. Pharma and Ph.D. programmes.
- The Department has one Professor and sixteen Asst. Professors.

- The Department has considerable placements.
- The Department celebrates World Pharmacy Day (25 September) every year.

Basic Information about the department is as follows:

- Students strength (Course wise): B.Pharm: 228, D. Pharm: 115, Ph.D: 02.
- No. of sanctioned teaching post: 02
- No. of Regular Faculty: 04
- No. of Adhoc/Guest Faculty: 13
- No. of non-teaching (technical and non-technical) staff: 13
- No. of publications in UGC listed journals with impact factor: 25
- No. of Publications in Conference Proceedings: 03
- No. of books/edited books/chapters in books:12
- No. of papers presented in conferences/seminars by the faculty members :15
- No. of research projects completed/ongoing:03
- No. of awards to faculty members:01

Department is having collaborative research work with Uttarakhand Ayurved University, Dehradun, Eykam Pvt. Ltd., Gurgaon, Amity University etc. Department has well equipped labs and an animal house duly approved by CPCSEA, Delhi. There is a good instrumentation lab in the department and an enriched alumni association.

F. Faculty of Science

The Faculty of Science has three main Departments- Chemistry, Physics and Mathematics & Statistics.

Department of Chemistry

- The Department was established in 1958 with the initiation of B.Sc. programme.
- The Department started M.Sc. in 1991 and Ph.D. in 1993.
- The Department has one Professor and five Asst. Professors. However, the positions of two Associate Professors and two Asst. Professor are vacant.
- The Department has Scopus citations of more than 3500 along with h-index: 17.
- A total of 23 Ph.D. students are registered in the Department of Chemistry.
- The faculty members have published 17 research papers during 2020.
- Seven PhD were awarded and 07 PhD thesis were submitted during AY 2020-21.

Basic Information about the department:

- Courses run by the department: B.Sc., M.Sc., Ph.D.
- Students strength (Course wise): B.Sc. (634), M.Sc. (114), Ph.D. (09)
- No. of sanctioned teaching post: 11
- No. of Regular Faculty: 08
- No. of non-teaching (technical and non-technical) staff: 06
- No. of publications in UGC listed journals with impact factors: 17
- No. of books/edited books/chapters in books: 07
- No. of papers presented in conferences/seminars by the faculty members:19

- No. of Ph.D. Awarded: 07
- No. of research projects completed/ongoing: 02 (Ongoing)

Department is running innovative applied and job-oriented Master's Programme. There is also an innovative paper at Master's level- Chemistry in Vedic literature and Ayurvedic drugs. Department is conducting research in new emerging areas, Nanotechnology (nano catalysts for process control), Degradation of hazardous materials, Adsorption for pollutants' removal, Active constituents of plants for significant biological activity, Environmental Chemistry, Fast Kinetics; Mechanism of transient species formation, Macrocyclic Chemistry. There are lots of Instrumentation and Equipment available for training related to industrial analysis.

Department of Physics

- The Department was established in 1958 with the initiation of B.Sc. programme.
- The Department started M.Sc. in 1991 and Ph.D. in 1993.
- The Department has two Professors and three Asst. Professors. However, the positions of one Professor and two Associate Professors and two Assistant Professors are vacant.
- Faculty members are active in research, as indicated by their citations; the cumulative impact factor is encouraging.

Basic Information about the department is as follows:

- Courses run by the department: B.Sc., M.Sc., Ph.D.
- No. of sanctioned teaching post: 11
- No. of Regular Faculty: 05
- No. of Adhoc/Guest Faculty:01
- No. of non-teaching (technical and non-technical) staff: 08
- No. of publications in UGC listed journals with impact factors: 22
- No. of papers presented in conferences/seminars by the faculty members: 05
- No. of Ph.D. Awarded: 02
- No. of research projects completed/ongoing: 02

Department has well-furnished laboratories for UG, PG and research students. There is a well-managed departmental library with books more than 3000. In addition to this, there is a well-equipped computer lab in the department. The modern teaching aids are also available at the department.

