हिमाचल प्रदेश केन्द्रीय विश्वविद्यालय

Central University of Himachal Pradesh

धर्मशाला, जिला-कांगड़ा,
हिमाचल प्रदेश, भारत - 176215

वेबसाइट/ Website : www.cuhimachal.ac.in

Dharamshala, District Kangra,
Himachal Pradesh [India] - 176215

स्नातक / स्नातकोत्तर/ सर्टिफिकेट/पीजी डिप्लोमा
पाठ्य कार्यक्रमों में प्रवेश हेतु

विवरणिका 2019-20

PROSPECTUS 2019-20

FOR ADMISSION TO
UG/PG/ CERTIFICATE/PG DIPLOMA PROGRAMMES

Last date for submission of Application 21st April, 2019 (Sunday) for PG Programmes; 26th May, 2019 (Friday) for UG Programmes; and 05th July, 2019 (Friday) for PG Diploma & Certificate courses
Date of Entrance Examination (For PG Programmes of Study only) rescheduled to **Tuesday, 21 May 2019**

विश्वविद्यालय के प्राधिकारीगण

Authorities of the University

श्री राम नाथ कोविन्द विश्वविद्यालय के माननीय कुलाध्यक्ष महामहिम भारत के राष्ट्रपति	**Shri Ram Nath Kovind** The Visitor of the University His Excellency, The President of India
डॉ. हरमहेन्द्र सिंह बेदी माननीय कुलाधिपति	**Dr. Harmohinder Singh Bedi** The Chancellor
प्रो. कुलदीप चन्द अग्निहोत्री माननीय कुलपति	**Prof. Kuldeep Chand Agnihotri** The Vice Chancellor
प्रो. हंस राज शर्मा माननीय प्रति-कुलपति अधिष्ठाता, समाज विज्ञान स्कूल अधिष्ठाता, अभिनय कला एवं दृश्य कला स्कूल	**Prof. Hans Raj Sharma** Pro Vice-Chancellor Dean, School of Social Sciences Dean, School of Performing and Visual Arts
प्रो. आई.वी.मल्हन अधिष्ठाता, गणित, कंप्यूटर एवं सूचना विज्ञान स्कूल	**Prof. I.V. Malhan** Dean, School of Mathematics, Computers & Information Sciences
प्रो. अम्बरीश कुमार महाजन अधिष्ठाता, जैविक विज्ञान स्कूल	**Prof. Ambrish Kumar Mahajan** Dean, School of Life Sciences
प्रो. रोशन लाल शर्मा अधिष्ठाता, भाषा स्कूल अधिष्ठाता, छात्र कल्याण तथा प्रॉक्टर	**Prof. Roshan Lal Sharma** Dean, School of Languages Dean, Students' Welfare & Proctor
प्रो. मनोज कुमार सक्सेना अधिष्ठाता, शिक्षा स्कूल	**Prof. Manoj Kumar Saxena** Dean, School of Education
प्रो. मुश्ताक अहमद अधिष्ठाता, पृथ्वी एवं पर्यावरण विज्ञान स्कूल	**Prof. Mushtaq Ahmed** Dean, School of Earth & Environmental Sciences
प्रो. बी. सी. चौहान अधिष्ठाता, भौतिक एवं पदार्थ विज्ञान स्कूल	**Prof. B. C. Chauhan** Dean, School of Physical and Material Sciences
प्रो. संजीव गुप्ता अधिष्ठाता, वाणिज्य एवं प्रबंधन अध्ययन स्कूल अधिष्ठाता, पर्यटन, यात्रा एवं आतिथ्य प्रबंधन स्कूल	**Prof. Sanjeev Gupta** Dean, School of Commerce and Management Studies Dean, School of Tourism Travel & Hospitality Management
प्रो. प्रदीप नायर अधिष्ठाता, पत्रकारिता, जनसंचार एवं नव मीडिया स्कूल	**Prof. Pradeep Nair** Dean, School of Journalism, Mass Communication and New Media
प्रो. सतीश गंजू चेयर प्रोफेसर, जनजातीय अध्ययन पीठ	**Prof. Satish Ganjoo** Chair Professor, Chair for Tribal Studies
प्रो. बी. एस गौतम चेयर प्रोफेसर, डॉ. अंबेडकर पीठ	**Prof. B. S. Gautam** Chair Professor, Dr. Ambedkar Chair
ब्रिग. जगदीश चंद रांगड़ा, वाई.एस.एम. (सेनि.) कुलसचिव	**Brig. Jagdish Chand Rangra, YSM (Retd)** The Registrar
प्रो. हंसराज शर्मा वित्त अधिकारी (अतिरिक्त प्रभार)	**Prof. Hans Raj Sharma** The Finance Officer (Additional Charge)
डॉ. संजीव शर्मा परीक्षा नियंत्रक	**Dr. Sanjiv Sharma** The Controller of Examinations

CONTENTS

Dates to Remember			
Events	Dates		
	PG Programmes	UG Programmes	PG Diploma / Certificate
❖ Issue of Online Prospectus	04 April 2019		
❖ Last Date for Submission of Online Applications	21 April 2019	26 May 2019	05 July 2019
❖ Date of Downloading Admit card	14 May 2019		
❖ Date and Time of Entrance Examination (For PG Programmes of Study only)* :	21 May 2019#	----------	----------
(1) Physics, Botany, English, Hindi, Sanskrit, MSW and History	9.30 AM to 11.00 AM	----------	----------
(2) Mathematics, Zoology, IT, CBB, Economics, MBA(TT), JMC and NMC **	12.00 Noon to 1.30 PM	----------	----------
(3) Chemistry, Environmental Science, Library and Information Science, MBA, Sociology, Political Science and Education	3.30 PM to 5.00 PM	----------	----------
❖ Declaration of Result of Entrance Examination	31 May 2019	----------	----------
❖ Display of the First List of Selected Candidates (including waiting List)	07 June 2019	31 May 2019	10 July 2019
❖ Payment of Fees upto	12 June 2019	05 June 2019	----------
❖ Display of the Second List of Selected Candidates (including waiting List)	14 June 2019	07 June 2019	----------
❖ Payment of Fees upto	19 June 2019	12 June 2019	----------
❖ Display of the Third List of Selected Candidates.	21 June 2019	14 June 2019	----------
❖ Payment of Fees upto	26 June 2019	19 June 2019	
❖ Verification of Documents & Registration	08 July 2019		----------
❖ Orientation Programme & Commencement of Classes	09 July 2019		

* Candidate can apply for admission to maximum two Programmes of Study (choosing only one Programme of Study from one group out of three groups of Programmes of Study mentioned above).

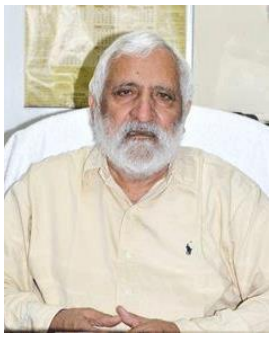
** There will be common paper for JMC (Journalism and Mass Communication) and NMC (New Media Communication).

Rescheduled in view of sixth phase General Elections 2019 to Lok Sabha in few states.

IMPORTANT

- Admission to Certificate / UG Programmes of Study will be done on the basis of Merit of 10+2 Examination.
- Admission to PG Diploma Programmes of Study will be done on the basis of Merit of Bachelor / UG Examination.

MESSAGE FROM THE VICE CHANCELLOR



हिमाचल प्रदेश केन्द्रीय विश्वविद्यालय, धर्मशाला धीरे-धीरे अपनी विशिष्ट पहचान स्थापित कर रहा है, यह प्रसन्नता का विषय है। भारत में उच्च शिक्षा और शोध की प्राचीन काल से ही समृद्ध परम्परा रही है। जिन दिनों विश्व के अन्य महाद्वीप ज्ञान की प्रारम्भिक अवस्था में थे, उन दिनों भारत में अंतर्राष्ट्रीय स्तर के तक्षशिला, नालंदा और विक्रमशिला जैसे विश्वविद्यालय स्थापित हो चुके थे। इन विश्वविद्यालयों में पढ़ने के लिए सुदूर क्षेत्रों के विद्यार्थी आते थे। यह देश का दुर्भाग्य ही कहा जाना चाहिए कि अरबों, तुर्कों, ईरानियों और मुगलों के आक्रमणों ने देश में ज्ञान-विज्ञान की इस समृद्ध परम्परा को अवरुद्ध ही नहीं किया बल्कि पुस्तकालयों में पड़ी असंख्य पांडुलिपियों को भी आग के हवाले कर दिया। कालांतर में जब अंग्रेजों ने इस देश पर कब्जा कर लिया तो उन्होंने अपने प्रशासन की आवश्यकताओं के अनुरूप शिक्षा पद्धति विकसित की और उसी के अनुसार यहाँ प्रारंभिक विश्वविद्यालयों की स्थापना की। इन विश्वविद्यालयों में ज्ञान और विज्ञान की पहल यूरोपीय जगत के हाथों में आ गयी और कालांतर में उसी का अनुसरण किया जाने लगा।

यह प्रसन्नता का विषय है कि भारत सरकार ने विदेशी आक्रमणकारियों के कारण ज्ञान परम्परा के अविरल प्रवाह में पड़े व्यवधान की कड़ियों को फिर से जोड़ने के प्रयास किए हैं। नालंदा विश्वविद्यालय का पुनरुद्धार इसका प्रमाण है।

मेरी इच्छा है कि पूर्वकाल में पश्चिमोत्तर के तक्षशिला विश्वविद्यालय को पुनर्जीवित करने का प्रयास हिमाचल प्रदेश केन्द्रीय विश्वविद्यालय के रूप में होना चाहिए। यह विश्वविद्यालय केवल भारत में ही नहीं बल्कि पड़ोसी देशों के बीच भी ज्ञान-विज्ञान की संवाद रचना के लिए व्यास आसन बने, यही मेरी कामना है । इसके लिए विश्वविद्यालय से जुड़े सभी छात्रों और अध्यापकों को मिलकर भगीरथ प्रयास करना होगा और उन्हीं उच्च परम्पराओं का अनुसरण और उनके अनुरूप आचरण भी करना होगा ।

सभी के निरंतर सहयोग से हम अपनी इस यात्रा में सफल होंगे, ऐसा मेरा विश्वास है।

प्रो. कुलदीप चंद अग्निहोत्री
कुलपति

ABOUT THE UNIVERSITY

GENESIS

The Prime Minister, in his address to the nation on August 15, 2007, announced the establishment of a Central University in each of the states that did not have a central university so far. Subsequently, 11th Plan provided for the establishment of 16 new Central Universities. Accordingly, the Central Universities Act 2009 (No. 25 of 2009) which received Presidential assent on 20th March 2009 provided for the establishment of Central University of Himachal Pradesh amongst others.

ESTABLISHMENT OF THE UNIVERSITY

The Central University of Himachal Pradesh is established under the Central Universities Act 2009 (No. 25 of 2009) enacted by the Parliament. The University is funded and regulated by the University Grants Commission (UGC). The University became functional with the assumption of charge by the first Vice Chancellor on 20th January 2010.

VISION OF THE UNIVERSITY

While the development of infrastructure of the University may take a while, it has an ambitious Vision Document prepared in consultation with eminent experts in the field of education. The Vision Document and Strategic Plan of the University as approved by the statutory authorities of the University are available at the website of the University (www.cuhimachal.ac.in). Accordingly, in due course of time, the University will grow to have purpose-built, state-of-the-art campus that will have 17 Schools of Study with nearly 90 Departments of Study and about 50 Centres of Study.

LOCATION AND HEADQUARTERS

The Headquarters of the University is located at Dharamshala, District Kangra, Himachal Pradesh. The University has following two campuses:

(i) Sapt Sindhu Parishar, Dehra, District Kangra (HP)
(ii) Dhauladhar Parishar, Dharamshala, District Kangra (HP)

In addition to above, few departments are also functioning in a State Government College building at Shahpur, District Kangra (HP).

VICE-CHANCELLOR'S OFFICE

The Vice-Chancellor's Office, which presently serves as the Headquarters of the University is located at Dharamshala (Near International Cricket Stadium), District Kangra.

HALLS OF RESIDENCE

The University has, at present, following two hostels:

(i) Mehar Chand Mahajan Men's Hostel, Kangra
(ii) Sharda Women's Hostel, Dharamshala

The **Men's Hostel** accommodates about 110 students of the University in two/three-bedded rooms and has facilities for kitchen and Dining Hall. The Hostel Mess is run on cooperative basis by the residents under the supervision of the Warden/Provost. All students who wish to opt for hostel accommodation have to join the hostel mess and make arrangement for transport on their own. However, the University has made available transport facility to the residents and other students coming from Kangra and nearby areas to Temporary Academic Block at Shahpur & Dharamshala by paying a token bus coupon fee of Rs. 500 per month.

The **Women's Hostel** of the University accommodates about 60 girl students of the University. All students who wish to opt for hostel accommodation have to mandatorily join the hostel mess. The University has made available transport facility to the residents of the hostel to commute between the Hostel and the Temporary Academic Block. However, to avail transport facility, students have to pay a token bus coupon fee of Rs. 500 per month.

ACCESSIBILITY & CONNECTIVITY

The University is well connected through air, road & rail networks. The nearest airport is Gaggal, Dharamshala. The nearest two railway stations are Pathankot and Amb Andaura.

SCHOOLS/DEPARTMENTS/CENTRES OF STUDY

The University have the following Schools of Study, Departments/Centres & Colleges. Programmes of Study under the below mentioned Schools will be commenced in a phased manner over a period of time.

S. No.	Schools	Colleges/Departments in the School	Centres in the School
Schools/Colleges/Departments/Centres already approved under the Statutes & Ordinances			
1.	**School of Medical Sciences**	▪ College of Medical Sciences ▪ College of Dental Sciences ▪ College of Ayurveda Sciences	
2.	**School of Health & Allied Sciences**	▪ Department of Nursing & Patient Care ▪ Department of Physiotherapy ▪ Department of Rehabilitation Sciences ▪ Department of Pharmaceutical Sciences ▪ Department of Pathology & Diagnostics ▪ Department of Nutrition & Food Technology	▪ Centre for Criminology & Forensic Sciences ▪ Centre for Hospital & Healthcare Management
3.	**School of Engineering Sciences & Technology**	▪ Department of Civil & Environmental Engineering ▪ Department of Electrical Engineering & Energy Technology ▪ Department of Electronics & Communication Engineering ▪ Department of Mechanical & Aerospace Engineering ▪ Department of Chemical Engineering & Chemical Technology ▪ Department of Computer Engineering & Robotics ▪ Department of Pharmaceutical Technologies ▪ Department of Biotechnology & Genome	▪ Centre for Emerging Technologies & Innovation ▪ Centre for Earthquake Sciences & Engineering ▪ Centre for Skill Development & Community Polytechnic
4.	**School of Physical & Material Sciences**	▪ Department of Physics & Astronomical Science ▪ Department of Microwave & Electronics ▪ Department of Chemistry & Chemical Sciences ▪ Department of Nanoscience & Materials	▪ Centre for Energy Studies ▪ Centre for Analytical Techniques in Physical & Material Sciences ▪ Centre for Inter-disciplinary Research in Basic Sciences ▪ Centre for Physics Education Research ▪ Centre for Converging Technology
5.	**School of Life Sciences**	▪ Department of Animal Sciences ▪ Department of Plant Sciences ▪ Department of Structural Biology ▪ Department of Microbiology ▪ Department of Biochemistry & Molecular Biology	▪ Centre for Computational Biology & Bioinformatics ▪ Centre for Human Biological Chemistry & Genetics ▪ Centre for Biomedical Engineering & Bio-Engineering ▪ Centre for Stem Cell and Tissue Engineering ▪ Centre for Integrated OMICs Sciences ▪ Centre for Systems Biology
6.	**School of Earth & Environmental Sciences**	▪ Department of Geology ▪ Department of Geography ▪ Department of Environmental Sciences ▪ Department of Atmospheric & Planetary Sciences	▪ Centre for Climate Change ▪ Centre for Hydrological Science & Hydro Energy ▪ Centre for Natural Resources Management & Mountain Ecology ▪ Centre for Disaster Management ▪ Centre for Carbon Management ▪ Centre for Remote Sensing & GIS ▪ Centre for Pollution Control and Waste Management

S. No.	Schools	Colleges/Departments in the School	Centres in the School
7.	**School of Mathematics, Computers & Information Sciences**	▪ Department of Mathematics ▪ Department of Statistics & Actuarial Science ▪ Department of Computer Science & Informatics ▪ Department of Library & Information Science	▪ Centre for Development of Multi-Media Systems ▪ Centre for Vedic Mathematical Studies ▪ Centre for e-Learning Management System ▪ Centre for e-Governance Research ▪ Centre for S R Ranganathan Library Studies ▪ Centre for High Performance and Cloud Computing ▪ Centre for Digital Library Research ▪ Centre for Fluid Dynamics ▪ Centre for Geometry
8.	**School of Languages**	▪ Department of English ▪ Department of Hindi ▪ Department of Punjabi & Dogri ▪ Department of Urdu ▪ Department of Sanskrit, Pali and Prakrit ▪ Department of Linguistics & Etymology ▪ Department of Other Indian Languages ▪ Department of African Languages ▪ Department of Asian Languages ▪ Department of European Languages	▪ Centre for Studies in Bharatiya Darashan ▪ Centre for Indian Literature ▪ Centre for Translation Studies ▪ Centre for Endangered Himalayan Languages ▪ Centre for Tribal Literature of America ▪ Centre for Linguistics and Etymological Studies
8-A.	**School of Humanities**	▪ Department of Philosophy ▪ Department of Psychology	▪ Centre of Family & Community Studies ▪ Centre of Bharatiya Panth, Matt, Sampraday and Semitic Religions ▪ Centre for Yoga Studies
9.	**School of Social Sciences**	▪ Department of Economics ▪ Department of Political Sciences ▪ Department of History ▪ Department of Public Administration ▪ Department of Sociology & Social Anthropology ▪ Department of Social Work	▪ Centre for Applied Economics ▪ Centre for Peace Studies & Conflict Resolution ▪ Centre for International Relations ▪ Centre for South Asian Studies ▪ Centre for Defence & Strategic Studies ▪ Centre for Women Studies ▪ Centre for Arab and Iranian Studies ▪ Center for Tibetan Studies ▪ Centre for Chinese Studies ▪ Centre for Ambedkar Studies ▪ Centre for Tribal Studies ▪ Centre for Native Americans Studies ▪ Centre for Deen Dayal Upadhyay Studies ▪ Centre for Integrated Himalayan Studies ▪ Centre for Migrated Clans, Gypsies and Yazidis ▪ Centre for Community Health & Social Medicine ▪ Centre for Policy Research ▪ Centre for Rural Development Studies ▪ Centre for Agrarian Studies ▪ Centre for Sindh, Balochistan Studies ▪ Centre for Kashmir Studies
10.	**School of Education**	▪ Department of Education	▪ Centre for Policy Research in Education ▪ Centre for Educational Technology & Innovation ▪ Centre for Educational Administration & Management ▪ Centre for Entrepreneurial Education
11.	**School of Commerce & Management Studies**	▪ Himachal Pradesh Kendriya Vishwavidyalaya Business School ▪ Department of Commerce	▪ Centre for Corporate Social Responsibility, Ethics & Corporate Governance ▪ Centre for Entrepreneurship & Innovation ▪ Centre for Management of Health Services ▪ Centre for Cross Cultural Management and Organisational Change ▪ Centre for Advanced Data Analysis, Business Analytics and Intelligence ▪ Case Research Centre ▪ Centre for University-Industry Interface ▪ Centre for Research in Corporate Finance ▪ Centre for Police Administration ▪ Centre for Training and Development ▪ Centre for Human Values and Dharamik Management

