

Himachal Pradesh University
Draft Regulations
Choice-Based Credit System (CBCS)
For the
Post-Graduate (PG) Classes

0. Levels of Certification

Level of Certification	Minimum Duration	Number of Credits /Week /Semester
Short term courses: Level 0	less than 6 weeks	4 credits
Certificate Courses: Level 1	One semester	6-8 credits
Diploma Courses: Level 2	Two semester	25-30 credits
PG Diploma Courses Level 3	Two semester	25-30 credits
UG Degree courses Level 4	Six semester	20-25 credits
PG Master courses (General Education and Professional Courses): Level 5	Four Semester	25-30 credits
UG Technical Courses: Level 6	Eight Semester	25-30 credits
PG Master Courses (Technical cum Professional): Level 7	Six Semester	25-30 credits
Research degrees (M.Phil, M.Tech, LLM): Level 8	Two Semester	25-30 credits with 25 credits in respect of thesis
Research degree (Ph.D. Course work): Level 9	One Semester	25 credits
Research degree** (Ph.D.): Level 10	4 Semesters after M.Phil	25 credits
Research Degree** (Ph. D.): Level 11	5 Semester without M.Phil but after Ph.D. Course work	25 credits

0.1 Abbreviations:

APGDIT:	Advanced Post Graduate Diploma in Information Technology
B.Ed.:	Bachelor of Arts
BOS:	Board of Studies
C:	Credits
CAGP:	Continuous Assessment Grading Pattern
CBCS:	Choice Based Credit System
CCA:	Continuous Comprehensive Assessment
CGPA:	Cumulative Grade Point Average
COE:	Controller of Examination
ESE:	End-Semester Examination
GI:	General Interest
GPA:	Grade Point Average
GRC:	Grievance Redressal Committee
H:	Hobby Course
HP:	Himachal Pradesh

HPU:	Himachal Pradesh University
L:	Lecture Session credits
L:T:P	Lectures: Tutorials: Practicals
LLB:	Bachelor of Laws
LLM:	Master of Laws
M.A.:	Master of Arts
M.C.A.:	Master of Computer Applications
M.Com.:	Master of Commerce
M.Ed.:	Master of education
M.PEd.:	Master of Physical Education
M.Phil:	Master of Philosophy
M.Sc.:	Master of Science
M.T.A.:	Master of Tourism Application
M.Tech.:	Master of Technology
M:	Mean
MIL:	Modern Indian Language
OT L:	Oriental Language
P:	Practical/Practice Session credits
PCPs:	Personal Contact Programmes
PG:	Post Graduate
PGDCA:	Post Graduate Diploma in Computer Application
Ph.D.:	Doctor of Philosophy
RDC:	Research Degree Committee
SD:	Standard Deviation
SGPA:	Semester Grade Point Average
T:	Tutorial Session credits
TDC:	Three Year Degree Course
UG:	Undergraduate
X:	Mean of data sets named x

1.0 Title and Commencement

These regulations will be called the HPU Regulations for CBCS and Continuous Comprehensive Assessment Grading Pattern (CCAGP) for PG Programmes. These regulations shall come into force from the academic year 2014-2015.

2.0 Programmes Offered

- (1) **Certificate Programmes:** In all subjects and the following:
Bhoti, German, Russian, French, Pali, Chinese, Japanese, Human Rights.
- (2) **Diploma Programmes:** In all subjects and the following:
Bhoti, German, Russian, French, Pali, Chinese, Japanese, Yoga, Disaster Management, Human Resource Development, Clinical Psychology, Social Welfare, Corporate Studies, Painting, Adult Education, Guidance & Counseling.
- (3) **Post-Graduate Diplomas:** In the following areas:
Bhoti, German, Russian, French, Pali, Chinese, Japanese, Tribal Studies, Mass Communication, Deen Dayal Upadhyaya Studies, Population Studies, Women Development Studies, Organisational Psychology, Environmental & Clinical

Psychology, Personnel Management & Labour Law, e-commerce, Cyber Crime, Prosecution & Defense, PGDCA, APGDIT.

- (4) **Advanced Diploma:** Remote Sensing & GIS.
- (5) **M. A. (Master of Arts):** In the following subjects:
Hindi, English, Punjabi, Urdu, Translation, Sanskrit, Performing Arts (Music, Painting, Sculpture), Economics, Business Economics, Sociology, Public Administration, Geography, Political Science, Psychology, History, Painting, Yoga Studies, Rural Development, Defense Studies, Education, Physical Education, Philosophy, Buddhist Studies, Mathematics, Statistics.
- (6) **M. Sc. (Master of Science):** In the following subjects:
Botany, Zoology, Chemistry, Physics, Geology, Mathematics, Statistics, Bio-Technology, Microbiology.
- (7) **Vocational: Vocational Post Graduate Degree** in the following fields:
B. Ed., LL. B, M.A. (Social Work), M.A. (Human Resource Development), Journalism & Mass Communication, Tourism Administration.
- (8) **Education:** the following Masters Degrees in the field of Education:
M. Ed., M. P. Ed.
- (9) **Research Degrees:** M. Tech. / M. Phil., LL. M. and Ph. D. Degrees in the various disciplines being taught in the University.
- (10) **Other Master Degrees:**
Computer Applications (M.C.A.), Commerce (M. Com.), Business Administration (M.B.A.), Tourism Administration (M.T.A.), M. Tech. (Computer Science).

3.0 Definitions

3.1 Course: A course is a set of instructions pertaining to a pre-determined contents (Syllabus), delivery mechanism, and learning objectives. Every course offered will have three components associated with the teaching-learning process of the course, namely:

- (i) Lecture – symbolized as *L*;
- (ii) Tutorial – symbolized as *T*; and
- (iii) Practical – symbolized as *P*.

L stands for one one-hour lecture session per week; *T* stands for one two-hour tutorial session per week consisting of participatory discussion (between teacher and students or teaching assistant and students) or self study / desk work / brief seminar presentations etc. by students (these can include such novel methods that make a student absorb and assimilate more effectively the contents delivered in lecture classes); and *P* stands for one two-hour practice (laboratory work) session per week (this consists of hands-on experience, laboratory experiments, field studies, case studies, etc. that equip students to acquire the much-required skill component).

3.2 Credit: Each course is rated in terms of **credits** or **credit hours**. Every one-hour session per week of *L* amounts to one (1.0) credit per semester. Every two-hour session per week of *T* or *P* amounts to one (1.0) credit per semester.