Faculty members have worked as reviewers of various international journals of repute. However, there is a shortage of faculty members at present in view of the retirement of few senior faculty members and the non-recruitment of the faculty members against the advertised posts due to Covid pandemic.

Department of Mathematics and Statistics

- The Department was established in 1958 with the initiation of B.Sc. programme.
- The Department started M.Sc. in 1964 and Ph.D. in 1986.

- The Department has 04 Asst. Professors. However, the positions of two Professors and two Associate Professors and one Assistant Professor are vacant.
- The Faculty members have published 19 research papers during 2020.

Basic Information about the department is as follows:

- Students strength (Course wise): B. Sc.-855; M.Sc.-84; Ph. D.-16
- No. of sanctioned teaching post: 10
- No. of Regular Faculty: 4
- No. of Adhoc / Guest Faculty: 1
- No. of non-teaching (technical and non-technical) staff: 2
- No. of publications in UGC listed journals with impact factors: 19
- No. of books/edited books/chapters in books: 04
- No. of Ph.D. Awarded: 02

Department has well-furnished Classrooms with LCD projector, well equipped Computer Laboratory and a Departmental Library with 1155 books. However, student faculty ratio is very poor. Due to the unavailability of permanent faculty members, most of the research scholars are engaged in teaching B. Sc. classes which affect their research work and academic progress of the department as well as faculty members.

G. Faculty of Technology

This faculty includes only one department, namely, Department of Computer Science.

Department of Computer Science

- The Department was established in 1988 with the B.Sc. in Computer Science.
- The Department also runs a flagship prgramme, MCA which was started in 1993. Department also offers the Ph.D. programme in Computer Science.
- The Department has 02 Professors and four Assistant Professors.
- Currently 27 Ph.D. students are enrolled in this Department.
- The Department has revised its syllabi in Jan. 2021.
- This Department has 11 publications in the Year 2020.

The research activity needs to be scaled up in this Department; they should also focus on increasing the placement of their MCA students.

H. Faculty of Engineering and Technology

This faculty consists of seven Departments, namely, Department of Computer Science Engineering, Department of Electronics Communication & Engineering, Department of Electrical Engineering, Department of Mechanical Engineering, Department of Applied Physics, Department of Applied Chemistry, and Department of Applied Mathematics.

 Department of Computer Science and Engineering, Applied Physics, Applied Chemistry and Applied Mathematics were established in 2000; Department of Electronics and Communications Engineering was established in 2001, Department of Electrical Engineering in 2004, and Department of Mechanical Engineering was established in 2009.

- In all, there are 46 faculty members in these Departments; out of which 18 faculty members are on regular rolls, rest of the faculty members are on contract.
- More than 50% of the regular faculty members are having a PhD degree.
- Faculty members have published 23 research papers in 2020 and some publications are in good journals.
- Faculty is quite active in outreach activities, and organized several online events in this direction.
- FET has planned to start M.Tech. courses in near future.
- There is a need to introduce some short term courses like diploma/certificate in data science, VLSI etc.
- Participation in MOOC and E-pathsala is also to be incorporated.
- FET should modify the infrastructure as per AICTE norms and apply for NBA accreditation.

3(a). Kanya Gurukul Campus, Haridwar

Specific Observations

The Kanya Gurukul Campus, Haridwar is a separate campus for women education, which was established in 1993. The campus has five Science Departments (Physics, Chemistry, Mathematics, Environmental Science and Microbiology) and six Departments are of Humanities and Oriental Studies (Hindi, English, Sanskrit, Psychology, Philosophy and Ancient Indian History, Archaeology and Culture). All the Departments are running P.G. courses (M.Sc., M.A.) in their respective subjects. B.Sc. (Maths Group), BA, MBA and BBA courses are introduced during the session 2020-21. Every Department is also involved in research.