S. No.	Schools	Colleges/Departments in the School	Centres in the School
12.	**School of Tourism, Travel and Hospitality Management**	▪ Department of Tourism & Travel Management ▪ Department of Hotel & Hospitality Management ▪ Department of Event, Trade Fair & Exhibition Management	▪ Centre for the Promotion of Ecological, Adventure, Health & Cultural Tourism ▪ Centre for Pilgrimage Tourism
13.	**School of Performing and Visual Arts**	▪ Department of Performing Arts ▪ Department of Visual Arts ▪ Department of History of Art, Art Education & Art Appreciation	▪ Centre for Popularisation and Preservation of Himalayan Art, Culture and Handicrafts
14.	**School of Journalism, Mass Communication & New Media**	▪ Department of Journalism & Mass Communication ▪ Department of New Media ▪ Department of Films and Visual Studies ▪ Department of Advertising & Media Planning	▪ Centre for Social & Development Communication

At present, the following Departments/Centres/Chairs are functioning:

Departments/Chairs/Others	Centres
(I) Sapt Sindhu Parishar, Dehra, District Kangra (HP)	
▪ Department of Political Science ▪ Department of History ▪ Department of Sociology & Social Anthropology ▪ Department of Visual Arts	▪ Centre for Yoga Studies
▪ Dr. Ambedkar Chair ▪ Chair for Tribal Studies	
(II) Dhauladhar Parishar, Dharamshala, District Kangra (HP)	
▪ Department of English ▪ Department of Hindi ▪ Department of Sanskrit, Pali and Prakrit ▪ Department of Economics ▪ Department of Social Work ▪ Department of Education ▪ Himachal Pradesh Kendriya Vishwavidyalaya Business School ▪ Department of Tourism & Travel Management ▪ Department of Journalism & Mass Communication ▪ Department of New Media ▪ Deen Dayal Upadhyay Kaushal Kendra	
Shahpur ▪ Department of Physics & Astronomical Science ▪ Department of Chemistry & Chemical Sciences ▪ Department of Animal Sciences ▪ Department of Plant Sciences ▪ Department of Environmental Sciences ▪ Department of Mathematics ▪ Department of Computer Science & Informatics ▪ Department of Library & Information Science	▪ Centre for Computational Biology & Bioinformatics

रैगिंग-निषेध संबंधी चेतावनी / WARNING REGARDING ANTI-RAGGING

विश्वविद्यालय में रैगिंग के प्रति **शून्य सहनशीलता** है । विश्वविद्यालय भारत के माननीय उच्चतम न्यायालय द्वारा दिए गए दिशानिर्देशों, जो यूजीसी द्वारा [यूजीसी अधिनियम, 1956 की धारा 26 (1) के अंतर्गत] भारत के राजपत्र (भाग-III-खंड 4, 4 जुलाई, 2009) में यथा अधिसूचित और प्रकाशित 'विश्वविद्यालय अनुदान आयोग के उच्चतर शिक्षण संस्थानों में रैगिंग के खतरे को रोकने के अधिनियम, 2009' का पूर्ण अनुपालन करता है ।

There is **ZERO TOLERANCE** for Ragging in this University. The University fully complies with the guidelines given by Hon'ble Supreme Court of India as notified by the UGC in "UGC Regulation on curbing the Menace of Ragging in Higher Educational Institutions, 2009" [Under Section 26(1) (g) of The UGC Act, 1956] published in the Gazette of India, (Part- III- Sec 4, July 4, 2009).

SALIENT FEATURES OF THE UNIVERSITY

ADMISSION BASED ON ENTRANCE TEST

The University has introduced an All India level entrance examination for admission to **Post Graduate (PG) Programmes of Study** to assess the knowledge of subject of the student to pursue higher studies.

Candidates seeking admission in the University shall be required to fill up only a single admission form indicating any **two PG** Programmes of Study from following groups:

Three groups of **PG** Programmes of Study :	
I.	M.Sc.(Physics), M.Sc.(Botany), M.A. (English), M.A. (Hindi), M.A. (Sanskrit), Master of Social Work and M.A. (History)
II.	M.Sc. (Mathematics), M.Sc. (Zoology), M.Sc. (IT), M.Sc. (CBB), M.A. (Economics), MBA(Specialisation in Travel and Tourism) and M.A. (Journalism and Mass Communication)
III.	M.Sc. (Chemistry), M.Sc. (Environmental Science), Master of Library and Information Science, MBA, M.A. (Sociology), M.A. (Political Science), M.A. (New Media Communication) and M.A. (Education)
Note: Candidate can apply for admission to maximum two Programmes of Study (choosing only one Programme of Study from one group out of three groups of Programmes of Study mentioned above).	

INNOVATIVE PROGRAMMES & CURRICULAR FRAMEWORK

Guided by the reforms agenda in higher education and learning from the experiences of the best universities of the world, the University has introduced a number of innovations, as detailed below:

- **Semester-based Academic Calendar:** All academic programmes of the University – Undergraduate (UG), Post Graduate (PG) and MPhil/PhD i.e. Research Degrees (RD) – are based on semester system, designed at par with global practices in terms of effective number of teaching days and teaching-learning inputs.

- **Programmes based on Comprehensive Choice Based Credit System:** The University has introduced Comprehensive Choice Based Credit System (CCBCS) as per UGC norms largely on the lines of the best universities of the world.

- **Programmes of Study are defined in terms of Credits:** As opposed to papers/courses in the conventional system, a student shall be required to accumulate:
  - 140 UG Credits to earn a UG degree
  - 80 PG Credits to earn a PG degree

- **Students Mobility and Credit Transfer:** The University has designed a framework to facilitate credit accumulation by its students from other recognised universities of India and abroad. The university has developed a structured mechanism to work out the equivalence and accept the transfer of credits earned by its students from other universities as per the relevant ordinance of the Central University of Himachal Pradesh.

- **Students to accumulate required number of credits from across disciplines:** The inter-disciplinary approach in the selection of courses is also followed.

- **Innovative approach in designing Programmes of Study:** Departments would not design Programmes of Study as such. Instead, they would (a) Design and offer courses, based on the expertise and specialisation of their faculty members; (b) Specify pre-requisite and co-requisites for each course offered; (c) Guide the students

to make their own basket of courses to accumulate the required credits to complete their Programme of Study. Thus, the focus is on 'learner-centred approach' (as opposed to the conventional 'teacher-centred approach') to accommodate learner's needs and expectations to have wider choices in content, mode and pace of learning.

- **Computation of Credits based on a Holistic Approach to Learning:** In the Central University of Himachal Pradesh, one credit is defined as equivalent to the Total Student's Effort (TSE) of 30 hours comprising:
  - 10 hours of lectures / organised classroom activity / contact hours;
  - 5 hours of laboratory work / practical / field work / tutorials / teacher-led activities;
  - 15 hours of other workload such as independent individual / group work; obligatory / optional work placement; literature survey / library work; data collection/ field work; writing of papers / projects/dissertation/thesis; seminars, etc.

  Thus, the focus is on in-depth learning driven by intrinsic curiosity and mastery of the subject by balancing the taught content with independent self-directed learning.

- **All Programmes of Study to be Modular:** All Programmes of Study in the university are designed as modular with exit and lateral entry option. While most students may want to complete their UG/PG/RD without any break, some may opt out of the Programme of Study mid-way due to their personal compelling reasons. The University, therefore, provides a structured framework for students to opt out mid-programme, whereby, depending on the extent of time spent on campus and credits accumulated by them, they will be awarded certificate/diploma/advanced diploma. For instance, if any student wants to quit study after two semesters, he/she can do so and would be awarded an appropriate Certificate/Diploma/Advanced Diploma and can re-join his/her study from this point within two years again. Thus:
- A Student Admitted to UG Programme may get:
  - Certificate (if s/he opts out after 2 Semesters with 40 UG Credits);
  - Diploma (if s/he opts out after 4 Semesters with 80 UG Credits);
  - Bachelor's Degree (if stays on to complete full 6 semesters with 140 UG Credits).
- A Student Admitted to PG Programme may get:
  - Advanced Diploma (if opts out after 2 semesters with 40 PG credits);
  - Master Degree (if s/he stays on for full 4 semesters with 80 PG credits).

  Those who thus opt out would be eligible to join laterally to complete and earn their degree, if they return to the university within the next two years.

- **All Programmes of Study to be Multi-disciplinary / Inter-disciplinary:** While Departments of Study of the University are designed around basic disciplines (to enable faculty members to continue to focus on their specialised areas of research) each Programme of Study of the university is multi-disciplinary. The student is empowered to accumulate required number of credits from a wide variety of courses offered throughout the university (e.g. a student will be entitled to learn mathematics with music, physics with philosophy, and technical courses with humanities and so on). Accordingly:

- **At PG level, a student would be required to accumulate total 80 PG credits as under:**

Course Type		Credits required
Core courses	Compulsory	40
	Open	12
Elective courses	Specialisation	16
	Open	4
Foundation courses	Human making	4
	Skill development	4
Total credit requirements		**80**

- **At UG level, a student would be required to accumulate total 140 UG credits as under:**

Course Type		Credits required
Core courses	Compulsory	72
	Open	12
Elective courses	Specialisation	12
	Open	12
Foundation courses	Human making	6
	Skill development	6
	Project work / Dissertation	20
Total credit requirements as per UGC guidelines		**140**

- **All Programmes to be based on Comprehensive Continuous Internal Assessment:**

The students in all Programmes of Study across disciplines and at all levels shall be assessed through Comprehensive Continuous Internal Assessment based on quiz, assignments, independent work, group work, mid-semester and end-semester examination.

As a general principle, the Comprehensive Continuous Internal Assessment shall comprise the following components:

- Continuous Internal Assessment - 25%
- Mid Semester Examination - 25%
- End Semester Examination - 50%

- **All Programmes of Study to have Grading System:** The University shall have grading system based on Ten point scale of evaluation of the performances of students in terms of Marks, Grade points, Letter grade and Description of letter grades. The total performance of a student within a semester and continuous performance from the second semester onwards shall be indicated by (a) Semester Grade Point Average (SGPA); (b) Semester Percentage Marks (SPM); (c) Cumulative Grade Point Average (CGPA); and (d) Overall Percentage Marks (OPM), with CGPA & OPM being the real indicators of a student's performance.

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ACADEMIC RESOURCES AT TEMPORARY ACADEMIC BLOCKS (TABS) SHAHPUR, DHARAMSHALA & DEHRA

Development of physical facilities and infrastructure for the permanent campus(es) of the university may take some time. In the interim, however, the University has commenced its academic activities from the Temporary Academic Blocks (TABS) located at Shahpur, Dharamshala and Dehra respectively, which has the following facilities:

Facilities / Details	Academic Resources at Dhauladhar Campus, Dharamshala - Shahpur	Dhauladhar Campus - Dharamshala	Sapt Sindhu Parisar, Dehra
Classrooms/Lecture Theaters	• Six state of the Art Classrooms with seating capacity of 50 each • Six state of the Art Classrooms with seating capacity of 90 each • Seven Smart Classrooms / Lecture Theater • 02 Rooms for Group Discussions/ Projects / Workshops with seating capacity to accommodate 20 persons each • All Classroom are equipped with Multimedia Projectors/Internet Connectivity	• 02 Classroom with seating capacity of 60 each • 14 Classrooms with seating capacity of 30 each • 04 Classrooms with seating capacity of 30 each All Classrooms are equipped with Wi-Fi Connectivity • 02 Classrooms are equipped with Multimedia Projectors/ Internet Connectivity	• 04 classrooms with a capacity of 30 each out of which 02 are functional and 02 are proposed to be furnished soon
Seminar Rooms/Conference halls	• One Conference hall with the seating capacity of 250 persons • One well equipped Seminar Hall with seating capacity of 140 persons	• One well equipped Seminar Hall with seating capacity of 100 persons • One well equipped Seminar Hall with seating capacity of 60 persons	• One Hall having approximate capacity of 200 Persons - yet to be furnished
Laboratories	• Physics Laboratory • Environment Science Lab • Computational Biology's Computer Lab • IT Lab • Chemistry Lab	• 01 Media Lab	
Office Space	• 03 Chamber and office for the Senior Officers of the University • Central office comprising reception , cash Counters, two Cabins and six workstations	• 01 Room for Dean and Coordinator & 05 Rooms/Cabin for the Senior Officers of the University • 08 Workstations for Staff members	• 02 Rooms for Dean/Director and supporting staff - yet to be furnished
Faculty Rooms/ Staffrooms	▪ 05 Fully furnished cabins for Deans/Heads/Professors ▪ 05 Workstations for Offices of the Schools/Departments ▪ 55 Workstations for Associate Professors/Assistant Professors ▪ 05 workstations for CoE's Office staff	▪ 05 fully furnished rooms for Deans/Heads/Professors ▪ 35 Workstations for Deans/ Heads/Professors/ Associate Professors/Assistant Professors ▪ 04 Workstations for Staff members	▪ 03 rooms for Faculty Members with capacity of 02 each - yet to be furnished

Facilities / Details	Academic Resources at Dhauladhar Campus, Dharamshala - Shahpur	Dhauladhar Campus - Dharamshala	Sapt Sindhu Parisar, Dehra
Library & Information Resource Centre (LIRC)	▪ 08 Terminals for Electronic Access to Catalogue and e-resources ▪ Reading Rooms with seating capacity of about 40 persons at a time ▪ Chamber for Librarian/Store Room/Photocopying facility ▪ Software of University Libraries(SOUL) from INFLIBNET ▪ E-Resource through UGC-INFONET provided by INFLIBNET	▪ One Library with seating capacity of about 20 persons at a time ▪ One Library with seating capacity of about 40 persons at a time	▪ 01 Room
Internet Connectivity	▪ 1 GBPS Connectivity under National Knowledge Network (NKN)/NME-ICT	▪ Through Wi-Fi (Campus Connect)	Under Process
LAN/WI-Fi	▪ LAN and Wi-Fi connectivity throughout Academic block (Campus Connect)	▪ Wi-Fi connectivity throughout Academic block under Campus Connect	Under Process
Research Scholars Lab	▪ The University has a fully computerised three Research Labs with seating capacity of 114 Scholars ▪ Lockers for about 100 persons	▪ 02 Rooms for PhD Scholars with seating capacity of 20 each	
Computing Facility	▪ The University has about 308 Desktops and Laptops/I-Pads for IT Lab, Teachers and office of the TAB	▪ The University has Desktops and Laptops/I-Pads for IT Lab, Teachers and office of the TAB	Under Process
Communication facility	▪ Five Landline telephone connections	Under Process	Under Process
	▪ 64 line EPBAX system has been installed	Under Process	Under Process
Generator Facility	▪ 320 KVA generator facility providing round the clock power backup	Under Process	Under Process
Video Conferencing facility	▪ NKN based video conferencing Infrastructure	▪ Available	
Canteen Facility	▪ Canteen	Under Process	
Photocopy facility	▪ Outsourced Photocopy facility	Under Process	
ATM Facility	▪ Canara Bank's ATM facility at Temporary Academic Block, Shahpur		

FACULTY AND INTELLECTUAL RESOURCES

The University is committed to provide quality teaching-learning environment on its campuses from the start through recruitment of highly qualified full time faculty on regular basis, besides making suitable arrangement for immediate availability of faculty by appointment on deputation/contract/guest faculty/visiting faculty/invited lectures/resource persons.