CBCS Post Graduate Courses

One semester extends over a period of 20 weeks in total out of which 16 weeks are for the teaching-learning process and four (4) weeks are for testing process (i.e. mid-term (Minor) test(s), homework assignments, and semester-end examination (including preparatory period if any).

A course can have one, two, or all the three above-mentioned components. That means that a course may have only lecture component, only tutorial component, only practical component, or a combination of any two or all the three components.

The total credits earned by a student at the end of the semester upon successfully completing the course will be $L+T+P$. The credit pattern of the course is indicated as $L : T : P$.

If a course is of 4 credits, then the different credit distribution patterns in $L : T : P$ format could be as follows-

4 : 0 : 0	(four lectures only (no tutorial and no practical) per week).
2 : 1 : 1	(two lectures, one tutorial, and one practical per week).
0 : 2 : 2	(no lecture, two tutorials, and two practicals per week).
1 : 2 : 1	(one lecture, two tutorials, and one practical per week).
2 : 2 : 0	(two lectures, two tutorials, and no practical per week).
0 : 4 : 0	(no lecture, four tutorials only, and no practical per week).
1 : 1 : 2	(one lecture, one tutorial, and two practicals per week).
2 : 0 : 2	(two lectures, no tutorial, and two practicals per week).
0 : 0 : 4	(no lecture, no tutorial, and four practicals only per week).
1 : 0 : 3	(one lecture, no tutorial, and three practicals per week).
3 : 1 : 0	(three lectures, one tutorial, and no practical per week).
0 : 1 : 3	(no lecture, one tutorial, and three practicals per week).
1 : 3 : 0	(one lecture, three tutorials, and no practical per week).
3 : 0 : 1	(three lectures, no tutorial, and one practical per week).
0 : 3 : 1	(no lecture, three tutorials, and one practical per week).

In each of these combinations, the first value stands for the same number of lecture instructions per week, whereas the last two values stand for double the number of tutorial / practical instructions per week.

The concerned PG Board of Study (PG BoS) will decide the credit pattern for every course on the basis of requirements (to be discussed in the said PG BoS). However, generally a PG course shall be of 3 or 4 credits.

The PG Boards of Study in each subject taught at the HPU will identify the courses to be taught in each department. These PG courses will be labeled by an acronym that will comprise of two parts. The four letter prefix for the subject like GEOG for geography, GEOL for geology, SOCI for sociology, ECON for economics and so on. This will be followed by three digit suffix starting with 301, 401 etc. for

the level of the course. The 600 series will be reserved for research courses (Dissertation, Thesis etc.).

3.3 Types of Courses: Post Graduate Boards of Studies in all subjects shall identify courses of the following three categories:-

- (i) Core Courses (300, 400, and 500 series)
- (ii) Elective Courses (300, 400, and 500 series)
- (iii) Research Courses (600 series)

(i) **Core Courses:** Core courses comprise a set of at least twelve courses that are identified as compulsory for the students registered for the PG (Masters) degree in a particular subject. This is the core requirement for a master's degree. The category of core courses may further be divided into two sub-categories, namely:

- I. Hard Core
- II. Soft Core

- (a) **Hard Core Courses** are a set of compulsory core courses that have to be done by all students doing master's degree in a subject. There is no choice available in this category. Degree is not completed without doing all the Hard Core Courses.
- (b) **Soft Core Courses** are a set of courses in which there is a degree of choice or option available to the student. The student may choose some courses out of this set.

The total number of core courses to be completed by a student doing master's degree in a subject will be such that accumulates at least 48 credits (say 12 four credit courses).

Note: Core courses of subjects other than the subject of a student's master's degree will be considered as elective course for a student's PG programme.

(ii) **Elective Courses:** A course that can be chosen from a number of options from a student's subject of master's degree or from outside (subjects other than a student's master's subject) is known as elective course. In choosing the course here, student has considerable freedom of choice. He / she does not need to remain confined to his / her subject of master's degree only. These may be very specific or specialized or advanced or supportive to the discipline / subject of a student's master's degree or which provides an extended scope or which enables an exposure to some other discipline / subject / domain or nurtures a candidate's proficiency / skill etc. All courses that a candidate takes after completing the core requirements will be considered as elective courses in case of a student's master's programme.

An elective course chosen from an unrelated discipline / subject with an intention to seek exposure is called an **Open Elective**.

An elective course that is specially designed to acquire special / advanced knowledge (might be for the specialization required for a particular student's programme) as a supplement study / support study to a project work or an elective course for which no teacher is available in the department and so a candidate studies such a course on his / her own (with might be an advisory support by a teacher) is called a **Self Study Elective**.

All courses (core as well as elective) offered in the disciplines / subjects other than the subject of a student's master's degree are treated as elective courses for the PG programme of that student.

(iii) **Research Courses:** There will be some PG courses in each department which will involve doing research. These would include Master's Thesis, Project Work, M.Phil. Thesis, and Ph.D. Thesis / Dissertation etc.

There will be no prescribed syllabus for the research course. However, the contents of these courses will be governed by the directions or decisions of the Research Degree Committee (RDC) of the concerned programme.

These are special courses involving application of knowledge in solving, analyzing, and / or exploring real-life situations or difficult problem. Research courses may be classified into the following categories:-

- (a) Minor Research / Project Work (such as Master's project work) for up to 4 credits. (... 601)
- (b) Major Research / Project Work (such as M.Phil. dissertation) for 6 to 8 credits. (... 602)
- (c) Dissertation / Thesis (for Ph.D., for instance) for 10 to 12 credits. (... 603)

3.4 Course Evaluation (Evaluation of the Students)

All courses (Core and Elective) involve an evaluation system of students that has the following two components:-

- (i) **Continuous Comprehensive Assessment (CCA)** accounting for 50% of the final grade that a student gets in a course; and
- (ii) **End-Semester Examination (ESE)** accounting for the remaining 50% of the final grade that the student gets in a course.

(i) **Continuous Comprehensive Assessment (CCA)**: This would have the following components:

- (a) **Classroom Attendance** – Each student will have to attend a minimum of 75% Lectures / Tutorials / Practicals. A student having less than 75% attendance will not be allowed to appear in the End-Semester Examination (ESE).

- Provided that those having between 74% and 65% attendance will

apply for exemption in a prescribed form accompanied by clear reason(s) for absence to the authorized functionaries.