- Department of Chemistry initiated the programme of M.Sc. in Chemistry in 1995. The Department has one Professor, two Asst. Professors and 02 Adhoc/Guest faculties. A total of 11 Ph.D. students are registered in the Department.
- Department of Microbiology was established in the year 1993. The Department has one Professor and one Asst. Professor. A total of 09 Ph.D. students are registered in the Department.
- Department of Zoology and Environmental Sciences initiated the programme of M.Sc. in Environmental Sciences in 1995. The Department has one Professor, one Asst. Professor and 01 Adhoc/Guest faculty. A total of 10 Ph.D. students are registered in the Department.
- Department of Mathematics runs M.Sc. programme in Mathematics since 1993 and Ph.D. programme since 2006. This Department has 01 Professor and 2 Assistant Professors. In year 2020, faculty members have published 05 articles. 01 Ph.D. has been guided by this Department during 2020-21. B.Sc. classes were also started during this AY.
- Department of Physics was established in 1993. This Department offers M.Sc. in Physics and B.Sc. Physics. There is only one Assistant Professor in this Department and 01 Adhoc/Guest faculty. 3 students are registered for their PhD in this Department.

- Department of English was established in 1993. The Department has one Professor and one Asst. Professor. A total of 10 Ph.D. students are registered in the Department.
- Department of Sanskrit was established in 1993and started M.A. in 1995. The
 Department has one Professor and one Asst. Professor. A total of 11 Ph.D. students are
 registered in the Department.
- Department of Psychology was established in 1993and started M.A. in 1995. The
 Department has one Professor and one Asst. Professor. A total of 03 Ph.D. students are
 registered in the Department.
- Department of Ancient Indian History, Archeology and Culture was established in 1993and started M.A. in 1995. The Department has only one Asst. Professor and one Adhoc faculty. A total of 02 Ph.D. students are registered in the Department.
- Department of Hindi was established in 1993 and started M.A. in 1995. The Department
 has one Professor and one Associate Professor and one Astt. Professor. A total of 15
 Ph.D. students are registered in the Department.
- Department of Philosophy was established in 1993 and started M.A. in 1995. The
 Department has only one Asst. Professor and one Adhoc/Guest faculty. A total of 3 Ph.D.
 students are registered in the Department.

Campus is facing the shortage of teachers to meet the existing teaching workload. There should be motivation for students to participate in other institutional activities.

3(b). Kanya Gurukul Campus, Dehradun

Specific Observations

- This campus offers BA, BA (Hons), MA, MCA and MA programmes. There are in all 14 programmes that are offered in the campus.
- The campus is having 13 regular faculty members, 05 guest/part time faculty and 15 supporting staff.
- The faculty members have organized 08 activities in the session 2020-21.
- The faculty members have published 18 research papers during 2020.
- Eight PhD were awarded and 01 PhD thesis was submitted during AY 2020-21.
- Total no. of publications of all faculty members was 18.
- Faculty members are advised to explore consultancy projects.

Best practices in each department of the campus is to highlighted. Identification of weak students and remedial classes are to be conducted regularly. Faculty members of the campus are advised to explore the project and extramural funding from different agencies. Groups of faculties working in a similar research area for joint projects should be developed. The parent-teacher meeting should be frequently conducted and recorded.

4. Recommendations and General Suggestions

- The Faculty of Life Science and Faculty of Science have made good academic and research contributions. Few other Departments of other faculties are also having good publications. It is recommended that the remaining other Departments should also focus on quality research publications.
- The University does not have middle level faculty. The ratio is highly negatively skewed for the Associate Professors. The University should take measures to remove this skewness.
- The CLOs (Course Learning Outcomes) are missing from the syllabi of all the Departments. This is now a requirement for all accreditations. These should also be measured with the help of direct/indirect methods.
- The feedback from students is also missing in the process. The University should take measures to introduce taking feedback from students.
- The Departments should initiate some kind of remedial classes for slow learners.
- The Departments which are affected from paucity of the students in their Masters Programmes should make serious efforts to attract the prospective students.
- The Departments should explore consultancy projects.
- The Departments should prepare academic calendars for different departmental activities
- Students feedback and analysis of the feedback is required.
- Flexibility in the curriculum is to be modified as per NEP 2020.
- Institutional Fellowship may be provided for meritorious PhD scholars.

More MoUs at departmental level need to be signed.

SRVerma Prof. S.R. Verma 30-10-21 (External Expert)

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