The UGC has approved faculty positions comprising Professors, Associate Professors and Assistant Professors for the Programmes of Study proposed by the University. The details of faculty are given below:

SCHOOL/DEPARTMENT / CENTRE / CHAIR	DESIGNATION	FACULTY
1. School of Commerce & Management Studies (SCMS) : Dean: Prof. Sanjeev Gupta, PhD		
Himachal Pradesh Kendriya Vishwavidalaya Business School (HPKVBS)	**Professor & Head**	Prof. Sanjeev Gupta, PhD
	Associate Professor	Dr. Bhagwan Singh, PhD
	Assistant Professor	Dr. Manpreet Arora, PhD
		Dr. Ashish Nag, PhD
		Dr. Mohinder Singh, PhD
		Dr. Chaman Lal, PhD
		Dr. Sarvesh Kumar, PhD
		Dr. Gitanjali Upadhaya, PhD
		Dr. Aditi Sharma, PhD
		Dr. Rita, PhD
2. School of Earth & Environmental Sciences (SEES): Dean: Prof. Mushtaq Ahmed, PhD		
Department of Environmental Sciences(ES)	**Professor & Head**	Prof. Mushtaq Ahmed, PhD
	Professor	Prof. Ambrish Kumar Mahajan, PhD
	Assistant Professor	Dr. Ankit Tandon, PhD
		Dr. Anurag Linda, PhD
		Dr. Subhankar Chatterjee, PhD
		Dr. Dilbag Singh, PhD
3. School of Education (SoE): Dean: Prof. Manoj K. Saxena, PhD		
Department of Education(ED)	**Professor & Head**	Prof. Manoj Kumar Saxena, PhD
	Assistant Professor	Dr. Anu G.S., PhD
		Dr. Navneet Sharma, PhD
		Ms. Prakrati Bhargava, M.Phil, JRF
		Mrs. Renu Bhandari, NET
4. School of Languages (SoL): Dean: Prof. Roshan Lal Sharma, PhD		
Department of English(ENG)	**Professor & Head**	Prof. Roshan Lal Sharma, PhD
	Assistant Professor	Dr. Khem Raj Sharma, PhD
		Dr. Hem Raj Bansal, PhD
		Ms. Shaweta Nanda, MPhil, NET
		Dr. K.B.S. Krishna, PhD
Department of Hindi (HIN)	**Head**	Prof. Roshan Lal Sharma, PhD
	Assistant Professor	Dr. Chandra Kant Singh, PhD
Department of Sanskrit, Pali and Prakrit (SPP)	**Head**	Prof. Roshan Lal Sharma, PhD
	Assistant Professor	Dr. Kuldeep Kumar, PhD
		Dr. Bhaj Hari Dass, PhD
		Mrs. Archana Kumari, NET
		Dr. Vivek Sharma, PhD
5. School of Journalism, Mass Communication & New Media (SJMCNM): Dean: Prof. Pradeep Nair, PhD		
Department of Journalism & Mass Communication (JMC)	**Head**	Prof. Pradeep Nair, PhD
	Professor (Eminent)	Prof. Baldev Bhai Sharma, PhD
	Assistant Professor	Dr. Archna Katoch, PhD
		Mr. Harikrishnan B., MCJ, NET
		Dr. Harsh Mishra, PhD
Department of New Media (NM)	**Professor & Head**	Prof. Pradeep Nair, PhD
	Assistant Professor	Dr. Ram Pravesh Rai, PhD
		Mr. Kuldeep Singh, MJMC, NET

SCHOOL/DEPARTMENT / CENTRE	DESIGNATION	FACULTY
6. School of Life Sciences (SLS): Dean: Prof. Ambrish Kumar Mahajan, PhD		
Centre for Computational Biology & Bioinformatics (CCBB)	**Director**	Prof. Ambrish Kumar Mahajan, PhD
	Assistant Professor	Dr. Polamarasetty Aparoy, PhD
		Dr. Vikram Singh,PhD
		Dr. Shailender K.Verma, PhD
Department of Animal Sciences	**Head**	Prof. Ambrish Kumar Mahajan, PhD
Department of Plant Sciences	**Head**	Prof. Ambrish Kumar Mahajan, PhD
7. School of Mathematics, Computers & Information Science (SMCIS): Dean: Prof. I. V. Malhan, PhD		
Department of Mathematics (MTH)	**Head**	Prof. I. V. Malhan, PhD
	Assistant Professor	Dr. Sachin Srivastava, PhD
		Dr. Rakesh Kumar, PhD
Department of Computer Science & Informatics (CSI)	**Head**	Prof. I. V. Malhan, PhD
	Assistant Professor	Mr. Manoj Dhiman, MCA,NET
		Mr. Keshav Singh Rawat, MTech., NET
		Mr. Ajay Kumar, MCA, NET
Department of Library & Information Science (LIS)	**Head & Professor**	Prof. I. V. Malhan, PhD
	Assistant Professor	Dr. Dimple Patel, PhD
		Mr. Nimmala Karunakar, MLib, NET
8. School of Physical & Material Sciences (SPMS): Dean: Prof. B. C. Chauhan, PhD		
Department of Physics & Astronomical Science (PAS)	**Professor & Head**	Prof. B. C. Chauhan, PhD
	Professor	Prof. O.S.K.S. Sastri, PhD
	Assistant Professor	Dr. Ayan Chatterjee, PhD
		Dr. Surender Verma, PhD
		Dr. Dalip Singh Verma, PhD
		Dr. Jagdish Kumar, PhD
		Dr. Rajesh Singh, PhD (UGC-Assistant Professor)
Department of Chemistry & Chemical Sciences	**Incharge**	Dr. Subhankar Chatterjee, PhD
9. School of Social Sciences (SSS): Dean: Prof. H. R. Sharma, PhD		
Department of Social Work (SW)	**Associate Professor & Head**	Dr. Asutosh Pradhan, PhD
	Professor	Prof. Arvind Agrawal, PhD
	Assistant Professor	Ms. Ambreen Jamali, MSW, NET
		Mr. Shabab Ahmad, MPhil, NET
Department of Economics(ECO)	**Professor & Head**	Prof. H. R. Sharma, PhD
	Assistant Professor	Mr. Amit K. Basantaray, MPhil, NET
		Mr. Indervir Singh, MPhil, JRF
		Mr. Kamal Singh, MA, NET
Department of Sociology & Social Anthropology	**Head**	Prof. H. R. Sharma, PhD
	Assistant Professor	Dr. Shreeya Bakshi, PhD
		Dr. Amit Kumar, PhD
Department of History (HIS)	**Head**	Prof. H. R. Sharma, PhD
Department of Political Sciences(PLS)	**Head**	Prof. H. R. Sharma, PhD
10. School of Tourism, Travel & Hospitality Management (STTHM): Dean: Prof. Sanjeev Gupta, PhD		
Department of Tourism & Travel Management (TTM)	**Head**	Prof. Sanjeev Gupta, PhD
	Assistant Professor	Dr. Suman Sharma, PhD
		Mr. Arun Bhatia, MTA, NET
		Mr. Debasis Sahoo, MTA, NET
		Dr. S.Sundararaman, PhD
11. School of Performing and Visual Arts: Dean: Prof. H. R. Sharma, PhD		
Department of Visual Arts	-	-
Other Centres / Chairs		
❖ Deen Dayal Upadhyay Kaushal Kendra		
	Honorary Director	Prof. Manoj Kumar Saxena, PhD
Mass Communication		
	Assistant Professor – on contract	Dr. Jai Prakash Singh, PhD
	Assistant Professor – on contract	Ms. Monika, SET
Financial & Marketing Services		
	Assistant Professor – on contract	Dr. Richa Rana, PhD
❖ Dr. Ambedkar Chair		
Dr. Ambedkar Chair in History and Cultural Nationalism	**Chair Professor**	Dr. B. S. Gautam, PhD
❖ Chair for Tribal Studies	**Chair Professor**	Dr. Satish Kumar Ganjoo, PhD
❖ Deen Dayal Upadhyay Chair	-	-

Besides the full-time faculty, the University invites eminent and experienced academicians, professionals and practitioners to enrich teaching-learning process. This helps in providing quality inputs in teaching and research.

CO-CURRICULAR & EXTRA CURRICULAR ACTIVITIES

FIELD WORKS/COMMUNITY LAB

The University offers a unique programme called Community Lab to connect, interact and network with the community in Himachal Pradesh, particularly the region in which the University is located. The Programme is integrated in the academic curricula. The students are assigned specific number of households in the identified villages. They collect data, prepare report, identify intervention strategies and work with the community towards their socio-cultural, educational and economic development and in the process enrich themselves with real-life experiences.

WORKSHOPS/SEMINARS/CONFERENCES/ SYMPOSIUMS

The Departments of the university organise Workshops/Seminars/Conferences/
Symposiums from time to time on various relevant topics for the overall academic development of the students.

EXTRA-CURRICULAR ACTIVITIES

Limited facilities for games, sports and other extracurricular facilities are being made available at the Temporary Academic Block (TAB). These include outdoor games such as Cricket, Football, Volleyball, Badminton, Carom, etc. Besides, a functional gym and facilities for selected indoor games are also being arranged.

CULTURAL ACTIVITIES

The University has a Cultural Society, a Debating Club, a Music Club, a Nature Club, a Film Club, a Theatre Group, and a Photography Club. It has very rich corporate life.

EDUCATIONAL TOURS/INDUSTRIAL VISITS

Different departments of the University organise Educational Tours and Industrial Visit for the students. These are aimed at exposing the students to the practical aspects of their discipline and sensitise them about the career opportunities and through that process help students chart out their career options and strategies.

SOCIAL AWARENESS CAMPAIGN

Students of the University proactively participate in a variety of activities leading to social awareness. These include poster competition, awareness programmes, sensitisation on social issues, organisations of debates and discussion, etc. This has led to the University forming Red Ribbon Club, which has now been upgraded and recognised as Youth Development Centre.

BLOOD DONATION CAMPAIGN

Blood donation camps have become a regular annual feature of the University. During a year 85 donors donated blood, thus creating history of single largest blood donation drive ever by an educational institution in the area.

TRAINING AND DEVELOPMENT PROGRAMMES

The University is working closely with the Government of Himachal Pradesh in capacity building training programmes for the teachers of government colleges in the State.

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SALIENT FEATURES OF UG / PG PROGRAMMES OF STUDY

COURSE / SCHOOLS / DEPARTMENT	SALIENT FEATURES
SCHOOL OF COMMERCE & MANAGEMENT STUDIES	
• **MBA (Master of Business Administration)** **In the Department of Himachal Pradesh Kendriya Vishwavidalaya Business School**	❖ Strong academia-industry interface ❖ Community laboratory for providing exposure to apply knowledge ❖ Summer placement of students in industry for eight weeks ❖ Project Work based on field study ❖ Development of entrepreneurship and strong leadership skills ❖ Freedom to students to create their own basket of courses based on new CBCS. ❖ Wide range of professional and personal development activities such as Management Fests, Workshops, Field Visits, Industrial Visits, Quiz, Case Studies, Role-plays, etc. ❖ Research thrusts on corporate finance, web-based marketing, human resource issues, entrepreneurship, strategic marketing and international finance.
SCHOOL OF EARTH & ENVIRONMENTAL SCIENCES	
• **MSc (Environmental Sciences)** **In the Department of Environmental Sciences**	❖ Multidisciplinary applied science postgraduate course to understand the earth and its environment ❖ Skill development to conduct environmental impact assessment studies for various industrial and Developmental projects ❖ Training in analytical techniques for environmental monitoring and assessment ❖ Summer training and Project work on various scientific problems related to contemporary environmental issues in different industries or national laboratories ❖ Faculty with diverse research areas / interests ❖ Thrust areas of research include Seismic Studies, Waste Management and Detoxification, Geochemistry Palaeo climate Geomorphology, Environmental Microbiology, Atmospheric Dynamics, Glaciology and Remote Sensing and Environmental Biotechnology ❖ Environmental Science lab is well furnished with the modern research facilities and equipment such as PCR Machine, Gel Documentation System, Electrophoresis Apparatus, HPLC, Ion Chromatography system, Micro tremor system, Engineering Seismograph and FTIR Spectrophotometer
SCHOOL OF EDUCATION	
• **MA(Education)** **In the Department of Education**	❖ Emphasis on culmination of theory and practice of education into one integral whole. ❖ Comprehensive in-depth knowledge of the universe of educational contents and intents. ❖ Emphasis upon the Constructivism and Constructionism paradigms of teaching, learning, assessment and research. ❖ Preparing future teachers with good command of learning blended with social responsibility and cultural responsiveness. ❖ Research thrusts of the School include Epistemology & Education, Mathematics & Science Education, Constructivism & Education, ICT in Education, Environmental Education, Tribal education, Educational Psychology & Science Education

SCHOOL OF LANGUAGES	
• **MA (English)** **In the Department of English**	❖ Wide array of courses pertaining to English literature and language alongside various literatures of the world in translation, Comparative Literature, Translation Studies, Literature from the Margins, etc. ❖ Emphasis on building strong theoretical base of PG students and RD scholars to meet contemporary challenges in literary Studies ❖ Emphasis on encouraging free spirit of inquiry among students and equipping them with required skills ❖ Encouraging innovativeness and novelty of ideas to sharpen critical and creative curve of students' thinking
• **MA (Hindi)** **In the Department of Hindi**	❖ भारत के उच्च शैक्षणिक संस्थानों के समतुल्य पाठ्यक्रम और कार्यान्वयन हेतु सतत प्रयास ❖ हिंदी साहित्य की समृद्ध परम्परा से छात्रों को अवगत कराते हुए समकालीन परिदृश्य में हिंदी को व्यापक बनाना ❖ दलित विमर्श, स्त्री विमर्श , जनजातीय विमर्श से जोड़कर पाठ्यक्रम को समकालिक बनाना ❖ पाठ्यक्रम के साथ-साथ सिनेमा, अनुवाद,पत्रकारिता,स्क्रिप्ट राइटिंग,आदि को बढ़ावा; राष्ट्रीय एवं अंतर्राष्ट्रीय स्तर की संगोष्ठी, कार्यशाला आदि का आयोजन ❖ छात्रोन्मुखी शिक्षण पद्धति पर ज़ोर; 'क्लास रूम' टीचिंग में संवादधर्मिता को बढ़ावा देना, साथ ही छात्रों की सृजनात्मकता को भी परिष्कृत करना ❖ उच्चस्तरीय अनुसंधान एवं शोध की नई दिशाओं की ओर पहल
• **MA (Sanskrit)** **In the Department of Sanskrit, Pali & Prakrit** • **BA (Sanskrit Honours)** **In the Department of Sanskrit, Pali & Prakrit**	❖ भारतीय संस्कृति के आध्यात्मिक, सार्वकालिक और वैज्ञानिक आयामों से विद्यार्थियों का परिचय करवाना । ❖ संस्कृत माध्यम के द्वारा प्राचीनतम-शास्त्रीय ज्ञान से लेकर आधुनिकतम साहित्यिक अवधारणाओं तक का उन्नत स्तरीय एवं विमर्शात्मक ज्ञान प्रदान करना। ❖ संस्कृत साहित्य में विद्यमान वैज्ञानिक, साहित्यिक और सामाजिक विषयों पर उच्चस्तरीय अनुसन्धान के लिए विद्यार्थियों को पूर्ण रूप से तैयार करना । ❖ संकाय के अन्य विभागों एवं संस्कृत की विभिन्न संस्थाओं के साथ अन्तर-संस्थात्मक स्वस्थ संवाद की परम्परा को विकसित करना । ❖ पूर्ण वैज्ञानिक भाषा संस्कृत की आधुनिककाल में उपादेयता और संस्कृत में रोजगार के विविध अवसरों से अवगत करवाना । ❖ प्राचीन एवं आधुनिक विमर्शों के परिप्रेक्ष्य में अध्यापक और छात्र के बीच मुक्त, सतत और व्यावहारिक संवाद स्थापित कर समकालीन चुनौतियों का सामना करने की सार्थक क्षमता प्रदान करना ।
SCHOOL OF JOURNALISM, MASS COMMUNICATION & NEW MEDIA	
• **MA (Journalism & Mass Communication)** **In the Department of Journalism & Mass Communication**	❖ Faculty members with teaching and industry experience in journalism and media research to corporate communications, advertising and media planning. ❖ Professional training and academic exposure to students through workshops, educational tours, guest lectures by working journalists and academicians. ❖ Use of modern pedagogical tools and techniques like case-studies, mock-interviews, presentations, hands-on training sessions. ❖ Research focus on Advertising & Public Relations and Development Commutation
• **MA (New Media Communication)** **In the Department of New Media**	❖ Focus on diverse vantage points ranging from new communication policy, political and international communication, media appreciation and web technologies ❖ Comprehensive curriculum ranges from conventional electronic media- television and radio to mobile and web communication technologies ❖ Opportunity for the students to work in the communication and cultural industries and to develop alternatives in non-profit and public media education and production ❖ Exposure of students to different media production techniques that allow them to work in the field of high definition broadcasting and digital media ❖ Regular industry and visits to encourage the students to have more interaction with the industry ❖ Research Thrust on New Media Research and New Media Technologies ❖ Up to date curricula extensively covering various areas of journalism and creative writing.