- Provided that those having between 64% and 50% attendance will apply for exemption in a prescribed form accompanied by a Medical Certificate from a Government Hospital.
- Provided that exemption from 75% attendance will be given to those participating in prescribed co-curricular activities (e.g. NCC, NSS, Youth Festivals, Sports etc.) to the extent of 25% (making the necessary attendance as 50% in these cases). However, the claim for this exemption should be supported by authenticated certificate from the concerned college / University authorities.
- Provided further that those getting the exemptions, except for those getting exemptions for co-curricular activities, will not be entitled for getting the CCA marks for classroom attendance as given below.

Those having greater than 75% attendance (for those participating in Co-curricular activities, 25% will be added to per cent attendance) will be awarded CCA marks as follows:-

> 75% but < 80%	1 marks
80% to 85%	2 marks
> 85 but < 90%	3 marks
90% to 95%	4 marks
> 95%	5 marks

For the Correspondence Courses and Distance Education Courses (through the ICDEOL of the HPU) the same can be done on the basis of the attendance in the Personal Contact Programmes (PCPs).

(b) **Mid-Term (Minor) Tests:** There will be two mid-term tests, first when roughly 50% of the syllabus has been covered (over the syllabus covered), and second when the remaining syllabus has been covered (over the syllabus covered after the first minor test). Each of these mid-term tests will be for 15 marks.

The stationary for the minor tests, e.g. the 20-page test booklet, will be provided by the Office of the COE, HPU/or COE of the college concerned.

Question paper for the minor tests will be made by the teacher of the course and will be evaluated by him / her.

Evaluated test booklets will be provided to the students (shown in the class) and they can be given photocopies of the same for the cost of photocopying and the administrative effort involved. The amount chargeable will be determined by the college / University administration and can be revised from time to time.

For the Correspondence Courses and Distance Education Courses (through the ICDEOL of the HPU) the same can be done in an on-line mode through e-mail or other electronic mediums.

- (c) **Seminar / Assignment / Term Paper** – The remaining 15 marks of the CCA will be awarded on the basis of seminar / assignment / term paper etc. that the course teacher might give to the students. At least one such seminar / assignment / term paper will have to be done in a semester course.

For the Correspondence Courses and Distance Education Courses (through the ICDEOL of the HPU) the same can be done in an on-line mode through e-mail or other electronic mediums.

- (ii) **End-Semester Examination (ESE)**: The remaining 50% of the final grade of the student in a course will be on the basis of an end-semester examination (ESE) that will be for three hours duration and will be covering the whole syllabus of the course.

- For the Odd Semesters the ESE will be in the month of October / November and for Even Semesters it will be in the month of April / May.
- A candidate who does not pass the examination (ESE) in any course(s) (or due to some reason is not able to appear in the ESE, other conditions being fulfilled, and so is considered as 'Fail'), shall be permitted to appear in such failed course(s)' ESE in the subsequent ESE to be held in the following October / November or April / May, or when the course is offered next, as the case may be.
- The registration for the ESE will be done at the time of the enrollment for the course at the beginning of the semester. The fee for the ESE will also be collected at that time.
- If a student is not permitted to appear in the ESE due to shortage of attendance beyond the exemption limit (i.e. < 50% attendance), he / she shall be deemed to have 'dropped' the course. However such candidate, on his / her written request to be made immediately, can be permitted to redo the missed semester after completing the rest of the programme or whenever the course is offered subsequently. This redoing would mean complete course including CCA and ESE.

Note for Laboratory Courses: In laboratory courses (having only practical (*P*) component), the students will be tested on the basis of laboratory exercises given by the course teacher concerned. It is suggested that 75% of the course grade may be on the basis of the laboratory record book and 25% on the basis of a viva voce examination cum test to be conducted by the course teacher at the end of the semester.

3.5 Question Paper Setting for the ESE:

- (a) In case a course is being taught only in the concerned teaching department of the HPU, the question paper for the ESE will be set by the teacher who is teaching the course, moderated by the Department Chairperson, and sent to the office of the CoE for the purpose of printing. The question paper will be administered (examination conducted) by the course teacher at the time of examination, and

evaluated by him / her. This will be part of the duty of the course teacher.

(b) In case a course is being taught in the concerned teaching department of the HPU as well as in some affiliated colleges also, the question paper for the ESE will be got set by the Controller of Examinations of the HPU by a panel comprising the following:

1. One teacher in the subject from the colleges where the course is being taught to be drawn in turn on the basis of seniority.
2. The course teacher from the concerned teaching Department of the HPU.

The question paper will be moderated by the Chairperson of the concerned teaching Department of the HPU. The question paper will be administered (examination conducted) by the course teacher (separately in the university teaching department and in the college where the course is being taught) at the time of examination, and evaluated by him / her. This will be part of the duty of the course teacher.

Note: For the above purpose, the ICDEOL of the HPU will be considered at par with an affiliated college of the HPU.

The question paper for the ESE will have either of the following two patterns:

Pattern-I:-

Part A

Ten objective type questions (MCQ / True or False / fill in the blanks etc.) for one mark each. $10 \times 1 = 10$ marks

Part B

Five short answer (25 words) type questions for two marks each. $5 \times 2 = 10$ marks

Part C

Ten questions of Medium Length Answer (50 words) type, of which five will have to be answered for three marks each. $3 \times 5 = 15$ marks

Part D

Three questions of long answer (400 words) type, of which one is to be attempted for fifteen marks. $15 \times 1 = 15$ marks

Total marks (A + B + C + D) = 10 + 10 + 15 + 15 = 50 marks.

OR

Pattern-II:-

Part A

Compulsory of 18 marks consisting of 10 objective type questions (in MCQ/True False/Fill in the blanks or such type) and four short answer questions of 2 marks each covering whole of the syllabus.

Part B (UNIT I)

One question out of two questions each of 8 marks. Each of these questions may contain sub parts and will be long type

Part C (UNIT II)

One question out of two questions each of 8 marks. Each of these questions may contain sub parts and will be long type

Part D (UNIT 1II)

One question out of two questions each of 8 marks. Each of these questions may contain sub parts and will be long type

Part E (UNIT 1V)

One question out of two questions each of 8 marks. Each of these questions may contain sub parts and will be of long type

Total marks (A + B + C + D+E) 18 + 8 + 8 +8+8 = 50 marks.