SCHOOL OF LIFE SCIENCES	
• **MSc (Computational Biology & Bio-Informatics)** **Centre for Computational Biology & Bio-Informatics**	❖ Expertise on data warehousing, data mining, and analysis in the area of Life Sciences ❖ Developing value added derived databases and algorithms for knowledge discovery with special emphasis on infectious diseases, neurodegenerative diseases, agricultural and plant bioinformatics, identification of disease causing genes and drug design ❖ Emphasis on understanding life and its processes from molecules to the levels of the system and pondering upon the Bio-complexity using sequence-based and structure based bioinformatics approaches in the context of genomics, proteomics and metabolomics ❖ Providing platform for the integrative study of complex interactions in biological processes to understand basic design principles that unite living systems ❖ Developing highly skilled human resource that is capable of doing inter-disciplinary research in the areas of synthetic and systems biology ❖ Research thrust is on Structural Bioinformatics, Computational Systems Biology, Molecular Modelling and Drug Designing ❖ Equipped with fifteen workstations for computational facility to Research Degree Scholars and faculty. ❖ Classroom equipped with 30 computer systems one at each desk for PG students
• **MSc (Botany)** **Department of Plant Sciences** • **MSc (Zoology)** **Department of Animal Sciences**	❖ Courses designed according to modern competitive needs. ❖ Faculty with diverse areas of specialization from research and teaching background. ❖ Core scientific courses and specialization courses are being offered. ❖ Library with basic and advanced books. ❖ Interaction with faculty of repute from premier Universities/ Institutes of India through specially arranged seminars/lectures. ❖ Awareness activities organised from time to time as instructed by the Government of India and the University
SCHOOL OF MATHEMATICS, COMPUTER AND INFORMATION SCIENCES	
• **MSc (Mathematics)** **In the Department of Mathematics**	❖ Teaching and research programs are designed to encourage students to think logically and abstractly ❖ Emphasis on application of mathematical theories and knowledge to seek solutions to Industrial problems ❖ Thrust of research is on Differential Geometry, Fluid Dynamics
• **MSc (IT)** **In the Department of Computer Science and Informatics**	❖ Well-equipped Labs with latest hardware and software catering to the computational needs ❖ Industrial visits to expose students to on-going developments ❖ Undertaking mini projects and organising training workshops.
• **MSc (Library and Information Science)** **In the Department of Library & Information Science**	❖ Imparting knowledge and developing skills to help students avail themselves of enormous career Science opportunities in diverse information work settings ❖ Courses designed to cater to the manpower needs of hybrid libraries and information centres ❖ Balance of theoretical foundations, praxis - based and project based learning in curricula ❖ Internship program in modern libraries and information centres to hone practical skills ❖ Using latest knowledge organization tools such as DDC 23rd (2011) & UDC latest edition in teaching- learning process ❖ Research thrusts are on Knowledge Management and Digital Libraries

SCHOOL OF PHYSICAL AND MATERIAL SCIENCES	
• **MSc (Physics)** • **B.Sc. (Physics Honours)** **In the Department of Physics and Astronomical Sciences**	❖ Offering specialisation courses in various branches of Theoretical Physics such as Condensed Matter Physics, Nuclear and High Energy Physics, Astrophysics, and Computational Physics ❖ Adequately equipped computational labs with individual PCs to enhance computational skills in C, Scilab and FORTRAN programming to perform simulations in physics ❖ Coupling of Real Time Experiments with Modelling, Simulations or Virtual Experiments. ❖ Specialisation Offered in Theoretical Physics after earning at least 16 credits including Project Work. ❖ Thrusts areas of research include Computational Materials Science, Physics Education Research, Neutrino Physics and Astrophysics, Cosmology & General Relativity, and Theoretical Nuclear Physics
• **MSc (Chemistry)** **Department of Chemistry & Chemical Sciences**	❖ Offering M.Sc. courses in various branches of Chemistry, covering all the field of Organic, Inorganic and Physical Chemistry ❖ An updated syllabus focusing on NET and advance research in the field ❖ After one year, specialisation courses are offered considering the interest of the students in theoretical and analytical (application) chemistry (for all field) ❖ Adequately equipped library and laboratory including workstations for computer application in chemistry courses ❖ Gas Chromatography, PCR Machine, Gel Documentation System, Electrophoresis Apparatus, HPLC, Ion Chromatography system are available for advance practical, project related work and research purposes. ❖ Thrust areas of research include Bioremediation study, metabolomics, analytical chemistry
SCHOOL OF SOCIAL SCIENCES	
• **MA (Economics)** **In the Department of Economics**	❖ Nurturing students to become competent economists/researchers having comprehensive understanding of theoretical and empirical issues both in traditional and emerging branches in economics ❖ Offering a mix of courses on economic theory, applied economics, quantitative techniques and field work ❖ Teaching application of quantitative techniques to solve empirical problems ❖ Developing basic skills in writing research reports and policy documents to successfully compete in the job market both nationally and internationally ❖ Research focus is on Agrarian Studies, Wages and Employment
• **Master of Social Work (MSW)** **In the Department of Social Work**	❖ Preparing students to integrate professional knowledge, values, and skills from a generalist social work perspective ❖ Providing an educational experience to understand, assess the context of professional practice to apply strategies of change ❖ Honing students' critical thinking skills thereby using personal and institutional resources, theoretical frameworks, and research to meet the needs of client systems of various types and sizes ❖ Research thrust is on Gender & Weaker Sections, Rural & Tribal Studies, Social Development and Social Capital
• **MA (Sociology)** **In the Department of Sociology and Social Anthropology**	❖ Preparing students to integrate professional knowledge, values, and skills from a generalist sociological perspective ❖ Providing an educational experience to understand, assess the context of contemporary society to analyze tradition and modernity ❖ Honing students' critical thinking skills thereby using personal and institutional resources, theoretical frameworks, and research to meet the needs of client systems of various types and sizes ❖ Research thrust is on Globalization, Culture, tradition and modernization, Gender & Weaker Sections, Urban, Rural & Tribal Studies, Social Development and Social Capital

• **MA (History)** In the Department of History	❖ Developing scientific and systematic approach in the students to integrate professional knowledge, values and skills from a generalist historical perspective. ❖ Providing academic and expert experience to understand and assess the context of historical sources, facts and events. ❖ Developing a sense of critical approach and thinking skills in the students to analyze the regional, national and international events so that History can serve as filter between the past and present; and, also as mirror for future. ❖ Academic and Research thrust is on Historiography, Iconography, Culture, Society, Economics, Heritage, Politics, Archaeology, Dharma, Art and Architecture, International Relations and Foreign Affairs, Regional and Constitutional History, Nationalism, Tradition and Modernization, Gender Relations and Weaker Sections, Urban, Rural & Tribal Studies.
• **MA (Political Science)** In the Department of Political Sciences	❖ Department is based on a comprehensive social science approach that integrates and interrogates Sociological, economic, philosophical and cultural dimensions. It encourages a comprehensive study of the field of politics, keeping especially the Indian reality in focus ❖ Our general focus has been supplemented by a growing emphasis on the need to combine theory with ethnographic and archival work. We believe that it is necessary to acquaint ourselves with both Western Political Theory and Indian Political Thought in order to address and open out new empirical material to fresh questions. ❖ Department has also insisted on learning and understanding research on western thought and institutions as well, so that the mutual imbrication of Europe and the non-west, especially India, may be studied more seriously. The relationship of exchange as well as asymmetry between the west and the non-west is of course critical to understanding the current thrust area of our department namely that of Globalisation, Democracy and Justice.
• **Dr B.R. Ambedkar Chair**	❖ To study the ideals, philosophy and work of Dr B.R. Ambedkar and their relevance in today's context, particularly in the field of History and Cultural Nationalism ❖ To sensitize the society towards the social evils like inequality, untouchability, social discrimination etc. and to work for the upliftment of weaker sections of the society
• **Chair for Tribal Studies**	❖ To offer a forum for presenting original research articles written on the tribal cultures and expressive behaviour ❖ To present and share research on tribal languages of India many of which are threatened and are on the verge of extinction.
• **Deen Dayal Upadhyay Chair**	❖ To study the ideals, philosophy and work of Deen Dayal Upadhyay and their relevance in today's context.
SCHOOL OF TOURISM, TRAVEL AND HOSPITALITY MANAGEMENT	
• **MBA (Specialisation in Tourism and Travel)** In the Department of Tourism &Travel Management	❖ Blend of tourism, travel and hospitality courses with focus on developing managerial skills ❖ Emphasis on developing professional ethics compatible with cultural ethos ❖ Frequent industrial visits and summer placement of 8 weeks duration in tourism industry to develop practical skills. ❖ Emphasis on leadership and entrepreneurship development in potential areas for adventure tourism ❖ Research thrust is on Destination Branding & Marketing and Terrorism & Tourism
DEEN DYAL UPDHYAYA KAUSHAL KENDRA	
• **B.Voc. (Mass Communication)** • **B.Voc. (Financial and Marketing Services)**	❖ To provide judicious mix of skills relating to a profession and appropriate content of General Education. ❖ To ensure that the students have adequate knowledge and skills, so that they are work ready at each exit point of the programme. ❖ To provide flexibility to the students by means of pre-defined entry and multiple exit points. ❖ To integrate NSQF with the undergraduate level of higher education in order to enhance employability of the graduates and meet industry requirements. Such graduates apart from meeting the needs of local and national industry are also expected to be equipped to become part of the global workforce. ❖ To provide vertical mobility to students coming out of 10+2 with vocational subjects.

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UG / PG PROGRAMMES OF STUDY OFFERED IN 2019-20

Commencing from the Academic Session 2010-11, different Schools of the University presently offer the following Programmes of Study:

PROGRAMMES OF STUDY	PROGRAMME DURATION	CREDITS REQUIRED	IN TAKE
School of Commerce & Management Studies			
Himachal Pradesh Kendriya Vishwavidalaya Business School ▪ **M.B.A**	**4 Semesters**	**80 PG Credits**	**90**
School of Physical & Material Sciences			
Department of Physics & Astronomical Sciences ▪ **BSc (Physics Honours)** ▪ **MSc (Physics)**	**6 Semesters** **4 Semesters**	**140 UG Credits** **80 PG Credits**	**30** **30**
Department of Chemistry & Chemical Sciences ▪ **MSc (Chemistry)**	**4 Semesters**	**80 PG Credits**	**30**
School of Life Sciences			
Centre for Computational Biology & Bioinformatics ▪ **MSc** (Computational Biology and Bioinformatics)	**4 Semesters**	**80 PG Credits**	**30**
Department of Animal Sciences ▪ **MSc (Zoology)**	**4 Semesters**	**80 PG Credits**	**30**
Department of Plant Sciences ▪ **MSc (Botany)**	**4 Semesters**	**80 PG Credits**	**30**
School of Earth & Environmental Sciences			
Department of Environmental Sciences ▪ **MSc (Environmental Sciences)**	**4 Semesters**	**80 PG Credits**	**30**
School of Mathematics, Computer & Information Sciences			
Department of Mathematics ▪ **MSc (Mathematics)**	**4 Semesters**	**80 PG Credits**	**30**
Department of Computer Science & Informatics ▪ **MSc (Information Technology)**	**4 Semesters**	**80 PG Credits**	**30**
Department of Library and Information Science ▪ **M Lib ISc (Integrated Dual-Degree Programme)***	**4 Semesters**	**80 PG Credits**	**30**
**A student admitted to M Lib ISc (Integrated Dual-Degree Programme), if opts out after successfully completing two semesters with 40 PG Credits, shall be awarded the degree of B. Lib. ISc. Those who thus opt out shall be eligible for lateral entry if they return to the University within the next two years to complete remaining two semesters and get the desired degree of M. Lib. ISc.*			
School of Languages			
Department of English ▪ **MA (English)**	**4 Semesters**	**80 PG Credits**	**30**
Department of Sanskrit, Pali and Prakrit ▪ **BA (Sanskrit Honours)** ▪ **MA (Sanskrit)**	**6 Semesters** **4 Semesters**	**140 UG Credits** **80 PG Credits**	**30** **30**

PROGRAMMES OF STUDY	PROGRAMME DURATION	CREDITS REQUIRED	IN TAKE
Department of Hindi ▪ **MA (Hindi)**	**4 Semesters**	**80 PG Credits**	**30**
▪ **Certificate in Gojari Language**	**6 months**	**20 Credits**	**30**
▪ **Certificate in Sharda Script**	**6 months**	**20 Credits**	**30**
School of Social Sciences			
Department of Economics ▪ **MA (Economics)**	**4 Semesters**	**80 PG Credits**	**30**
Department of Social Work ▪ **Master of Social Work (MSW)**	**4 Semesters**	**80 PG Credits**	**30**
Department of Sociology and Social Anthropology ▪ **MA (Sociology)**	**4 Semesters**	**80 PG Credits**	**30**
Department of Political Science ▪ **MA (Political Science)**	**4 Semesters**	**80 PG Credits**	**30**
Department of History ▪ **MA (History)**	**4 Semesters**	**80 PG Credits**	**30**
▪ **MA (Jammu & Kashmir Studies)***	**4 Semesters**	**80 PG Credits**	**30**
▪ **Certificate in Gujjar History and Culture**	**6 months**	**20 Credits**	**30**
School of Education			
Department of Education ▪ **MA (Education)**	**4 Semesters**	**80 PG Credits**	**30**
School of Journalism, Mass Communication & New Media			
Department of Journalism & Mass Communication ▪ **MA (Journalism & Mass Communication)**	**4 Semesters**	**80 PG Credits**	**30**
Department of New Media ▪ **MA (New Media Communication)**	**4 Semesters**	**80 PG Credits**	**30**
Department of Tourism & Travel Management ▪ **MBA (Tourism & Travel Management)**	**4 Semesters**	**80 PG Credits**	**30**
School of Performing and Visual Arts			
Department of Visual Arts ▪ **BFA (Bachelor of Fine Arts)(Sculpture)**	**6 Semesters**	**140 UG Credits**	**15**
Department of Visual Arts ▪ **BFA (Bachelor of Fine Arts)(Painting)**	**6 Semesters**	**140 UG Credits**	**10**

** This Programme of Study is ONLY for EXTERNAL STUDENTS. The interested candidates can get admission simply by registering themselves at the Office of Controller of Examinations, Central University of Himachal Pradesh, District Kangra (HP).*

PROGRAMMES OF STUDY	PROGRAMME DURATION	CREDITS REQUIRED	IN TAKE
Other Centres / Chairs			
Deen Dyal Upadhyaya Kaushal Kendra			
▪ **B.Voc. (Mass communication)** ▪ **B.Voc. (Financial and Marketing Services)**	**6 Semesters** **6 Semesters**	**180 Credits** **180 Credits**	**50** **50**
Dr B.R. Ambedkar Chair			
▪ **PG Diploma in Ambedkar Studies**	**One Year**	**40 PG Credits**	**30**
Chair for Tribal Studies			
▪ **PG Diploma in Tribal Studies** ▪ **PG Diploma in Jammu and Kashmir Studies**	**One Year** **One Year**	**40 PG Credits** **40 PG Credits**	**30** **30**
Deen Dayal Upadhyay Chair			
▪ **PG Diploma in Deen Dayal Upadhyay Studies**	**One Year**	**40 PG Credits**	**30**

Note:

1. The University reserves the right to defer a Programme of Study depending upon the availability of adequate number of suitably qualified students, intellectual resources and other facilities.
2. The intake capacity for different programmes of Study is only indicative and the university may reduce the intake depending on the availability of suitably qualified students, intellectual resources, research supervisor(s) and other academic infrastructure.

MINIMUM ELIGIBILITY CONDITIONS FOR ADMISSION IN UG/PG PROGRAMMES OF STUDY

The minimum eligibility requirements and selection criteria for admission in the PG/UG/Certificate/PG Diploma Programmes of Study are as under:

PROGRAMME OF STUDY	MINIMUM ELIGIBILITY REQUIREMENT
• MSc (Physics) • MSc (Mathematics)	A minimum of 50% marks or an equivalent grade in Bachelors/UG degree in non-medical /Engineering/Technology stream from a recognised University or an equivalent examination.
• MSc (Chemistry) • MSc (Botany) • MSc (Zoology)	A minimum of 50% marks or an equivalent grade in Bachelors/UG degree with Chemistry for MSc (Chemistry) / with Botany for MSc (Botany) / with Zoology for MSc (Zoology) as one of the subjects from a recognized University or an equivalent examination.
• MSc (Computational Biology & Bio-Informatics)	A minimum of 50% marks or an equivalent grade in Bachelors/UG degree in any science stream from a recognised University or an equivalent examination.
• MSc (IT)	A minimum of 50% marks or an equivalent grade in Bachelors/UG degree in science/ engineering/ technology stream from a recognised University or an equivalent examination.
• MSc (Environmental Science)	A minimum of 50% marks or an equivalent grade in Bachelors/UG degree in science stream from a recognised University or an equivalent examination.
• MBA • MA(Economics) • MSW • MA (Sociology) • MA (English Language and Literature) • MBA(Specialisation in Travel and Tourism) • MA(Education) • MA(New Media Communication) • MA(Journalism & Creative Writing) • M Lib ISc. • MA(History) • MA (Political Science) • MA (Jammu & Kashmir Studies) - only for EXTERNAL STUDENTS	A minimum of 50% marks or an equivalent grade in Bachelors/UG degree from a recognised University or an equivalent examination.
• MA (Hindi)	A minimum of 50% marks or an equivalent grade in Bachelors/UG degree with Hindi from a recognised University or an equivalent examination.
• MA (Sanskrit)	A minimum of 50% marks or an equivalent grade in Bachelors/UG degree with Sanskrit or Shastri examination from a recognised University or an equivalent examination. *The candidates who have passed Shastri examination shall be given 10% weightage in their score limited to the prescribed maximum marks.*
• BSc (Physics Honours)	A minimum of 50% Marks or an equivalent grade in 10+2 (any science stream) examination of a recognized school board or an equivalent examination by authorized board of state/ national level.

PROGRAMME OF STUDY	MINIMUM ELIGIBILITY REQUIREMENT
• BA (Sanskrit Honours)	A minimum of 50% Marks or an equivalent grade in 10+2 or Prak-Shastri Part- II or Visharad examination of a recognized school board or an equivalent examination by authorized board of state/ national level. *The candidates who have passed Prak Shastri Part II or Visharad examination shall be given 10% weightage in their composite score limited to the prescribed maximum marks.*
• BFA (Sculpture) • BFA (Painting)	A minimum of 50% Marks or an equivalent grade in 10+2 (any stream) examination of a recognized school board or an equivalent examination by authorized board of state/ national level.
• B.Voc. (Mass communication) • B.Voc. (Financial and Marketing Services)	The minimum eligibility condition for admission to B.Voc. Programme shall be 40% in 10+2 or equivalent in any stream.
• Certificate in Gojari Language • Certificate in Gujjar History and Culture • Certificate in Sharda Script	A minimum of 50% Marks or an equivalent grade in 10+2 examination of a recognized school board or an equivalent examination by authorized board of state/ national level.
• PG Diploma in Ambedkar Studies • PG Diploma in Tribal Studies • PG Diploma in Jammu & Kashmir Studies • PG Diploma in Deen Dayal Upadhyay Studies	A Bachelors/UG degree from a recognized University or an equivalent examination.
Relaxation in Minimum Qualifying Marks: Relaxation in minimum qualifying marks up to a maximum of 5% shall be made in case of candidates belonging to the SC, ST, OBC (Non-creamy layer) and Persons with Disabilities Categories.	
IMPORTANT: Applications are INVITED from Eligible Candidates for ADMISSION to ALL of the Above Programmes.	

SELECTION CRITERIA FOR ADMISSIONS

UG / Certificate Programmes

All applicants seeking admission to UG / Certificate Programmes of Study shall be admitted on the basis of merit in 10+2 or equivalent examination. The candidates seeking admission in BA (Sanskrit Honours) having passed Prak Shastri Part II or Visharad shall be given 10% weightage of their score limited to the prescribed maximum marks.

PG Programmes

1. All applicants seeking admission to a PG Programme of Study shall be required to appear in entrance examination of their respective subjects.
2. **Admission to various PG Programmes of Study shall be made on the basis of merit of score obtained in entrance examination.**
3. **In case of number of applicants for admissions to a programme study is less than 50 (Fifty), there will be no entrance examination and the admission shall be made on the basis of merit of the marks scored in qualifying examination.**
4. The candidates seeking admission in PG Sanskrit having passed Shastri examination shall be given 10% weightage in their score limited to the prescribed maximum marks.

PG Diploma Programmes

All applicants seeking admission to PG Diploma Programmes of Study shall be admitted on the basis of merit in Bachelors/UG degree.

APPLICANTS WHO ARE NOT ELIGIBLE FOR ADMISSION

The following shall **NOT** be Eligible for admission in the University:

(a) A person who has been suspended, rusticated, debarred, expelled or removed from the roll of the University by a competent authority of the University.

(b) A person who at any time, was admitted to a PhD programme in this University or has completed PhD degree either from this University or any other University shall not be eligible to apply for the same or any other UG/PG/MPhil/PhD programme of this University.

(c) A person who at any time was admitted to an MPhil Programme in this University or has completed an MPhil Degree either from this University or from any other University shall not be eligible to apply for the same or any other UG/PG/MPhil Programme of this University.

(d) A person who at any time was admitted to a PG Programme in this University or has completed PG Degree either from this University or from any other University shall not be eligible to apply for the same or any other UG/PG Programme of this University.

(e) A person who at any time was admitted to an UG Programme in this University of has completed UG Degree either from this University on from any other University shall not be eligible to apply for the same or any other UG Programme of this University.

(f) A person seeking admission to pursue second UG/PG programmes shall be permitted if the first UG/PG is the requirement / preference for admission to second degree.

(g) Provided the permission to pursue second UG/PG/MPhil/PhD programme may be granted by the Vice Chancellor on genuine reasons.

PLEASE NOTE.....

- **Hall Tickets for the Entrance Examination**
  - To be downloaded and printed from the University Website (www.cuhimachal.ac.in).
  - Please note the Hall Tickets will **NOT** be sent by post.
- **Intimation regarding Entrance Test, Entrance Examination Centres, List of Candidates finally Selected/Waitlisted shall be displayed only on the**
  - University Website (**www.cuhimachal.ac.in**)
  - Notice Boards of the School/Department/Centre concerned.
- **No intimation to the candidates will be sent by post.**

PROCEDURE OF APPLICATION FOR ADMISSION

1) (i) **Procedure:** All admissions shall be based on the ONLINE applications ONLY received in response to the admission notification and issue of this prospectus. The prospectus can be downloaded free of cost from the university website **(www.cuhimachal.ac.in).** Hard copy of the prospectus / application form shall NOT be made available by the University.

   (ii) **Online Application:** A candidate can apply online by clicking on the link given at the University website **(www.cuhimachal.ac.in)**. Application fee shall be payable as per the instructions given on the Website of the University.

   (iii) The **application fee** for admission to Certificate / UG / PG / PG Diploma programmes for different categories of applicants shall be as under:

   a. General Category/EWS: Rs 400/- (Rs 200/- for B.Voc./ PG Diploma/ Certificate)
   b. OBC Category: Rs 300/- (Rs 150/- for B.Voc./ PG Diploma/ Certificate)
   c. SC/ST/PH Categories: Rs 100/- (Rs 50/- for B.Voc./PG Diploma/ Certificate)

2) **Last Date for the Submission of Application:** ONLINE application form for admission in the various programmes of study must be duly filled in on or before the last date **i.e. 21st April, 2019 (Sunday) for PG Programmes; 26th May, 2019 (Friday) for UG Programmes; and 05th July, 2019 (Friday) for PG Diploma & Certificate courses.**

3) A candidate can apply on a single application form for admission to any **two PG** Programmes of Study from following groups:

Three groups of **PG** Programmes of Study :	
I.	M.Sc.(Physics), M.Sc.(Botany), M.A. (English), M.A. (Hindi), M.A. (Sanskrit), Master of Social Work and M.A. (History)
II.	M.Sc. (Mathematics), M.Sc. (Zoology), M.Sc. (IT), M.Sc. (CBB), M.A. (Economics), MBA(Specialisation in Travel and Tourism) and M.A. (Journalism and Mass Communication)
III.	M.Sc. (Chemistry), M.Sc. (Environmental Science), Master of Library and Information Science, MBA, M.A. (Sociology), M.A. (Political Science), M.A. (New Media Communication) and M.A. (Education)
Note: Candidate can apply for admission to maximum two Programmes of Study (choosing only one Programme of Study from one group out of three groups of Programmes of Study mentioned above).	

4) A candidate can apply on a single application form for admission to any **two** UG Programmes of Study from the following:

I. B.Sc. (Physics Honours)
II. B.A. (Sanskrit Honours)
III. B.Voc. (Mass Communication)
IV. B.Voc. Financial and Marketing Services)
V. B.F.A. (Sculpture)
VI. B.F.A. (Painting)

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RESERVATION OF SEATS IN ADMISSION

1) The University shall follow reservation in admission as mandated under the Central Educational Institutions (Reservation of Seats) Act 2006, as amended from time to time.
2) The University shall also follow reservation in admission in all Programmes of Study in accordance with the Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995 and The Rights of Persons with Disabilities Act, 2016.
3) Accordingly, the University shall reserve seats in all Programmes of Study for admission as under for the students belonging to:

i.	Scheduled Caste (SC) Category	15.0%
ii.	Scheduled Tribe (ST) Category	7.5%
iii.	Other Backward Classes (OBC) Category – Non-creamy layer	27.0%
iv.	Persons with Disabilities (PWD)	5.0%
v.	EWS (Economic Weaker Section)	10% of total seats (over and above the total intake)

- Persons suffering from not less than forty per cent (40%) of any disability as certified by a competent medical authority would be considered for admission under PWD category.
- There will be concession facilities of fee waiver, free accommodation, food and transport for students with disabilities.

4) The Kashmiri migrant students shall have the following concessions in admission to various programmes during academic year 2019-20:
   - Relaxation in cut off percentage upto 10% subject to minimum eligibility requirement.
   - Increase in intake capacity up to 5% course-wise.
   - Reservation of at least one seat in merit quota in technical/professional institutions.
   - Waiving off domicile requirements.
5) Two seats are available under supernumerary quota for admitting students coming from the state of Jammu & Kashmir
6) Candidates seeking admission under the reserved categories shall be required to fulfil the prescribed conditions of admission to the Course.
7) The candidates applying under the reserved categories shall need to submit the Scheduled Caste / Scheduled Tribe / OBC Non-Creamy Layer Certificate/ EWS issued by the competent authority in the prescribed format during verification of documents / registration. Non-Creamy Layer certificate should not have been issued earlier than six (6) months from the date of registration.
8) If a candidate in the reserved category qualifies for admission in the general category s/he shall be treated as a general category candidate. If sufficient number of candidates are not available to fill up the seats reserved for Scheduled Tribes, these may be filled up by suitable candidates from Scheduled Castes and vice-versa.

ENTRANCE EXAMINATION CENTRES						
S.No.	**Test City**	**Code**		**S.No.**	**Test City**	**Code**
1.	Bilaspur (HP)	01		**09.**	Itanagar (Arunachal Pradesh)	09
2.	Chandigarh	02		**10.**	Jaipur (Rajasthan)	10
3.	Dehra (HP)	03		**11.**	Jammu (J&K)	11
4.	Delhi	04		**12.**	Mandi (HP)	12
5.	Dharamshala (HP)	05		**13.**	Palampur (HP)	13
6.	Guwahati (Assam)	06		**14.**	Shahpur (HP)	14
7.	Hamirpur (HP)	07		**15.**	Shimla (HP)	15
8.	Imphal (Manipur)	08				
Note: The Central University of Himachal Pradesh will have the right to cancel / change the Centres for holding Entrance examination depending upon the number of applicants choosing/opting for a particular centre.						

ADMISSION OF FOREIGN NATIONALS / NRIs / PIOs - SUPERNUMERARY SEATS

i. In all the courses 15% seats may be filled as Supernumerary Seats meant for Foreign Nationals (FN), Non-Resident Indians (NRI) and Persons of Indian Origin (PIO) category. Out of the above 15% Supernumerary Seats, one-third shall be earmarked for the children of Indian workers in the Gulf.

ii. Candidates belonging to the FN/NRI/PIO category shall not be required to appear for the entrance examination of the University. However, they will have to fulfil minimum eligibility conditions for admission. Additionally, they may be required to qualify internationally accepted aptitude tests like SAT/GMAT/GRE/TOEFL as prescribed for admission in different Programme of Study as specified in the Prospectus of the University.

iii. Admission to these categories of students shall be granted on merit determined either by their past academic records or by internationally conducted aptitude tests for admission in higher education or a combination thereof with due regards to need for providing opportunities to the nationals belonging to different countries.

iv. Candidates seeking admission under the above quota of Supernumerary Seats shall be required to submit their application on a prescribed form, along with the certified copies of all the necessary documents, as per the procedure specified in the Prospectus, to the office of the Foreign Students Advisor (FSA) in advance throughout the year but not later than 30th April for the current academic session.

v. Application for admission should be submitted to the Dean of the School/ Head of the Department concerned along with the attested / certified copies of all the necessary documents.

vi. Candidates seeking admission under FN/NRI/PIO category shall be required to pay fees and other charges as applicable to their category and as specified in the ordinances relating to fee structure and as notified in the Prospectus.

vii. Candidates admitted under the FN/PIO category shall be required to undergo a medical test (including test for HIV/ AIDS) within a week from the date of admission.

viii. Candidates admitted under the FN/PIO category shall be required to produce STUDENT VISA within one month of the date of completion of the admission but prior to the commencement of the academic session and submit a copy of the same in the Office of the Foreign Students Advisor, failing which their admission shall stand cancelled.

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COMPLETION OF ADMISSION FORMALITIES

i) No candidate shall be entitled to claim admission as a matter of right and that the University reserves the right to refuse admission in any individual case without assigning any reason.

ii) A candidate shall be considered as admitted to a Programme of Study and be eligible to avail the privileges of a student of the University only after he/she has deposited the prescribed fees, as per the Prospectus. If a candidate fails to deposit the admission fee by the prescribed date, he/she will automatically forfeit his/her right of admission.

iii) List of selected candidates shall be displayed on the University website (www.cuhimachal.ac.in) and on the Notice Boards of the School/Department concerned. No intimation to the selected candidates will be sent by post.

iv) The candidates shall be required to get their admission completed by the dates given in the Schedule.

v) The selected candidates shall be required to submit the photocopies and produce the following documents in original for verification at the time of registration:

   a. Certificates, Diplomas, Degrees, Mark-Sheets of all educational qualifications
   b. In case of the working students, a No Objection Certificate (NOC) from the employer clearly mentioning that the employer has no objection to the candidate's pursuing higher education in the Central University of Himachal Pradesh on full time basis
   c. In case of gap of more than two years between the qualifying examination and the year of seeking admission in the university, the candidate shall be required to submit a Self-Declaration/Self-Certification indicating the reasons for such gaps and the activities in which he/she was engaged during the intervening period.
   d. SC/ST/OBC/PWD/EWS Certificate whichever is applicable.
   e. Kashmiri migrant certificate if applicable.
   f. Proof of Permanent residence

vi) Admission to a Programme of Study will be granted only to those candidates, who have obtained the minimum eligible requirements for admission and their results of the qualifying examinations are complete in all respects at the time of registration.

vii) Admission of candidates to a Programme of Study shall be subject to the clearance from the Proctor of the University.

viii) Admission of candidates seeking admission after a gap of three or more academic years of their taking Certificate/ Diploma/ Degree/ Post-Graduate Degree from this University or any other University/Educational Institution/Board, shall be subject to the clearance by the Admission Review Committee consisting of the Dean, Students' Welfare (DSW), the Dean of the School concerned, the HOD concerned, and the Proctor.

ix) At the time of admission, every student shall be required to sign a declaration to the effect that s/he submits

herself/himself to the disciplinary jurisdiction of the Vice Chancellor and other authorities of the University.

x) All the students admitted to Programmes of Study shall be required to submit Transfer Certificate/Migration Certificate in original within 30 days from the date of admission, failing which their admission in the university may be cancelled.

xi) Admission of the candidate will only be final after the verification of his/her testimonials at the time of registration.

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GENERAL RULES RELATING TO ADMISSION

(1) The University shall be open to the persons of either sex and of whatever caste, creed, race or class, and it shall not be lawful for the University to adopt or impose on any person, any test whatsoever of religious belief or profession in order to entitle him to be admitted as a student in the University or to graduate thereat or to enjoy or exercise any privilege thereof;

(2) The University shall maintain an all-India character and high standards of teaching and research and shall admit students strictly on merit as determined through an All India level entrance test conducted by the University either individually or with other universities;

(3) The admission shall also be subject to the following:

I. If more than one candidate get same score in Entrance Examination for a particular seat for which admission is being offered, then the candidate senior in age will considered first in the merit.

II. Further if there is a tie in the age of the candidate then candidate scoring more marks in correct answers in Entrance Test will be considered first in merit.

III. If more than one candidates have scored same marks in qualifying examination, then the candidate senior in age will be considered first.

IV. In case there is a tie in the age of the candidate then candidate securing more marks in the subject in which admission is being sought will considered first in the merit.

V. Provided further that if the candidate has not studied the subject in qualifying examination, in which admission is being sought then the candidate securing more marks in 10+2 examination for admission in PG Programme of Study and Matric for admission in UG Programme of Study will considered first in merit.

(4) No candidate, pursuing a full-time programme of study in the University shall be allowed to take up a job without prior and explicit permission of the University.

i. Provided that those already employed at the time of admission shall submit, within thirty days, in original, a certificate from their employer to the effect that the employer has granted him/her leave for the whole duration of the Programme of Study.

ii. Provided further that the above shall not prohibit, exclude or exempt a student from undergoing obligatory or optional work placement, if completion of the Programme of Study in which he/she has taken admission so requires.

(5) No student pursuing a Programme of Study in the University shall be permitted to take any other regular examination leading to another degree of this University or any other education institution. However, a student would be eligible to take courses, subject to the prior permission of the Dean of the School concerned, under Career Oriented Proficiency/Certificate/Diploma Programmes simultaneously either from CUHP or any other university/ educational institution/ board, etc.

(6) Provided further that the University may allow a student to pursue any programme under MOOCs from the university (CUHP) or any other institution in India / abroad.

(7) Provided further that a student may also be permitted to take additional courses, over and above the minimum prescribed for a semester. In such a case, the following conditions shall apply:

a. S/he shall be required to pay fees for the additional courses registered
b. Her/his marks sheet would reflect such courses having been studied by him as additional courses
c. The additional courses so taken would not be considered for the computation of total credits for the award of the degree.

(8) Similarly, a person who is not a student of a university and is not registered for any Programme of Study of the university, may, with the prior permission of the Dean of the School concerned, be allowed to register for select courses of the university subject to the following conditions:

a. Not more than two courses in a semester may be allowed to be taken
b. S/he shall meet minimum eligibility conditions to pursue such courses
c. S/he shall be required to pay a Non-refundable Registration fee of Rs. 2000/- per semester plus the Tuition Fees twice the rate as applicable to such courses
d. S/he shall not be considered to be a student of the University and shall, therefore, not be eligible to the privileges of a student of the University. However, s/he shall be subject to the disciplinary jurisdiction of the University authorities
e. Subject to the successful completion of all credit requirements for the courses so taken, s/he shall be eligible to receive a testimonial from the university indicating the courses that s/he has so attended and qualified. This may however, not entitle her/him to receive any certificate/diploma/degree of the university.

(9) If at any time it is discovered that a candidate has made a false or incorrect statement or has furnished false or incorrect information or has used any other fraudulent means for securing admission her/his name shall be

removed from the rolls of the university.

(10) A student admitted to the University shall be a member either of a Hall of Residence Hostel or Non-Resident Students Centre of the University.

(11) A student admitted to a Programme of Study if detained due to the shortage of attendance in the first Semester, will no longer remain the student of the University. Such students will have to seek fresh admission and will be required to go through the entire admission process.

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ACADEMIC CALENDAR 2019-20

The academic calendar and commencement of classes for all Programmes of Study shall be in accordance with the guidelines/regulations issued by the UGC and/or other national level regulatory bodies as issued and amended from time to time. For the academic session 2019-20, it shall be as under:

Academic Year 2019-2020

Monsoon Semester (06 July to 31 December)	
Activities	**Dates**
Commencement of Semester	08 July 2019 (Admission/Registration/Orientation - 3 days)
Mid Term Examination	Between 13 September 2019 and 30 September 2019
End Semester Examination	01 December 2019 – 16 December 2019 (16 days)
Winter Vacation	17 December 2019 – 31 December 2019 (15 days)
Semester ends	31 December 2019

Spring Semester (01 January to 05 July)

Activities	Dates
Commencement of Semester	01 January 2020
Mid Term Examination	Between 10 March 2020 and 27 March 2020
End Semester Examination	16 May 2020 – 31 May 2020 (16 days)
Summer Vacation	01 June 2020 – 05 July 2020 (35 days)
Semester ends	05 July 2020

SCHEDULE OF FEES FOR CERTIFICATE/UG/PG /PG DIPLOMA PROGRAMMES							
Heads of Fees/Funds	**MBA/ MBA(TT)/ MSc/MSW/ BSc Hons. in Physics**	**MA/ MLIS**	**M.A. Skt**	**B.A. Skt**	**UG Prog. of Study (B.Voc./BFA)**	**Certificate**	**PG Diploma (Annual)**
ONE TIME							**ANNUAL**
Alumni Registration Fee	100	100	100	10	10	00	00
Security Deposit/Caution Money (refundable)	3000	1000	1000	500	500	500	500
University Registration/Enrolment Fee	500	500	500	100	100	100	200
Student Cooperative Society Membership Fee	100	100	100	100	100	100	100
Onetime - Sub-Total (A)	**3700**	**1700**	**1700**	**710**	**710**	**700**	**800**
PER SEMESTER							**ANNUAL**
Examination Fee	600	500	500	200	200	150	300
Subject Association Fund	200	50	50	00	00	00	00
Teaching Learning Resource Fund	400	50	50	20	20	20	00
Tuition Fee	2400	1000	00	00	500	100	500
Admission Fee	500	100	00	00	100	50	200
Campus Development & Beautification Fund	100	20	20	10	10	10	50
Convocation Fee	50	50	50	50	50	00	00
Cultural Activities Fund	50	20	20	20	20	20	20
Development Fund	500	50	50	50	50	10	20
Electricity & Water Fee	100	100	100	100	100	20	100
Foundation Day Celebration Fee	50	30	30	50	50	20	20
Games & Sports Fund	50	50	50	50	50	20	00
ICT Lab Fee	100	10	10	10	10	10	00
Language/ Practical Lab Fee	200	100	100	100	100	10	00
Library Fee	100	20	20	20	20	10	20
Magazine Fee	50	50	50	50	50	20	20
Medical Fees	50	50	50	50	50	10	20
Non Residential Student Centre Fee	00	00	00	00	00	00	00
Students Welfare Fund	100	50	50	50	50	20	30
Per Semester - Sub-Total (B)	**5600**	**2300**	**1200**	**830**	**1430**	**500**	**1300**
Professional Development Fees-Sub Total (C)	***4000**	***1000**	***1000**	**-**	**-**	**-**	**-**
Total [Onetime (A) + Per Semester(B)+ Professional Development Fees(C)]	**13300**	**5000**	**3900**	**1540**	**2140**	**1300**	**2100**

NOTE:

The Fee payable by the students is fixed by the Executive Council on the recommendation of the Academic Council and is notified in the Admission Brochure/Prospectus issued by the University from time to time.