Notes:

- (a) Questions in all parts will be set in a manner as to cover the whole syllabus. Syllabus preferably should be divided into four units.
- (b) The question paper cum answer books will be printed by the CoE office of the HPU and will have the required number of pages with the necessary space for answers.
- (c) The answer books will be evaluated by the course teacher in the College / University Department / ICDEOL. The teacher will give his / her comment on each answer.
- (d) The examination will be conducted by the course teacher in the class room of the College or University or at centres designated by the ICDEOL as the case may be making proper arrangement for this purpose and will be evaluated by him / her.
- (e) The course teacher will give elaborate comments on each answer in the answer booklet he / she has evaluated.
- (f) The photocopies of the evaluated answer books will be made available to the students for a fee (to be decided depending on the cost of reproduction per answer book and the administrative charges to be decided by the college administration) to be paid in advance.

1.1.1.1 Notes about Question Papers for the ESE:

- 1.1.1.1.1** BOS through the teachers in a workshop mode will get model question papers drafted for circulation among the teachers and students.
- 1.1.1.1.2** Questions in all parts will be set in a manner as to cover the whole syllabus. Syllabus preferably should be divided into at least four units with sub units indicating credits / instructional hours for each topic in the sub unit.
- 1.1.1.1.3** The question paper cum answer books for the ESE will be printed by the CoE office of the HPU and will have the

necessary number of pages.

- 1.1.1.1.4 The answer books will be evaluated by the course teacher in the College or by table evaluation through external evaluator other than the teacher in case of ICDEOL courses. The teacher / external examiner will give his / her marks on each answer based on an objective criteria through model answers indicating marks of various steps or expectations in the answer.
- 1.1.1.1.5 The photocopies of the evaluated answer books will be made available to the students for a fee (to be decided depending on the cost of reproduction per answer book and the administrative charges to be decided by the college administration) to be paid in advance.

3.6 Teacher's Course File

A course teacher will maintain a **Teacher's Course File** in which all the detail of the course he / she is teaching will be entered. This file will contain details about all the students enrolled in the course, including the details about the attendance, minor / mid-term tests, course time table, unit and sub-unit wise content delivery (with dates), end-semester examination, grade points earned, etc. This file will be a semi-permanent record to be maintained by the teacher and will be retained with the teacher or in the Department / College for at least 5 years.

3.6.1 To bring transparency in the whole system maintenance of complete course file by teacher to be handed over to the designated head of Department having following documents shall be essential

- (a) Course Time table
- (b) Learning goals of the course
- (c) Unit wise, Subunit wise, Lecture wise course plan for content delivery along with learning/instructional objectives with dates
- (d) Tutorial sheets/Assignment sheets
- (e) Quizzes
- (f) Question papers of minor tests
- (g) Question paper of end semester examination
- (h) Attendance record*
- (i) Complete record of Comprehensive Continuous Assessment*
- (j) Filled Teacher Evaluation Sheets by students
- (k) Course Content Evaluation Sheets by students
- (l) Raw scores of CCA of students with authenticated copy submitted to Head of the Department/Principal
- (m) This file will be a semi-permanent record to be maintained by the teacher and will be retained with the teacher or in the Department / College for at least 5 years.

* Format for Attendance cum Continuous Comprehensive Assessment Register						
S.No.	Reg. No.	Name	Days			
1		NAME1	Attendance			

			CCA1 (during first 8 weeks)					
			CCA2 (during second 8 weeks)					
2		NAME2	Attendance					
			CCA1 (during first 8 weeks)					
			CCA2 (during second 8 weeks)					

Grievances and Redressal Mechanism

- a) The students will have the right to make an appeal against any component of evaluation. Such appeal has to be made to the Principal of the College or the Chairperson of the University Department concerned as the case may be on a prescribed form and should clearly state in writing the reason(s) for the complaint / appeal.
- b) The appeal will be placed before the **Grievance Redressal Committee (GRC)**, Chaired by the College Principal or or the Director ICDEOL or the Chairperson of the University Department concerned, comprising:
 - (1) Course Teacher, and
 - (2) a senior Teacher of the college / ICDEOL (preferably from the same subject or from an allied subject) or the University Department as the case may be.

The Committee will consider the case and may give a personal hearing to the appellant before deciding the case. The decision of the Committee will be final.

Grading

- a) The marks obtained in the CCA and the ESE will be combined and used for the deciding of the course grade that the student will be getting. Relative grading will be done by the Office of the CoE HPU for each course class in all the colleges as is described in the next section.
 - b) Two systems of grading will be used:
 - i. Absolute Grading, and
 - ii. Relative Grading.
- i. Absolute Grading** will be done in case of courses in which the total number of students anywhere in the HPU and its affiliated colleges is 50 or less. Example can be a course that is being offered in only one or two colleges. In such cases the final scores obtained by the students will be graded in an absolute manner on the basis of per cent marks obtained by the students as follows:

= and > 95 % marks	Grade Point 10.0	Letter grade S+
90 to less than 95 % marks	Grade Point 9.5	Letter Grade S
85 to less than 90 % marks	Grade Point 9.0	Letter Grade O++
80 to less than 85 % marks	Grade Point 8.5	Letter Grade O+
75 to less than 80 % marks	Grade Point 8.0	Letter Grade O
70 to less than 75 % marks	Grade Point 7.5	Letter Grade A++
65 to less than 70 % marks	Grade Point 7.0	Letter Grade A+

60 to less than 65 % marks	Grade Point 6.5	Letter Grade A
55 to less than 60 % marks	Grade Point 6.0	Letter Grade B+
50 to less than 55 % marks	Grade Point 5.5	Letter Grade B
45 to less than 50 % marks	Grade Point 5.0	Letter Grade C
Less than 45 % Marks	Grade Point 0.0	Letter Grade F (Fail)
Incomplete	-----	Letter Grade I
Audit Pass	-----	Letter Grade P
Audit Fail	-----	Letter Grade X

- ii. **Relative Grading** will be done in all cases where the number of students in the HPU and its affiliated colleges is more than 50. This will be done on the basis of the scores / marks (preferably in per cent form) received from all the colleges in which the course is being taught, and is to be done as explained and described below by the Office of the Controller of Examinations, Himachal Pradesh University.