1. *An additional fee towards Professional Development Fund shall be chargeable as under:
   a. Rs 4000/- per semester from the students admitted to MBA/MBA(TT)/MSW/MSc/BSc Hons.
   b. Rs 1000/- per semester from the students admitted to all other PG Programmes of Study.
2. Tuition fee for offering audit course and 'I' grade will be Rs 100/- per credit.
3. For 'F', 'I' and audit course, examination fee will be Rs 100/- per credit.

NOTE: For any Programme of Study in Sanskrit, no tuition and admission fee shall be charged.

Schedule of Hostel Fee for 10 Months (Post Graduate Programmes)

Particulars	Fee (in Rs.)	Total (Annual)
Hostel Admission fee (Non-refundable)	500 (One Time)	500
Hostel Security Fee Deposits (Refundable)	1000 (One Time)	1000
Room Rent	500 (Per Month)	5000
Electricity and Water Charges	150 (Per Month)	1500
Hostel Establishment Charges	150 (Per Month)	1500
Kitchen Establishment Charges	150 (Per Month)	1500
	Total	**11000**

Schedule of Hostel Fee for 12Months (RD Scholars)

Particulars	Fee (in Rs.)	Total (Annual)
Hostel Admission fee (Non-refundable)	500 (One Time)	500
Hostel Security Fee Deposits (Refundable)	1000 (One Time)	1000
Room Rent	500 (Per Month)	6000
Electricity and Water Charges	150 (Per Month)	1800
Hostel Establishment Charges	150 (Per Month)	1800
Kitchen Establishment Charges	150 (Per Month)	1800
	Total	**12900**

THINGS TO REMEMBER

Programmes of Study offered in 2019-20

Programmes of Study	Academic Resources at Dhauladhar Campus, Dharamshala - Shahpur	Dhauladhar Campus - Dharamshala	Sapt Sindhu Parisar, Dehra
Post Graduate (PG)	1. MSc (Physics) 2. MSc (Chemistry) 3. MSc (Botany) 4. MSc (Zoology) 5. MSc (Mathematics) 6. MSc (Computational Biology and Bioinformatics) 7. MSc (Information Technology) 8. MSc (Environmental Science) 9. Master of Library and Information Science (M Lib ISc.)	1. MBA 2. Master of Social Work (MSW) 3. MA (Economics) 4. MBA (Specialisation in Travel and Tourism) 5. MA (Education) 6. MA (Journalism & Mass Communication) 7. MA (New Media Communication) 8. MA (English) 9. MA (Hindi) 10. MA (Sanskrit)	1. MA (Sociology) 2. MA (History) 3. MA (Political Science)
Under Graduate (UG)	1. BSc (Physics Honours)	1. BA (Sanskrit Honours) 2. B.Voc. (Mass communication) 3. B.Voc. (Financial and Marketing services)	1. BFA (Sculpture) 2. BFA (Painting)
PG Diploma (One Year)			1. PG Diploma in Ambedkar Studies 2. PG Diploma in Tribal Studies 3. PG Diploma in Jammu & Kashmir Studies 4. PG Diploma in Deen Dayal Upadhyay Studies
Certificate		1. Certificate in Gojari Language	1. Certificate in Gujjar History and Culture 2. Certificate in Sharda Script
MA (Jammu & Kashmir Studies)	*This Programme of Study is ONLY for EXTERNAL STUDENTS. The interested candidates can get admission simply by registering themselves at the Office of Controller of Examinations, Central University of Himachal Pradesh, District Kangra (HP).*		

Only Online Application shall be received

A candidate must **apply online** by clicking on the link given at the **University Website** (www.cuhimachal.ac.in). Applicants are advised to read carefully all instructions given therein. Requisite aapplication fee can be made through any of the following mode:

- **Debit Card** of any bank (Visa/Master Card/Maestro)
- **Net Banking**
- All major **Credit Cards**
- **Last Date** to apply online is
  - **21st April, 2019 (Sunday) for PG Programmes;**
  - **26th May, 2019 (Friday) for UG Programmes; and**
  - **05th July, 2019 (Friday) for PG Diploma & Certificate courses**

COMPONENTS OF ENTRANCE EXAMINATION

The Entrance test will be discipline specific and aimed to assess the knowledge of the subject in which the applicant wants to seek the admission. It will have four sections as specified by the concerned department (60 MCQ type questions of one mark each).

1. There shall be **NEGATIVE MARKING** for incorrect answer for every question and one-fourth (0.25) marks assigned to question(s) will be deducted as penalty.
2. The candidate will have to choose one correct answer and mark on OMR sheet. However if a candidate marks multiple entries in the OMR sheet for particular question(s), it will be treated as cancelled.
3. Each correct answer will carry 01 mark.
4. In case a candidate appears in subject other than that specified in his/her application form/admit card, his/her exam will be cancelled. It is the responsibility of the candidate to appear in correct paper prescribed for the chosen Programme of Study.
5. Use of any unfair means shall automatically disqualify the candidate from the entrance examination 2019.

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SYLLABUS FOR ENTRANCE TEST 2019

MA (English Language & Literature)

Section A: Major Literary Terms
Section B: Major Poets (John Milton, Alexander Pope, William Wordsworth, William Blake, John Keats, Robert Frost, Rabindranath Tagore, Derek Walcott, Alfred Lord Tennyson and Robert Browning)
Section C: Major Novelists (Jane Austen, Charles Dickens, Thomas Hardy, R.K. Narayan, Kamla Markandya, Mark Twain, Charlotte Bronte, Virginia Woolf, V.S. Naipaul, William Golding, Bhishm Sahani)
Section D: Major Dramatists (William Shakespeare, Christopher Marlowe, G.B. Shaw, John Osborne, Harold Pinter, Vijay Tendulkar, Sophocles, Samuel Beckett, Bertolt Brecht, Arthur Miller)

MA (Hindi)

- हिन्दी साहित्य का इतिहास
- हिन्दी भाषा का विकास
- हिन्दी कथा साहित्य (कहानी + उपन्यास)
- काव्य शास्त्र (भारतीय + पाश्चात्य)

MA (Sanskrit)

- वैदिकवाङ्मयः संहिताः, ब्राह्मणानि, आरण्यकाणि,उपनिषदः, वेदाङ्गानि
- व्याकरणम्: शब्द-धातुरूपाणि, सन्धि-कारक-समासाः, प्रत्ययाः, अनुवादः
- संस्कृतसाहित्यम्: काव्यानि, नाटकानि, छन्दांसि, अलङ्काराः, कविपरिचयः
- पुराणेतिहासं दर्शनानि च: रामायणम्, महाभारतम्, श्रीमद्भगवद्गीता, षड्दर्शनानि, स्मृतयः, पुराणानि

MA (Journalism and Mass Communication) and MA (New Media Communications)

1. General Awareness

History of Media, Prominent Personalities Associated with Print Media, and other Media related issues.

2. Current Affairs

Current Debates on Media, Awards & Honours, Policy Matters, latest happenings and other Media related issues.

3. Print Media

Reporting, Editing, Media Management, Development Journalism, Public Relations, Advertising, Film.

4. Electronic Media

Television and Radio Production, Online Media, Production Techniques, Digital Broadcasting.

M.Sc. (Computational Biology and Bioinformatics)

Considering the interdisciplinary and integrative nature of the subject and to give equal opportunity to students coming from various disciplines, the questions requiring thinking and analysis in the following subjects will be asked in the entrance exam and equal weightage will be given to each paper. Following will be the composition:

All the above sections will be given equal proportion and the questions will be designed from the **bachelor's level syllabus**.

	Subject	**Number of Questions**
1.	Physics	20%
2.	Chemistry	20%
3.	Mathematics (including Statistics)	20%
4.	Computer Sciences	20%
5.	Biology (Botany, Zoology, Biochemistry, Molecular Biology, Genetics, Microbiology etc.)	20%

MA (Economics)

- **General Economic Awareness** Indicators of Growth and Development, Trends in Poverty, Unemployment and Economic Growth in India, Indian Economic Institutions (Objectives, Functions & Organizational Structure): Planning Commission (Niti Ayog), Finance Commission, Reserve Bank of India , Economic Reforms in India, Trends in Liberalization, Privatization and Globalization in India, Exports and Imports in India, World Trade Organization (WTO) Agreement, International Economic Institutions (Objectives & Functions): World Bank, International Monetary Fund (IMF)
- **Mathematics I**
  Set Theory, Linear and Quadratic Equations, Functions, Exponential and Logarithmic Functions, Matrix Operation (Addition, Subtraction, and Multiplication)
- **Mathematics II**
  Limits & Continuity, Derivatives, Higher Order Derivatives, Partial Derivatives, Maximum/Minimum of a Function (One variable), Integration

- **Statistics**

  Univariate distributions: Frequency table, Histogram

  Central tendency: Mean, Median, Mode, Harmonic Mean, and Geometric Mean.

  Measures of Dispersion: Range, Interquartile range (IQR), Mean deviation, Standard deviation, Coefficient of variation (CV),

  Correlation Analysis- Simple correlation, Partial correlation (three variables), multiple correlation (three variables), and Rank correlation

  Probability: Basic concepts of probability, Venn diagram, Joint probability, Conditional probability, Permutations and Combinations

M.Sc. (Information Technology)

Section-A (30 % weightage)

Fundamental of Computer: History of computer, classification of computer, characteristics of computer, application of computer, hardware, software, firmware, CPU, memory hierarchy, I/O devices, number system, Boolean algebra, introduction to internet and email.

Programming in C and C++: Control structures, data structures (arrays, records included), data types, and functions, subroutines, parameter passing mechanism, Pointers, scope and lifetime of variables. Procedural and Problem oriented programming languages, Top-Down Programming, Bottom-up programming, Object Oriented Programming, Essentials of OOPs (Encapsulation, Overloading, Inheritance, Polymorphism) Object, Classes, Constructors, Destructors, and Exception Handling.

Computer Architecture: Overview of basic digital building blocks; basic structure of a digital computer. Combinatorial logic (multiplexers, decoders, encoders comparators, arithmetic operators included) sequential circuits (flip flops, counter and shift register).

Section-B (30 % weightage)

Computer organization: Introduction, system buses and instructions cycles, memory subsystem organization and interfacing, and I/O subsystem organizations.

Basics of Operating System: Introduction of operating system, classification of operating system, Structure of operating system, Process management and scheduling, memory management, file systems, IO management.

Data Communication & Computer Networks: Introduction, data Transmission mode- simplex, half duplex, full duplex, analog and digital signal, transmission media, network reference model and architecture (OSI and TCP/IP), networks types (LAN, MAN and WAN), network topologies, components of network.

Database Management System: Basics of data management systems, database models, relational algebra, relational calculus, normalization, and SQL.

Section –C (20% weightage)

Mathematics: General Mathematics up to CBSE XII standard.

Section –D (20% weightage)

Physics: General Physics up to CBSE XII standard.

Master of Social Work (MSW)

- **Sociological Concepts and Social Problems**

  Society, Community, Groups – Definition, Types; Types of Society, Social Institutions, Groups and its Type

  Social Problems: Poverty, Unemployment, Drug Addiction, Old Age & Destitution, Corruption, Domestic Violence, Displacement, Harassment & Abuse in workplace;

  Communism, Secularism & Socialism

- **Social Change & Social Reform -** Social Reform Movements
  Social Reformers: Mahatma Gandhi, Vinoba Bhave, Ambedkar, Vivekanand, Raja Ram Mohan Roy, Mother Teresa, etc. and their contribution
  Social Legislation – RTI, Domestic Violence, POSCO, and Legislation related to SC/ST, Juvenile Justice Act, Lokpal, Legal Aid & Public Interest Litigation.
  Non-governmental Organizations
- **Indian Polity, Social Policy & Social Development, Constitution of India**: Fundamental Rights, DPSP, Fundamental Duties; Constitutional provisions and safeguards for SCs, STs, OBCs, Women & Children; Panchayti Raj System;
  Human Rights: Institutions, International Conventions
  Social welfare and social development: Recent Policies and Programmes
  Information Communication Technology
  Health – Epidemiology, Communicable disease, Health Systems, Health Indicators
  Community Development
- **Social Research** Basics of Research Methodology, Nature & Types of Research
  Science & Scientific Method; Research Design, Sampling,
  Techniques of Data Collection;
  Basic Statistics: Mean, Median & Mode

M. Sc. (Mathematics)

- Mathematical Analysis: Sequence and series of real numbers, Mean value theorem, Maxima and minima of functions of a single variable and several variables, Open and closed sets, limit points, completeness of R, Uniform Continuity and convergence, Power series, proper and improper integrals, Fundamental theorem of calculus, Gradient, divergence, curl and Laplacian, Green's, Stokes and Gauss theorems and their applications.
- Ordinary and Partial Differential Equations: First order ODEs, Initial value problems, Linear ODEs with constant and variable coefficients, Method of variation of parameters, first order linear PDEs and Lagrange method, Linear PDEs with constant and variable coefficients.
- Complex Analysis: Algebra of complex numbers, Analytic functions, Cauchy-Riemann equations, Contour integral, Cauchy's theorem, Cauchy's integral formula, Liouville's theorem, Taylor series, Laurent series, singularities, calculus of residues, Conformal mappings.
- Linear Algebra and Algebra: Systems of linear equations. Matrices, rank, determinant, inverse. Eigenvalues and eigenvectors. Finite Dimensional Vector Spaces over Real and Complex Numbers, Basis, Dimension, Linear Transformations, Groups, subgroups and normal subgroups, Lagrange's Theorem for finite groups, group homomorphisms and basic concepts of quotient groups, rings, ideals, quotient rings and fields.

MBA (Specialisation in Tourism and Travel)

SECTION-A Himachal Pradesh as a Tourist Destination

- Geography of Himachal Pradesh, Climate, People, Language, Population.
- Important Fairs and Festivals, Performing Arts, Wildlife, Cuisine, Temples, Churches, Gurudwara, Monasteries, Adventure tourism places and important tourism Circuits of Himachal Pradesh

SECTION-B Tourism Product of India

- Heritage Tourism products of India: Forts, Palaces, other architectural marvels etc.

- Religious Tourism Products of India: Temples, Mosques, Churches, Gurudwara etc.
- Natural Tourism Resources in India: Landforms (mountains, deserts, beaches, coastal areas and Islands), Water bodies and biotic wealth (flora – fauna), wildlife etc.

SECTION-C Indian Culture and Society

- Cultural Tourism Resources in India: Indian History, Traditions, Customs and costumes, cuisine. Music, Dance forms; painting, Craftsmanship etc.
- Contemporary tourism destinations for adventure tourism, eco-tourism, health tourism etc.

SECTION-D World Tourism Destinations

- Major popular tourism destinations of the world

MSc (Physics)

SECTION-A

Mathematical methods

Infinite sequences and series - convergence and divergence, conditional and absolute convergence, ratio test for convergence.

Calculus of single and multiple variable, Partial derivatives, Jacobian, Imperfect and perfect differentials. Taylor Expansion.

Vector algebra, Vector Calculus, Multiple integrals, Divergence theorem, Green's theorems, Stokes' theorem, orthogonal coordinate systems.

First order equations and linear second order differential equations with constant coefficients.

Linear vector spaces, linear independence, basis. Matrices and determinants, Hermitian adjoint and inverse of a matrix; Hermitian, orthogonal, and unitary matrices; Eigenvalue and eigenvectors.

Fourier expansion – statement of Dirichlet's condition, analysis of simple waveforms with Fourier series.

Probability distributions and error analysis.

Classical mechanics and general properties of matter

Newton's laws of motion and applications, Velocity and acceleration in Cartesian, Polar and cylindrical coordinate systems. Uniformly rotating frame, Centrifugal and Coriolis forces.

System of particles, Center of mass, Equation of motion of the CM, Conservation of linear and angular momentum, Conservation of energy, Variable mass systems

Motion under a central force, Kepler's laws, Gravitational Law and field, Conservative and non-conservative forces

Elastic and inelastic collisions.

Differential equation for simple harmonic oscillator and its general solution, Superposition of two or more simple harmonic oscillators, Lissajous figures, Damped and forced oscillators, resonance, Wave equation, travelling and standing waves in one dimension, Energy density and energy transmission in waves, Group velocity and phase velocity, Sound waves in media, Doppler Effect.

Rigid body motion, Euler angles, fixed axis rotations. Moments of Inertia and products of Inertia,

Parallel and perpendicular axes theorem, Principal moments and axes.

Kinematics of moving fluids, Equation of continuity, Euler's equation, Bernoulli's theorem.

SECTION-B

Optics

Fermat's Principle, General theory of image formation, Thick lens, Thin lens and lens combinations.

Huygen's principle, Interference of light, Optical path retardation, interferometers.

Fraunhofer diffraction, Rayleigh criterion and resolving power, Diffraction gratings.

Linear, Circular and elliptic polarization, Double refraction and optical rotation.

Lasers, principle and working.