Based on the precept that the students in a course class are a random sample drawn from a normal population of the students in all such classes anywhere, the students in the given course class will be graded in a relative manner within the context of the class and the categories of the normal distribution. It is well known that in a normal distribution 50% of the values are larger than the mean (μ) and 50% are less than the mean, and that 68% of the values lie between mean and plus / minus one standard deviation (i.e. $\mu \pm \sigma$), 95% of the values lie between mean and plus / minus two standard deviations (i.e. $\mu \pm 2\sigma$), 99.7% of the values lie between mean and plus / minus three standard deviations (i.e. $\mu \pm 3\sigma$), and only 0.26% of the values lie beyond mean plus / minus three standard deviations (i.e. beyond $\mu \pm 3\sigma$). This property of the normal distribution will be used in deciding the grades of the students in a course class (the random sample) in a relative manner for all the students appearing in a particular course in a particular semester in all the colleges affiliated to the HPU, by the Office of the CoE, HPU. For doing this the following steps are to be taken:

1. When all the awards have been received, calculate the mean award (symbolized as \bar{x}) using the formula

$$\bar{x} = (\sum x_i) / n$$

where x_i is the score of student i , n is the total number of students in the class and symbol \sum means summation over the values that follow.

2. Calculate the standard deviation (symbolized as s or σ) of all the awards in the class using the formula

$$s = \sqrt{(\sum (x - \bar{x})^2 / n)}$$

3. Divide the students in the class into the following categories:

- i. Category I: $> \bar{x} + 3\sigma$
- ii. Category II: $\leq (\bar{x} + 3\sigma)$ and $\geq (\bar{x} + 2.5\sigma)$
- iii. Category III: $\leq (\bar{x} + 2.5\sigma)$ and $\geq (\bar{x} + 2\sigma)$
- iv. Category IV: $\leq (\bar{x} + 2\sigma)$ and $\geq (\bar{x} + 1.5\sigma)$
- v. Category V: $\leq (\bar{x} + 1.5\sigma)$ and $\geq (\bar{x} + \sigma)$
- vi. Category VI: $\leq (\bar{x} + \sigma)$ and $\geq \bar{x}$
- vii. Category VII: $\leq \bar{x}$ and $\geq (\bar{x} - \sigma)$

CBCS Post Graduate Courses

viii.	Category VIII:	$\leq (\bar{x} - \sigma)$ and $\geq (\bar{x} - 1.5\sigma)$
ix.	Category IX:	$\leq (\bar{x} - 1.5\sigma)$ and $\geq (\bar{x} - 2\sigma)$
x.	Category X:	$\leq (\bar{x} - 2\sigma)$ and $\geq (\bar{x} - 2.5\sigma)$
xi.	Category XI:	$\leq (\bar{x} - 2.5\sigma)$ and $\geq (\bar{x} - 3\sigma)$
xii.	Category XII:	$< (\bar{x} - 3\sigma)$

4. Assign the grades to the students in the class as follows:

Category I:	Grade Points 10.0	Letter Grade S+
Category II:	Grade Points 9.5	Letter Grade S
Category III:	Grade Points 9.0	Letter Grade O++
Category IV:	Grade Points 8.5	Letter Grade O+
Category V:	Grade Points 8.0	Letter Grade O
Category VI:	Grade Points 7.5	Letter Grade A++
Category VII:	Grade Points 7.0	Letter Grade A+
Category VIII:	Grade Points 6.5	Letter Grade A
Category IX:	Grade Points 6.0	Letter Grade B+
Category X:	Grade Points 5.5	Letter Grade B
Category XI:	Grade Points 5.0	Letter Grade C
Category XII:	Grade Points 0.0	Letter Grade F (Fail)
Category XIII:	Incomplete	Letter Grade I
Category XIV:	Audit Pass	Letter Grade P
Category XV:	Audit Fail	Letter Grade X

Notes:

1. Category XIII (Incomplete, with letter grade I) is given to students who are unable to complete the programme and are considered 'dropped'.
2. Categories XIV and XV (Audit Pass with letter grade P and Audit Fail with letter grade X) are given to the students who are auditing (attending the class, but not for grade) the course and are passing or failing respectively. These grades will not be counted for determining the Grade Point Average (GPA) and Cumulated Grade Point Average (CGPA) of the student.

Determining GPA and CGPA

For each student the Grade Point Average (GPA) and the Cumulated Grade Point Average (CGPA) will be determined by the CoE office of the HPU as follows:

$$GPA \text{ or } CGPA = (\sum C_i G_i) / (\sum C_i)$$

Where, C_i is the credit earned for course i (i varying from 1 to n) and G_i is the grade point obtained by the student in course i (i varying from 1 to n), n being the number of courses passed so far by a student.

At the completion of the PG programme the CGPA will be determined for the whole programme and will be assigned letter grades as below:

CGPA	Letter Grade	Explanation of letter Grade	Classification of the Final Result
9.51 and above	S+	Super	First Class - Exemplary
9.01 to 9.50	S		
8.51 to 9.00	O++	Outstanding	First Class - Distinction
8.01 to 8.50	O+		
7.51 to 8.00	O		
7.01 to 7.50	A++	Excellent	First Class
6.51 to 7.00	A+		
6.01 to 6.50	A		
5.51 to 6.00	B+	Good	Second Class
5.01 to 5.50	B		
4.51 to 5.00	C	Average	Third Class
4.50 and below	F	Fail	Fail
No Grade	I	Incomplete	Incomplete

Provided further that if a student leaves a programme without completing it (i.e. has accumulated less than 96 credits), he / she can be, on a written application from the student, considered for the following:

1. If he / she has accumulated up to 48 credits and has done up to 50 % of the core courses of the subject, he / she can be conferred a **PG Diploma** in the concerned subject.
2. If he / she has accumulated up to 72 credits and has done all of the core courses of the subject, he / she can be conferred a **PG Advanced Diploma** in the concerned subject.

4.0 **Reservation**

Admissions in all courses would be subject to the reservations in the following pattern:-

- (I) 25% of all the seats will be filled in **Open Quota**. All candidates will be competing under this category.
- (II) The remaining 75% seats will be for the **Bonafide Himachali Quota** and will be filled by the candidates who hold Bonafide Himachali Certificate or have passed the qualifying examination from institutions located within the state of Himachal Pradesh. Following reservations will be applicable in this category:
 1. For the Scheduled Caste Candidates 15%
 2. For the Scheduled Tribe Candidates 7.5%
 3. For Sports Activist Candidates 5.0%

CBCS Post Graduate Courses

4. For cultural Activist Candidates 5.0%

5. For Handicapped / Physically Challenged 3.0%

For the purpose of these reservations the following 120 point reservation roster will be followed:

1	26 - SC	51	76	101
2	27 - ST	52 - SC	77	102
3	28	53 - ST	78 - SC	103
4	29	54	79 - SP	104
5	30	55	80 - ST	105
6	31	56	81 - CUL	106 - SC
7 - SC	32	57	82	107 - ST
8	33 - SC	58	83	108
9	34 - HC	59 - SC	84	109
10	35	60 - SP	85 - SC	110
11	36	61 - CUL	86	111
12 - SC	37	62	87	112
13 - ST	38 - CUL	63	88	113 - SC
14	39 - SC	64	89	114
15	40 - SP	65 - SC	90	115
16	41 - ST	66 - HC	91 - SC	116
17	42	67 - ST	92	117 - SP
18 - SC	43	68	93 - ST	118 - CUL
19 - SP	44	69	94	119 - SC
20 - CUL	45	70	95	120 - ST
21	46 - SC	71	96	
22	47	72 - SC	97 - SC	
23	48	73	98 - CUL	
24	49	74	99 - SP	
25	50	75	100 - HC	

Abbreviations used: SC: Scheduled Caste; ST: Scheduled Tribe; SP: Sports; CUL: Cultural; HC: Handicapped / Physically Challenged.

Number of category-wise Reserved Seats in 120 Point Reservation Roster:

SC 18 Seats (15 %)

ST 9 Seats (7.5 %)

SP 6 Seats (5 %)

CUL 6 Seats (5 %)

HC 6 Seats (5 %)

5.0 Eligibility for Admissions

(1) **For Master's Degree Programme:**

- (i) Candidates possessing a Bachelor's Degree (with the subject chosen for the master's degree programme as major or minor (allied) subject at the bachelor degree level) of HPU or any other

university established by law in India or equivalent thereto are eligible for admission to the PG degree programmes (M.A., M.Sc. etc.)

- (ii) A minimum of 40% marks (35 % in case of those belonging to Scheduled Caste and Scheduled Tribe categories) in the entrance test conducted by the HPU.
- (2) **For Vocational Degree Programme:**
 - (a) For LL. B. (Law Degree) (To be decided by the respective faculty)
 - (b) For M.T.A. (To be decided by the respective faculty)
 - (c) For LL. M. (To be decided by the respective faculty)
- (3) **For Education Degree Programme:**
 - (a) For M. Ed. (To be decided by the respective faculty)
 - (b) For M. P. Ed. (To be decided by the respective faculty)
- (4) **For Technology Degree Programme:**
 - (a) MCA (To be decided by the respective faculty)
 - (b) M. Tech. (To be decided by the respective faculty)
- (5) **For PG Diploma, Certificate & Advanced Diploma Programmes**
(To be decided by the respective faculty)
- (6) **For Research Degree Programme:**
 - (a) For M.Phil. / Pre-Ph.D.
 - (i) Candidates Possessing a Master's Degree in the concerned subject of HPU or any other university established by law in India or equivalent thereto are eligible for admission to the M.Phil. / Pre-Ph.D. programme.
 - (ii) With a cut off based on the merit list of the entrance test but not below 40% marks in entrance test for General Category Candidates and 35% marks in case of SC and ST categories. Merit list shall be drawn separately for SC / ST and General Category students.
 - (b) For Ph.D. (Direct).
Candidates possessing a Master's Degree of HPU or any other university established by law in India or equivalent thereto along with the UGC NET / SLET
or
candidates possessing an M.Phil. degree of HPU or equivalent (admitted through entrance test) are eligible for registering for Ph.D. programme.

6.0 **Scheme of Instruction**

- (1) **Master's Degree Programme:** (See Appendix – I and II)

CBCS Post Graduate Courses

(i) A master's degree programme is of 4 semesters- two years- duration. A candidate can avail a maximum of 10 semesters- 5 years (in one stretch) – to complete Master's Degree (including blank semesters (semesters in which candidate does not take any course), if any). Provided that a maximum of three attempts are allowed to pass any course.

Permission for blank semester will have to be obtained by the candidate before the concerned semester starts. The permission will be given by the Chairperson of the Department or the principal of the college as the case may be.

However, whenever a candidate opts for blank semester(s), he / she will have to study the prevailing courses offered by the department(s) when he / she continues (re-joins) his / her studies.

(ii) A candidate has to earn a minimum of 100 credits (96 credits of courses plus 4 credits of research / project work) with passing grades for the successful completion of a Master's Degree with a distribution of credits for different categories of courses as given in the following table:

Course Type	Credits
Core	48 Compulsory (Within the department)
Elective	48 (at least 32 from within the department), including up to 16 from outside the department.
Minor Research Project	4 credits in the last Semester
Total	100

(iii) A candidate can enroll for a maximum of 24 credits per semester, except in the last semester when 4 credits of Minor Research Project is done to make 28 credits in that semester.

(iv) Only such candidates who enroll for a minimum of 18 credits per semester and complete successfully 100 credits in 4 successive (without blank) semesters shall be considered for declaration of ranks and medals.

(v) Only such candidates shall be permitted to apply after the completion of 1st Semester for students' fellowships, scholarships, and freeships in their PG programmes who have passed all the courses (at least 24 credits) of first semester in the first attempt with not less than 7.00 CGPA i.e. A+ or better letter grade.

(vi) If a candidate earns 20 credits in excess to 100 credits (i.e. 120 credits in total) for master's degree, and if these extra credits are in a particular identifiable area of academic interest, the candidate will be given an **Add On Proficiency Diploma** in that identified academic area along with the master's degree.

(vii) If a candidate earns 10 credits in excess to 100 credits (i.e. 110 credits in total) for master's degree, and if these extra credits are in a particular identifiable area of academic interest, the candidate will be given an **Add on Proficiency Certificate** in that identified academic area along with the master's degree.

CBCS Post Graduate Courses

(viii) When a candidate admitted to Master's Programme is not able to accumulate the total of 100 credits required for master's degree but has been able to accumulate not less than 48 credits (including at least 24 credits of core courses), he / she may opt to exit and receive a **Bachelor Honour Degree** or **PG Diploma** in the said subject.