Electricity and magnetism

Electricity and Magnetism: Coulomb's law, Gauss's law, Electric field and potential
Electrostatic boundary conditions, Solution of Laplace's equation for simple cases.
Conductors, Capacitors, Dielectrics, Dielectric polarization
Volume and surface charges, energy stored in Electromagnetic field
Biot-Savart law, Ampere's law, Faraday's law of electromagnetic induction, self and mutual inductance.
Alternating currents, Simple DC and AC circuits with R, L and C components.
Displacement current, Maxwell's equations and plane electromagnetic waves, Poynting's theorem.
Lorentz Force and motion of charged particles in electric and magnetic fields.
Reflection and refraction at a dielectric interface, Transmission and reflection coefficients.

SECTION-C

Modern Physics

Inertial frames and Galilean invariance, Postulates of special relativity, Lorentz transformations,
Length contraction, Time dilation, Relativistic velocity addition theorem, Mass energy equivalence.
Blackbody radiation, Planck's law, Rayleigh- Jeans and Wein's law, Photoelectric effect, Compton Effect.
Bohr's atomic model, Sommerfeld's correction, X-rays.
Wave-particle duality, Uncertainty principle.
Wave function and its interpretation, wave packets, Dynamical variables as operators, measurement of observables, expectation values. Commutation relations between operators and compatibility, observables and simultaneous measurements, Ehrenfest's theorem.
Schrödinger equation and its solution for one, two and three dimensional boxes, Solution of Schrödinger equation for the one dimensional harmonic oscillator, Reflection and transmission at a step potential.
Nuclear and Particle Physics
General Properties of Nuclei, Nuclear Models: liquid drop model, condition of nuclear stability. Experimental evidence for nuclear magic numbers, elementary accounts of nuclear shell model and its predictions, Radioactivity, qualitative account of the theory of alpha decay and beta decay, Interaction of Nuclear Radiation with matter: Energy loss due to ionization energy loss of electrons, Cerenkov radiation, Rutherford scattering, multiple coulomb scattering, passage of gamma- rays through matter. Compton scattering, pair production radiation loss by fast electrons, Radiation length and electron-gamma showers, position a annihilation, Relativistic Kinematics. Particles Accelerators and Detectors, classification of elementary particles, Types of interactions and its features, Mass spectra and major decays of elementary particle: leptons, mesons, baryons, Weak and electromagnetic Decays of Strange mesons and Hyperons. Classification of weak decays and selection rules.

SECTION-D

Atomic and Molecular Spectroscopy

Good quantum numbers and selection rules. Stern-Gerlach experiment, Fine structure.
Magnetic moment of the electron, Lande g factor. Vector model – space quantization. Zeeman
Effect. Explanation from vector atom model.
Pauli Exclusion Principle, shell structure. Hund's rule, spectroscopic terms of many electron atoms in the ground state, Spectra of alkali and alkaline earth atoms. Rotational and vibrational spectra, Raman effect, Stokes and anti-stokes lines, complimentary character of Raman and Infrared spectra, experimental arrangements for Raman spectroscopy.
Kinetic Theory of Gases and Thermodynamics
Elements of Kinetic theory of gases. Velocity distribution and Equipartition of energy. Specific heat of Mono-, di- and tri-atomic gases. Ideal gas, van-der-Waals gas and equation of state. Mean free path.
Laws of thermodynamics. Zeroth law and concept of thermal equilibrium. First law and its consequences. Isothermal and adiabatic processes. Reversible, irreversible and quasi-static processes. Second law and entropy. Carnot cycle. Maxwell's thermodynamic relations and simple applications. Thermodynamic potentials and their applications. Phase transitions and Clausius-Clapeyron equation.
Ideas of ensembles, Maxwell-Boltzmann, Fermi-Dirac and Bose-Einstein distributions.

Solid State Physics and Electronics

Basics of Crystal Structure: Lattice and basis, primitive and unit cell, Wigner Seitz cell, symmetry operations, lattice types, packing fraction, Miller indices, simple structures NaCl, diamond. Diffraction Methods: Bragg's Law, experimental arrangements, Laue equation, reciprocal lattice, atomic scattering factor, geometrical structure factors. Crystal bonding: Potential between a pair of atoms, Lennard-Jones potential, Ionic, Covalent, Vander - Waal's, cohesive energy, Lattice Vibration, specific heat Einstein and Debye's models of specific heat. Free electron theory of metals, Band Theory of Metals:

Kronig Penny model, Brillouin zones, electrons in periodic structure, energy bands, energy gaps,

effective mass of electrons and holes, metals, insulators, semiconductors, Magnetism, Curie-Weiss law, Langevin theory, basics of superconductivity.

Junction Diodes, Transistors their characteristics and simple circuit designs: Thevnin's Theorem, Norton Theorem, Constant Voltage and current generator, idea of equivalent circuits, low frequency equivalent circuits, h-parameters, bias stability, thermal runaway. BJT, FET's and MOSFETS: Structure and working, FET amplifier. Oscillators: Tuned Collector, Hartley and Colpitts oscillators, phase shift oscillators. Operational Amplifier, inverting noninverting amplifier, OP-Amp as adder, subtractor, comparator, integrator and differentiator. Modulation and detection,

Digital electronics fundamentals, various number systems, Basic logic gates, de-Morgan's law

MSc (Environmental Sciences)

Section A: Law of Motion, Work, Energy and Power, Gravitation; Gas Laws, The First Law of Thermodynamics, Joule's Law, Specific Heats, Enthalpy, Adiabatic Processes; The Spectrum of Radiation, Blackbody Radiation, The Planck Function, Wien's Displacement Law, The Stefan–Boltzmann Law, Kirchhoff's Law, Beer's Law; Interaction of light with matter: Transmission, Absorption, Scattering; Beer-Lambert's Law; Atomic Absorption and Atomic Emission Spectra, X-Rays and Interaction of X-Rays with Matter. Single variable calculus: domain and range, maxima and minima, continuity, differentiability, integration; matrices and determinants; eigen values and eigenvectors; permutation and combination; ordinary differential equations with constant coefficients; analytic functions; groups and subgroups.

Section B: Microbes-diversity, structure and reproduction. General account of infection, Phytoimmunology; Microbiology-Role in agriculture, industry, medicine and pollution combatment; Important plant diseases caused by viruses, bacteria, fungi and nematodes; Cryptogams and Gymnosperms-classification, distribution, diversity, structure and reproduction from evolutionary view point; Angiosperms- Systematics, anatomy, embryology, palynology and phylogeny; various systems of Classification; Non-chordata and chordates- General characters, nutrition, locomotion, reproduction of Protozoa, Coelenterata, Platyhelminthes, Nemathelminthes, Annelida, Arthropoda, Mollusca, and Echinodermata, comparative study of Pisces, Amphibia, Reptilia and Mammalia; Cell and Molecular Biology-Techniques of Cell Biology, Prokaryotic and eukaryotic cells, Linkage and crossing over–methods of gene mapping including molecular maps; sex determination and molecular basis of sex differentiation, Mutations; Organic evolution; Ecology- Ecosystem structure and function of ecosystem, food chains, food webs and ecological succession; Ecological factors, Concepts and dynamics of community, Plant succession, Concepts of biosphere, Ecosystems and their conservation, Pollution, afforestation, deforestation and social forestry, Endangered plants, endemism and Red Data Books, Biodiversity- Convention of Biological Diversity and Conservation, Sovereign Rights and Intellectual Property Rights, Biogeochemical cyeles.

Section C : Element and periodicity, reaction mechanism, ionic, covalent and complex compounds , alkane, alkene , alkyne and aromatic compounds. Heterocyclic compounds, Homolytic and heterolytic fission , chemical kinetics.

Environmental studies its scope and importance; Concept of sustainability and sustainable development. Natural Resources Renewable and Non-renewable Resources and its conservation; Environmental Pollution; Environmental Legislations - national and international ; Current environmental Issues- Climate change, global warming, ozonelayer depletion, acid rain and impacts on human communities and agriculture.

Section D : Modern theories on the origin of the Earth; Internal structure of Earth; Theory of Plate tectonics and its implications in understanding mountain building and sea floor spreading processes;
Folds and Faults; Natural hazards; Introduction to rocks and minerals. Different types of rocks and their characteristics; Rock-forming minerals; weathering and erosion of rocks and minerals; Geological Time Scale and associated geological events; Biogeochemical cycle; Physical work of river, wind, glacier, sea and lake; basic hydrology; engineering geology; environmental geology.

MBA

Section A: Data Analysis and Numerical Aptitude:

- Data analysis and interpretation based on text, graphs and tables,
- Time, Speed, Distance, Ratios and Proportions
- Profit & Loss, Simple and Compound Interest
- Elementary Statistics

Section B: Business Awareness:

- Indian Business Environment
- Legends of Business and Business Corporate
- Current Issues in Business
- Famous Awards and Prizes in Business
- International Institutions
- Brand, Trademarks and Advertisements

Section C: Business Communication:

- Business Writing
- Business Vocabulary
- Pronouns and Misplaced Modifiers
- Sentence Completion
- Synonym and Antonyms

Section D: General Knowledge:

- National Statistics
- Economic Geography
- Famous Books and Authors
- Sports
- Current Affairs

Master of Library and Information Science (M.Lib. ISc.)

SECTION-A

Types of library systems

- Role of libraries in the contemporary society
- National libraries features, functions & activities
- Academic libraries features, functions & activities
- Special libraries features, functions & activities
- Public libraries features, functions & activities

SECTION- B

Knowledge, Information and Data; Types of societies

- Data types
- Primary, secondary and tertiary information
- Types of knowledge
- Agricultural society, industrial society
- Knowledge society

SECTION-C

Information sources

- Difference between ordinary book and reference book
- Difference between Journal and Magazine
- Difference between indexing service and abstracting service
- Difference between handbook and directory
- Difference between thesis and dissertation
- Difference between patent and standard

SECTION-D

Computer Fundamentals

- Computer Organisation
- Generations of Computers
- Classification of computers
- Computer memory: RAM, ROM
- Secondary Storage: Characteristics of Hard disk and CD-ROM, DVDs, Blue-ray Disks
- Printers and Scanners; Types and characteristics
- Types of software.

MA (Sociology)

SECTION-A

Introduction to Sociology, Human Society, Culture, and Socialization: Definition, Nature, Relationship of Sociology with other Social Sciences, Human Society, Social Groups, Association, Community, Caste and Social Stratification, Culture and Civilization, Cultural Lag, Conceptual Understanding of Acculturation, Assimilation and Socialization.

SECTION-B

Social Structure and Change: Status and Role, Social Change: Types of Social Change: Evolution (Comte), Revolution (Marx). Processes of Social Change: Sanskritization, Westernization, Modernization, Secularization and Globalization.

SECTION-C

Rural and Urban Society: Family, Marriage, Kinship, Cultural Change, Economy and Polity (Village Panchayat). Urban Society: Concepts of Urbanization and Urbanism, Urban family, Voluntary associations, Slums, Crime, Pluralism and Cultural diversity, Industrialization, population growth and Social Change.

SECTION-D

Sociology of Underprivileged: Women, Scheduled Castes, Scheduled Tribes, Disabled, Minorities. Gender inequality, Aging, Racial and Ethnic Inequality.

MA (Education)

Section A

1. Co-operative nature
2. Wide interest and Scholarly taste
3. Moral character & discipline
4. Leadership quality
5. Empathy with the needs of problems of children

Section B-Indian Society

1. Social process: social stratification, social change, social mobility
3. Society and culture: cultural change, cultural lag, acculturation
4. Social problem: Social injustice and inequality, poverty, crime against women, child labour, drug abuse

Contemporary Indian education system

1. Education in independent India: Provisions for education in Indian constitution, Structure of Indian education system: from Primary to higher education
2. Efforts for free and compulsory education: from Sarva Shiksha Abhiyan to Right to Education

Section C-Human development and learning

1. Thinking, Reasoning and problem
2. Learning processes
3. Human development

Section D

1. Caste and Class: The Education of marginalized
2. Gender: The Girl Child and Schooling
3. Education of/for minorities
4. Language, Politics and Culture: Mainstream and alternatives

M.Sc.(CHEMISTRY)

Section A

Atomic Structure; Periodicity of Elements; Chemical Bonding (ionic & covalent); Oxidation-Reduction; General Principles of Metallurgy; Acids and Bases; Chemistry of s and p Block Elements; Noble Gases; Inorganic Polymers; Coordination Chemistry; Transition Elements; Lanthanoids and Actinoids; Bioinorganic Chemistry; Theoretical Principles in Qualitative Analysis (H2S Scheme); Organometallic Compounds; Reaction Kinetics and Mechanism; Catalysis by Organometallic Compounds;

Section B

Gaseous state; Liquid state; Solid state; Ionic equilibria; Chemical Thermodynamics; Systems of Variable Composition; Chemical Equilibrium; Solutions and Colligative Properties; Phase Equilibria; Chemical Kinetics; Catalysis; Surface chemistry; Conductance; Electrochemistry; Electrical & Magnetic Properties of Atoms and Molecules; Quantum Chemistry; Molecular Spectroscopy; Photochemistry;

Section C

Basics of Organic Chemistry; Stereochemistry; Chemistry of Aliphatic Hydrocarbons (Carbon-Carbon sigma bonds, Carbon-Carbon pi bonds, Cycloalkanes and Conformational Analysis); Aromatic Hydrocarbons (Aromaticity); Chemistry of Halogenated Hydrocarbons; Alcohols, Phenols, Ethers and Epoxides; Carbonyl Compounds; Carboxylic Acids and their Derivatives; Sulphur containing compounds; Nitrogen Containing Functional Groups; Polynuclear Hydrocarbons; Heterocyclic Compounds; Alkaloids; Terpenes; Nucleic Acids; Amino Acids, Peptides and Proteins; Enzymes; Lipids; Concept of Energy in

Biosystems; Pharmaceutical Compounds: Structure and Importance; Organic Spectroscopy; Carbohydrates; Dyes; Polymers;

Section D

Analytical methods in chemistry- Qualitative and quantitative aspects of analysis; Optical methods of analysis; Thermal methods of analysis; Electroanalytical methods; Separation techniques; Basic analytical Chemistry; Introduction to polymeric chemistry; Research methodology for chemistry; Environmental Chemistry; Data Analysis tools; Introduction to Green Chemistry; Industrial chemicals and environment (Environment and its segments, Energy & Environment, Biocatalysis) Fundamentals, mathematical functions, polynomial expressions, logarithms, the exponential function, units of a measurement, interconversion of units, constants and variables, equation of a straight line, plotting graphs.

Uncertainty in experimental techniques: Displaying uncertainties, measurements in chemistry, decimal places, significant figures, combining quantities. Uncertainty in measurement: types of uncertainties, combining uncertainties. Statistical treatment. Mean, standard deviation, relative error. Data reduction and the propagation of errors. Graphical and numerical data reduction. Numerical curve fitting: the method of least squares (regression). Algebraic operations on real scalar variables (e.g. manipulation of van der Waals equation in different forms).Roots of quadratic equations analytically and iteratively (e.g. pH of a weak acid). Numerical methods of finding roots (Newton-Raphson, binary –bisection, e.g. pH of a weak acid not ignoring the ionization of water, volume of a van der Waals gas, equilibrium constant expressions). Differential calculus: The tangent line and the derivative of a function, numerical differentiation (e.g., change in pressure for small change in volume of a van der Waals gas, potentiometric titrations).

M.Sc. (BOTANY)

Section A

Economic botany: Food plants: Rice, Wheat, Maize, Potato. Pulses: Pigeon Pea, Bengal gram, Black gram, Green gram. Fibres and Fibre plants: Cotton, Jute, Coir. Oil and oil yielding plants: Ground nut, Coconut, Safflower, Sunflower. Firewood, Timber and Bamboos: Rose wood, Teak, Honne, Acacia, Bamboo. Spices:'Cardamom, Clove, Cinnamon, Pepper. Beverages: Coffee and Tea. Narcotic Plants: l.Opium, 2.Cannabis, 3 .Tobacco. Medicinal plants: A general account –Plants of medicinal importance studied in Monocot and Dicot families under Taxonomy

Ethnobotany: Introduction and significance. Examples under Ethnobotany: l.Phyllanthus. 2. Hemidesmus indicus 3.Terminalia chebula. 4. Strychnos nux-vomica 5. Aloe vera 6.Boerhaavia dffisa. 7. Withania somnifera. Importance of sacred groves and their conservation.

Taxonomy: Principles of Taxonomy, A brief account of Classical and modern Taxonomy.

Systems of classification: Broad outline of Bentham and Hooker's and Engler and Prantl's Classifications with merits and demerits. Plant Nomenclature- Binomial system, ICBN Principles and aims. Recent trends, Chemotaxonomy, Cyotaxonomy. Field and Herbarium Techniques, Herbaria, Botanical gardens, Floras and their importance, Botanical Survey of India and its functions.

Section B

Bacteria: Discovery, General characteristics and cell structure; Reproduction – vegetative, asexual and recombination, Economic importance.

Fungi : General characteristics, ecology and significance, range of thallus organization, cell wall composition , nutrition, reproduction and classification; Morphology and life cycles of Phytophthora, Rhizopus (Zygomycota) Penicillium, Venturia (Ascomycota), Puccinia, Agaricus (Basidiomycota); Symbiotic Associations- Lichens: General account, reproduction and significance; Mycorrhiza: ectomycorrhiza and endomycorrhiza and their significance

Viruses: Characteristics and classification, host-virus interaction; Bacteriophage – T4, Tobacco mosaic virus; viroids; prion.
Algae: Characteristics and classification; structure and reproduction of Nostoc, Chlamydomonas, Volvox, Vaucheria, Chara, Batrachospermum, Ectocarpus; economic importance.
Cell: Prokaryotic and eukaryotic cells, structure and functions, cell cycle and cell division.
Physiology: Plant water relations; mineral nutrition; photosynthesis; translocation of food material; respiration; nitrogen and nucleic acid metabolism; growth and development.

Section C

Genetics: Mendel's principles of inheritance, gene interactions, quantitative genetics, gene mapping; two and three point test crosses; cytoplasmic inheritance, descriptive statistics. Molecular genetics – Composition and roles of different forms of nuceic acids; DNA replication, transcription, translation; gene regulation in prokaryotes and eukaryotes.
Ecology: Ecological factors: Soil: Water: Light and temperature; Shelford law of tolerance. Adaptation of hydrophytes and xerophytes. Plant communities:Characters; Ecotone and edge effect; Succession; Ecosystem:Structure; energy flow trophic organisation; Food chains and food webs, Ecological pyramids production and productivity; Biogeochemical cycling. Biodiversity and their conservation
Plant pathology - Symptoms, classification and etiology of following diseases: White rust of crucifers, Late blight of potato, Apple scab, Loose smut of wheat, Black stem rust of wheat, Early blight of potato, Red rot of sugarcane and Citrus canker;General account of plant disease control (Quarantine, Chemical, Biological and Integrated); losses caused by plant diseases.

Section D

Bryophytes: Characteristics and classification; structure and reproduction of Riccia, Marchantia, Anthoceros, Funaria; economic importance.
Pteridophytes : General characteristics, classification, Early land plants (Cooksonia and Rhynia).General Classification, morphology, anatomy and reproduction of Selaginella, Equisetum and Adiantum. (Developmental details not to be included). Heterospory and seed habit, stelar evolution. Ecological and economical importance of Pteridophytes.
Gynnosperms : General characteristics, Classification (up to family), morphology, anatomy and reproduction of Cycas and Pinus. (Developmental details not to be included). Ecological and economical importance.
Angiosperms : Characteristics and classification; description and economic importance of families of dicots (Ranunculaceae, Papaveracea, Capparidaceae, Caryophyllaceae, Malvaceae, Rutaceae, Cucurbitaceae, Apiaceae, Rubiaceae, Apocynaceae, Asclepiadaceae, Convolvulceae, Solanaceae, Acanthaceae, Lamiaceae, Euphorbiaceae, Moraceae) and monocots (Liliaceae, Arecaceae, Poaceae).
Anatomy: Tissues and tissue systems and their function, anatomy of root, stem and leaf of dicots and monocots, secondary growth.
Reproduction: Asexual and sexual reproduction; structure and functions of flower, microsporogenesis, megasporogensis, pollination, fertilization, development of embryo, endosperm and seed; apomixes.

M.Sc.(ZOOLOGY)

Section A

ANIMAL DIVERSITY:

I. Principles and methods of taxonomy:
i. Basic concepts of Biosystematics and Taxonomy.
ii. Biological nomenclature
iii. Classical and quantitative methods of taxonomy of animals.
iv. Evolutionary relationships among taxa.
A) Non Chordata

Protozoa

i. General characteristics of Protozoa
ii. Protozoa: locomotion, reproduction, osmoregulation in Protozoa
iii. Disease causing protozoan: Plasmodium, Entamoeba

Porifera

i. General characteristics of Porifera.
ii. Canal system in Porifera.
iii. Organization and affinities in Porifera.

Coelenterata

i. General characteristics of Coelenterata
ii. Polymorphism in Coelenterata

Platyhelmenthes

i. General characteristics of Platyhelmenthes
ii. Parasitic adaptations.
iii. Life History and pathogenecity of Faciola hepatica, Taenia solium

Aschelmenthes

i. General characteristics of Aschelmenthes
ii. Life history and pathogenecity of Ascaris lumbricoides.

Annelida

i. General characteristics of Annelida.
ii. Adaptive radiations.
iii. Segmental organs.

Arthropoda

i. General characteristics of Arthopoda
ii. Larval forms of Crustacea.
iii. Mouth parts of insects.
iv. Social life in wasps, ants and termites.

Mollusca

i. General characteristics of Mollusca
ii. Torsion in gastropods.

Echinodermata

i. General characteristics of Echinodermata.
ii. Water vascular system.

B) **Chordata**

i. General characteristics, organization and affinities of Hemichordata, Cephelochordata and Urochordata.
ii. General organization and affinities of Ostrachoderms, Dipnoi and Holocephali.
iii. Amphibia: Origin of tetrapods, general characteristics of Amphibia and parental care.
iv. Reptilia: General characteristics and origin of reptiles, affinities of Rhynchocephalia and Crocodelia, poisonous and non-poisonous snakes of India, venom and anti-venom.
v. Aves: General characteristics, migration and flightless birds.
vi. Mammalia: Origin and evolution of mammals, dentition in mammals and affinities of Prototheira and Metatheria.

ANIMAL PHYSIOLOGY AND ENDOCRINOLOGY:

A. Blood and Circulation Blood corpuscles, haemopoiesis and formed elements, plasma function, blood volume, blood volume regulation, blood groups, hemoglobin, immunity, haemostasis, coagulation of blood.

B. Cardiovascular System Comparative anatomy of heart structure, myogenic heart, specialized tissue, ECG – its principle and significance, cardiac cycle, heart rate, stroke volume and cardiac output, blood pressure, neural and chemical regulation of heart.
C. Respiratory System Comparison of respiration in different species, anatomical considerations, transport of gases, exchange of gases, respiratory quotient, waste elimination, neural and chemical control of respiration.
D. Nervous system –Gross neuroanatomy of the brain and spinal cord, central and peripheral nervous system, structure and types of neurons, origin and transmission of nerve impulse through axon and synapse. Action potential, neurotransmitters, neuro-inhibitors and reflexes.
E. Sense organs - Vision, hearing and tactile response, chemo receptors.
F. Excretory system - Comparative physiology of excretion, kidney, types of nitrogenous wastes in animals, urine formation and urine concentration, regulation of water balance, blood volume, blood pressure, electrolyte balance, acid-base balance and hormonal control of urine formation.
G. Thermoregulation - Comfort zone, body temperature – physical, chemical, neural regulation, acclimatization.
H. Enzymes and vitamins: Types of enzymes and vitamins and their role in human physiology.
I. Digestive system - Digestion, absorption, energy balance, BMR.
J. Muscular system – Types of muscles, physiology of muscle contraction and single muscle twitch.
K. Integumentary System – Derivatives of Integument w.r.t. glands and digital tips.
L. Skeletal System – Evolution of visceral arches.
M. Endocrinology and reproduction – Classification of hormones, endocrine glands, their secretions and functions, basic mechanism of hormone action, hormones and diseases, gametogenesis, ovulation, neuroendocrine regulation, hormonal regulation of carbohydrates, lipids, proteins, nucleic acids and metabolism: reproductive cycles in vertebrates and hormonal control
N. Innate and adaptive immune system Cells and molecules involved in innate and adaptive immunity, antigens, antigenicity and immunogenicity. Humoral and cell-mediated immune responses, primary and secondary immune modulation, the complement system, inflammation, hypersensitivity and autoimmunity, immune response during bacterial (tuberculosis), parasitic (malaria) and viral (HIV) infections, congenital and acquired immunodeficiencies, vaccines.

Section B

INHERITANCE BIOLOGY AND CYTOLOGY:

A) Mendelian principles: Dominance, segregation, independent assortment.
B) Concept of gene: Allele, multiple alleles, pseudoallele, complementation tests
C) Extensions of Mendelian principles: Codominance, incomplete dominance, gene interactions, pleiotropy, genomic imprinting, penetrance and expressivity, phenocopy, linkage and crossing over, sex linkage, sex limited and sex influenced characters.
D) Gene mapping methods: Linkage maps, tetrad analysis, mapping with molecular markers, mapping by using somatic cell hybrids.
E) Extra chromosomal inheritance: Inheritance of Mitochondrial genes, maternal inheritance.
F) Microbial genetics: Methods of genetic transfers – transformation, conjugation, transduction and sex-duction, mapping genes by interrupted mating, fine structure analysis of genes.
G) Human genetics: Pedigree analysis, lod score for linkage testing, karyotypes, genetic disorders.
H) Quantitative genetics: Polygenic inheritance, heritability and its measurements, QTL mapping.
I) Mutation : Types, causes and detection, mutant types – lethal, conditional, biochemical, loss of function, gain of function, germinal verses somatic mutants, insertional mutagenesis.
J) Structural and numerical alterations of chromosomes: Deletion, duplication, inversion, translocation, ploidy and their genetic implications.
K) Recombination: Homologous and non-homologous recombination including transposition.

L) Structure, organization and functions of animal cell organalles: Nucleus, mitocondria, Golgi bodies, lysosomes, endoplasmic reticulum, peroxisomes and ribosomes.

M) Membrane structure and functions: Structure of model membrane, lipid bilayer and membrane protein diffusion, osmosis, ion channels, active transport, membrane pumps, mechanism of sorting and regulation of intracellular transport, electrical properties of membranes.

N) Chromosomes: Structure and types of Prokarotic and eukaryotic chromosomes

O) Cell Division and Cell Cycle: Mitosis and meiosis, their regulation, steps in Cell cycle, regulation and control of cell cycle

EVOLUTION AND ANIMAL BEHAVIOUR:

A) Emergence of evolutionary thoughts:
Lamarck; Darwin–concepts of variation, adaptation, struggle, fitness and natural selection; Mendelism; Spontaneity of mutations; the evolutionary synthesis, evidences of organic evaluation.

B) Origin of cells and unicellular evolution:
Origin of basic biological molecules; abiotic synthesis of organic monomers and polymers; concept of Oparin and Haldane; experiment of Miller (1953); the first cell; evolution of prokaryotes; origin of eukaryotic cells; evolution of unicellular eukaryotes; anaerobic metabolism, photosynthesis and aerobic metabolism.

C) Paleontology and evolutionary history:
The evolutionary time scale; eras, periods and epoch; Major events in the evolutionary time scale; origins of unicellular and multicellular organisms; major groups of animals; major fossil records, evolution of horse, elephant and man.

D) Molecular evolution:
Concepts of neutral evolution, molecular divergence and molecular clocks; molecular tools in phylogeny, classification and identification; protein and nucleotide sequence analysis; origin of new genes and proteins; gene duplication and divergence.

E) The mechanisms:
Population genetics: populations, gene pool, gene frequency; Hardy-Weinberg law; concepts and rate of change in gene frequency through natural selection, migration and random genetic drift; adaptive radiation; isolating mechanisms; speciation; allopatricity and sympatricity; convergent evolution; sexual selection; co-evolution.

Section C

MOLECULES AND THEIR INTERACTIONS:

A) Structure of atoms, molecules and chemical bonds.

B) Composition, structure and function of biomolecules (carbohydrates, lipids, proteins, nucleic acids and vitamins).

C) Stabilizing interactions (Van der Waals, electrostatic, hydrogen bonding, hydrophobic interaction).

D) Principles of biophysical chemistry (pH, buffer, reaction kinetics, thermodynamics, colligative properties).

E) Bioenergetics, glycolysis, oxidative phosphorylation, coupled reaction, group transfer, biological energy transducers.

F) Conformation of proteins (Ramachandran plot, secondary structure, domains, motif and folds).

DEVELOPMENTAL BIOLOGY OF ANIMALS:

A) Basic concepts of development : Potency, commitment, specification, induction, competence, determination and differentiation; morphogenetic gradients; cell fate and cell lineages; stem cells; genomic equivalence and the cytoplasmic determinants; imprinting; mutants and transgenics in analysis of development.

B) Gametogenesis, fertilization and early development: Production of gametes, cell surface molecules in sperm-egg recognition in animals; types of eggs, zygote formation, cleavage, blastula

formation, embryonic fields, gastrulation and formation of germ layers in animals; embryogenesis.

C) Morphogenesis and organogenesis in animals: Types of metamorphosis and hormonal control of metamorphosis

D) Placentation in Mammals: Placenta, Classification of placenta, physiology and functions of placenta.

ANIMAL ECOLOGY:

A) The environment: Physical environment; biotic environment; biotic and abiotic factors and their interactions.

B) Habitat and niche: Concept of habitat and niche; niche width and overlap; fundamental and realized niche; resource partitioning; character displacement.

C) Population ecology: Characteristics of a population; population growth curves; population regulation; life history strategies (r and K selection); concept of metapopulation – demes and dispersal, interdemic extinctions, age structured populations.

D) Species interactions: Types of interactions, intra-specific and inter-specific competition, herbivory, carnivory, symbiosis.

E) Community ecology: Nature of communities; community structure and attributes; levels of species diversity and its measurement; edges and ecotones. Ecological succession: Types; mechanisms; changes involved in succession; concept of climax.

F) Ecosystem ecology: Ecosystem structure; ecosystem function; energy flow and mineral cycling (carbon, nitrogen, oxygen and phosphorus); food chain, food web and ecological pyramids, primary production and decomposition; structure and function of some Indian ecosystems: terrestrial (forest, grassland) and aquatic (fresh water, marine, eustarine).

G) Biogeography: Major terrestrial biomes; theory of island biogeography; bio-geographical zones of India.

H) Applied ecology: Global environmental change; biodiversity: status, monitoring and documentation; major drivers of biodiversity change; biodiversity management approaches. Conservation biology: Principles of conservation, major approaches to management of natural resources, conservation/management strategy (project tiger, project elephant, national parks, sanctuaries and biosphere reserves) in India.

I) Environmental pollution: noise, air, water and soil pollution, their sources and control measures: acid rains, global warming, greenhouse effect and depletion of ozone layer.

Section D

APPLIED BIOLOGY:

A) Microbial fermentation and production of small and macro molecules.

B) Application of immunological principles, vaccines, diagnostics. Tissue and cell culture methods for animals.

C) Transgenic animals, molecular approaches in diagnosis and strain identification.

D) Genomics and its application to health and agriculture, including gene therapy.

E) Bio-resources and uses of biodiversity.

F) Common parasites and pathogens of humans and domestic animals.

G) A brief study of silk culture, apiculture, lac culture, vermiculture, pearl culture and fish culture.

H) Insects used in medicines, bio-control and food.

I) Integrated pest management.

METHODS IN BIOLOGY:

A) Molecular biology and recombinant DNA methods: Isolation and purification of RNA, DNA (genomic and plasmid) and proteins, different separation methods.

B) Analysis of RNA, DNA and proteins by one and two dimensional gel electrophoresis, isoelectric focusing gels.

C) Molecular cloning of DNA or RNA fragments in bacterial and eukaryotic systems. Expression of recombinant proteins using bacterial, animal and plant vectors. Isolation of specific nucleic acid sequences

D) Generation of genomic and cDNA libraries in plasmid, phage, cosmid, BAC and YAC vectors. In vitro mutagenesis and deletion techniques, gene knock out in bacterial and eukaryotic organisms. Protein sequencing methods, detection of post translation modification of proteins. DNA sequencing methods, strategies for genome sequencing.

E) Isolation, separation and analysis of carbohydrate, protein and lipid molecules RFLP, RAPD and AFLP techniques

F) Histochemical and immunotechniques Antibody generation, detection of molecules using ELISA, RIA, western blot, Immune-precipitation, fluocytometry and immune-fluorescence microscopy, detection of molecules in living cells, in situ localization by techniques such as FISH and GISH.

G) Microscopic techniques: Visulization of cells and subcellular components by light microscopy, resolving powers of different microscopes, microscopy of living cells, scanning and transmission microscopes, different fixation and staining techniques for EM, freeze-etch and freeze-fracture methods for EM, image processing methods in microscopy.

M.A. (History)

Section- A

- Pre-historic - Hunters & Gatherers
- The Harappan Civilization 2600-1900 B.C.
- Cultural Transitions: Images from texts and archaeology, 2000-600B.C.
- The Mauryans and the later Mauryans
- The Guptas and the later Guptas

Section – B

- Gurjara-Pratiharas, Palas and Rashtrakutas
- The Pallavas, Cholas and Chalukyas
- Md.Ghaznavi's invasions
- Md.Ghori and his invasion
- Establishment of Sultanate

Section – C

- Bahmani and Vijaynagar Empires
- Bhakti Movements & Sufism
- Mughal Empire & later Mughals
- Marathas and Sikhs
- Coming of Europeans

Section – D

- British Conquest of India
- 1857- Early Resistance to British Rule
- National Moment and Struggle by the Masses
- Social Reforms in British India
- Partition and Independence

M.A. (Political Science)

Section: A Introduction to Political Theory and Thought

Theories of State, Sovereignty, Liberty, Equality, Right and Justice. Sources of Law, Power, Authority and Legitimacy. Political Ideologies: Liberalism, Theories of Democracy, Marxian

Theory, Socialism and Fascism. Indian Political Thought: Manu, Kautilya, Raja Ram Mohan Roy, Swami Vivekananda, Rabindra Nath Tagore, Mahtma Gandhi, Aurobindo Ghosh, Subhash Chandra Bose, Jawaharlal Nehru, Vinayak Damodar Savarkar, Bhimrav Ramji Ambedkar, M.N.Roy, Ram Manohar Lohia, Deen Dyal Upadhayaya. Western Political Thought: Aristotle, Niccolo Machiavalli, Jean Bodhin, Thomas Hobbes, John Lock, Jean Jacques Rousseau, Jeremy Bentham, J.S.Mill.

Section: B Indian Government and Politics

Indian National Movement Strategies and Perspectives. Constituent Assembly: Composition, Working and Making, Constitution: Preamble, Features, Fundamental Rights and Duties, Directive Principles of State Policy. The Executive in India: The President, the Prime Minister and the Union Cabinet, the Governor, the Chief Minister and the State Cabinet. The Legislature in India: Parliament of India and Legislatures in States. Judiciary in India: The Supreme Court, the High Court. Federalism in India, Party System, Pressure Groups and Electoral Process. Caste and Religion in Indian Politics, Ethnicity and Social Movements, Strategy of Development.

Section: C Comparative Government and Politics

Comparative Politics, Comparative Methods. Comparative Politics Approaches: System and Institutional. Comparative Politics: Perspectives. Forms of Government: Parliamentary and Presidential, Unitary and Federal. Party System: One Party, Two Party and Multiparty System. Electoral System and Elections, Pressure Groups and Interest Groups. Typology of Political Systems: Liberal, Democratic, Authoritarian and Totalitarian. Develop and Developing Nations: A Comparison.

Section: D Introduction to International Politics and Foreign Policy of India

International Politics. Approaches to the study of International Relation: Traditional and Modern. Key Concepts: National Interest, National Power, Balance of Power, Deterrence, Security and Powers. Changing International Political Order: Rise of Super Power, Bi-Polarity, Cold War, Post-Cold War Theories. Arms and Nuclear Threats, Contemporary World Actors and Issues. Globalization and its Impact. India's Foreign Policy, Non-Alignment Movement, India's Relations with U.S.A, China, Pakistan and Russia. India and the Vision of a New World Order.

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