(2) **For Vocational Degree Programme:** (To be decided by the respective faculty)

(3) **For Educational Degree Programme:** (To be decided by the respective faculty)

(4) **For Technology Degree Programme:** (To be decided by the respective faculty)

(5) **For Research Degree Programmes:**

(a) **For M.Phil. / Pre-Ph.D.**

- (i) An M.Phil. degree programme is of 2 semesters - one year - duration. A candidate, however, can avail of a maximum of 3 semesters - 1½ years - in total
- (ii) A candidate has to earn a minimum of 36 credits with passing grades for the successful completion of the M.Phil. degree.
- (iii) The distribution of credits for an M.Phil. degree shall be as follows:-

Course Type	Credits
Core Courses	12 credits (should necessarily include courses on Research Methodology, Recent Philosophical Issues in the Subject, and Thesis Writing Techniques)
Proficiency Courses	12 credits (courses in languages / computer techniques / statistical techniques in the respective departments to be suggested by the supervisor of the candidate).
Thesis / Dissertation	12 credits (to be completed under the guidance of the Supervisor to be appointed by the Chairman of the Department through the Department Council)
Total	36 credits

Note: Core and Proficiency courses may be completed in the first semester or may be distributed over Ist and IInd semester as per the decision of BoS of the M.Phil. programme. However, the failed candidates will be given one more (and final) chance to pass in the second semester.

- (iv) The candidate will be allotted a guide / supervisor at the time of admission by the Departmental Council.

- (v) The candidate will seek advise from the guide / supervisor regarding the Elective Courses to be taken.
- (vi) The candidate will start working on the thesis / Dissertation only when he / she has passed both the Core Courses and Proficiency Courses (24 credits), which cannot be later than the completion of two semesters of the programme.
- (vii) Thesis / Dissertation will be submitted not later than one and half (1½) years from the date of admission.
- (viii) A panel of examiners will be suggested by the Departmental Council for each M. Phil. Dissertation submitted and the Vice Chancellor will select one of these to be the examiner for the dissertation. Examiner will award marks out of 75 for the dissertation.
- (ix) The examiner will take a viva voce examination pertaining to the thesis / dissertation and will award marks out of 25 to the candidate on its basis.
- (x) Grade point secured by the candidate in the thesis / dissertation and the CGPA will be determined in the same manner as is done in other PG courses.

(b) For Ph. D.:

- (i) The Ph. D. Programme will be of five years duration (including the one-and-half years period for doing M.Phil. in case a candidate goes for Ph.D. programme after doing M.Phil.) and can be extended by two yearly extensions for each of which a fee will be required to be paid. Thus the maximum period of the programme is seven years.
- (ii) The Ph. D. Programme is divided in to two parts:
 - (a) Course Work (at least 12 credits of Core / Elective Courses in the main subject and 12 credits of Elective Courses in the Allied subject as in case of M.Phil.), and
 - (b) Thesis / Dissertation (will be considered as equivalent of 24 credits).

Note: A student who has done M. Phil. from the HPU with the course work or from any other university established by law equivalent to the credit as detailed above will be exempted from doing the Course Work. He / She, however, will have to pass (obtain 'satisfactory' grade) the **Comprehensive Test** given by the Supervisor(s) as in **Stage III** of the Ph.D. programme given below.

- (iii) The Ph. D. Programme will have the following stages:

- (a) **Stage I (Registration / Enrollment):** In this stage the student enters the Ph. D. Programme. His / her application goes to the Standing Committee which will verify as to the student's eligibility for registration / enrollment for the programme. If eligible, the student will be registered / enrolled for the programme and one (or two) research supervisor(s) / Guide(s) will be appointed. After getting registered the student will sign up for certain number of PG level core courses in the subject of his / her doctoral research.

Note: A research supervisor / guide can be from outside the department (other departments of the HPU, the ICDEOL, colleges affiliated to the HPU, or from other universities or research institutions) provided that the second supervisor / guide from the department is also appointed.

- (b) **Stage II (Course Work):** After the registration the non-M.Phil. candidates will take the course work as recommended for M.Phil. / Pre-Ph.D. This will not be done by those candidates who have entered the Ph.D. programme after doing M.Phil.

Note: In case a candidate wishes to exit the Ph.D. programme at this stage (or is not able to pass the Comprehensive Test in stage III below), he / she will be given the choice to write an M.Phil. dissertation and receive an M.Phil. degree.

- (c) **Stage III (Comprehensive Test):** After the candidate has passed the Courses as given above (the candidates having done M.Phil. will skip Stage II and come to Stage III directly), he / she will have to appear in a Comprehensive Test given by the Supervisor(s) related to the candidate's prospective specialization. The candidate will have to obtain 'Satisfactory' result in the Comprehensive Test. This will have to be passed (i.e. 'Satisfactory' result) in the first and the only attempt. Failing this, he / she will be considered as 'Dropped' from the programme.

Note: As given in the previous note, in case a candidate is not able to pass the Comprehensive Test in stage III, he / she will be given the choice to write an M.Phil. dissertation and receive an M.Phil. degree. This, however, will have to be completed within a period of not more than six months after the declaration of the result of the Comprehensive Test.

(d) **Stage IV (Writing and Presenting Synopsis):** When the candidate has completed all course work requirements and passed the comprehensive test, he / she will write and present a 'Synopsis' of his / her proposed research to the **Research Degree Committee (RDC)** as per the statues / ordinances of the University. The Research Synopsis will have the following sections:

Either

1. Title / Topic
2. Introduction
3. Literature Review
4. Statement of the Problem (Research Questions and Hypotheses)
5. Tentative Methodology
6. Tentative Chapter Scheme
7. Bibliography

Or

1. Title / Topic
2. Introduction
3. Review of literature
4. Theoretical/Experimental background
5. Computational Methodology/Experimental Technique
6. Motivation/Objective of the proposed research work to be carried out by the candidate.
7. Bibliography

(Other subheadings of the problem may be included if needed)

The RDC will approve the title / topic and outline of the thesis or might approve the synopsis with some changes or might reject the same. When the synopsis has been rejected, a revised synopsis can be re-presented before the RDC after at least two months. If revised synopsis is not re-presented before the RDC within five months from the first meeting of the RDC, the candidate will be deemed to have 'Dropped' from the programme.

If a synopsis is rejected twice, the candidate is deemed to have 'Dropped' from the programme.

The RDC will also make a panel of six examiners for the thesis.

(e) **Stage V (Thesis / Dissertation Writing and Submission):** After the synopsis has been approved by the RDC, the candidate works on the thesis / dissertation under the joint supervision / guidance of the internal members of the RDC and, when the supervisor and other internal members of the RDC approve, submits two copies of the thesis / dissertation in a spiral-bound form within a period not exceeding five

years (six or seven years if extension is granted) from the date of registration or from the date of admission to M.Phil. programme as the case may be.

- (iv) The thesis / dissertation submitted by the candidate will be sent for evaluation to two examiners chosen by the Vice Chancellor out of the panel approved by the RDC. The examiners might:
- Recommend the thesis / dissertation or
 - Suggest revision of the thesis / dissertation or
 - Reject the thesis / dissertation.

If one of the examiners or both suggest revision of the thesis / dissertation, the suggested revisions will be carried out by the candidate and the revised thesis / dissertation will be re-submitted. This will be sent to the examiner(s) who have suggested revisions for evaluation.

If one of the examiners rejects the thesis / dissertation, the thesis / dissertation will be sent to a third examiner selected by the Vice Chancellor from the panel for evaluation.

If both the examiners reject the thesis / dissertation, the candidate will be deemed to have failed in the programme.

When two of the examiners recommend the award of the degree, an open viva voce examination (notice for the viva voce will be circulated to all the departments of the University) will be held by the internal members of the RDC and one of the examiners selected by the Vice Chancellor. All attending the open viva voce examination can ask questions pertaining to the thesis / dissertation. Degree will be awarded to the candidate upon successful defense in the viva voce examination.

Ph. D. thesis / dissertation will not be assigned grade points and letter grade. However, in the transcripts issued to the candidate the GPA for the courses passed by the candidate and the CGPA for the total number of courses passed by the candidate will be mentioned.

After the viva voce examination has been conducted and the thesis / dissertation has been recommended for the award of Ph. D. Degree, five bound copies along with a soft copy (in the form of a CD / DVD) of the thesis / dissertation, in which all suggestions made by the examiners during the viva voce examination have been incorporated, will be deposited in the department. These copies will be meant for the following:

1. A Copy for the Departmental Library.
2. A copy for the Central Library of the HPU.
3. A copy for the Supervisor.
4. A copy for the Co-Supervisor.
5. A soft copy in a PDF format (on a CD or DVD) for the UGC INFLIBNET archives: *Shodh Ganga* along with

approved synopsis for posting on UGC INFLIBNET
archive *Shodh Gangotri*.

Revision of Regulation and Curriculum

Whenever necessary, the HPU may from time to time revise, amend, and change the regulations and curriculum, after the due approval of the different bodies and authorities of the University.

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APPENDIX – I
Programme Outline for Master's Degree Programme

Year / Semester	Courses	Credits	Marks		Duration
			CCA	End Term Examination	
First Year					
1 st Semester	6 core courses of 4 credits each	6 X 4 = 24	300	300	16 Weeks
2 nd Semester	6 core courses of 4 credits each	6 X 4 = 24	300	300	16 Weeks
Second Year					
3 rd Semester	6 elective courses of 4 credits each	6 X 4 = 24	300	300	16 Weeks
4 th Semester	6 elective courses of 4 credits each plus Research	6 X 4 = 24 1 X 4 = 4	300 50	300 50	16 Weeks
Total	24 courses of 4 credits each	(24 X 4) + 4 = 100	1250	1250	64 Weeks

APPENDIX – II
Semester-wise Courses for a Master's Degree Programme

1st Semester (6 Core Courses of 4 Credits each)						
Course No.	Course Title	Credits	Marks		Number of Lectures-Tutorials-Practicals (L-T-P)	Course Coordinator / Teacher
			CCA	End Term Examination		
.... 301	Core Course 1	4	50	50	L-T-P	
.... 302	Core Course 2	4	50	50	L-T-P	
.... 303	Core Course 3	4	50	50	L-T-P	
.... 304	Core Course 4	4	50	50	L-T-P	
.... 305	Core Course 5	4	50	50	L-T-P	
.... 306	Core Course 6	4	50	50	L-T-P	
Total	6 Courses	24	300	300	L-T-P	

2nd Semester (6 Core Courses of 4 Credits each)						
Course No.	Course Title	Credits	Marks		Number of Lectures-Tutorials-Practicals (L-T-P)	Course Coordinator / Teacher
			CCA	End Term Examination		
.... 311	Core Course 7	4	50	50	L-T-P	
.... 312	Core Course 8	4	50	50	L-T-P	
.... 313	Core Course 9	4	50	50	L-T-P	
.... 314	Core Course 10	4	50	50	L-T-P	
.... 315	Core Course 11	4	50	50	L-T-P	
.... 316	Core Course 12	4	50	50	L-T-P	
Total	6 Courses	24	300	300	L-T-P	

CBCS Post Graduate Courses

3rd Semester (6 Elective Courses of 4 Credits each)						
Course No.	Course Title	Credits	Marks		Number of Lectures-Tutorials-Practicals (L-T-P)	Course Coordinator / Teacher
			CCA	End Term Examination		
.... 321	Elective 1 (Departmental)	4	50	50	L-T-P	Prof. B.S. Marh
.... 322	Elective 2 (Departmental)	4	50	50	L-T-P	
.... 323	Elective 3 (Departmental)	4	50	50	L-T-P	Prof. B.S. Marh
.... 324	Elective 4 (Departmental)	4	50	50	L-T-P	
.... 325	Elective 5 (Departmental)	4	50	50	L-T-P	
.... 326	Elective 6 (Departmental)	4	50	50	L-T-P	
Total	6 Courses	24	300	300	L-T-P	

4 th Semester (6 Elective Courses of 4 Credits each plus 4 credits of Minor Research Project)						
Course No.	Course Title	Credits	Marks		Number of Lectures-Tutorials-Practicals (L-T-P)	Course Coordinator / Teacher
			CCA	End Term Examination		
.....	Elective 7 (Departmental or Outside)	4	50	50	L-T-P	
.....	Elective 8 (Departmental or Outside)	4	50	50	L-T-P	
.....	Elective 9 (Departmental or Outside)	4	50	50	L-T-P	
.....	Elective 10 (Departmental or Outside)	4	50	50	L-T-P	
.....	Elective 11 (Departmental or Outside)	4	50	50	L-T-P	
.....	Elective 12 (Departmental or Outside)	4	50	50	L-T-P	
.....	Minor Research Project	4	50	50	.....
Total	6 Courses	28	350	350	L-T-P	

APPENDIX-III
Programme outline for M.Phil./Pre-Ph.D.

Semester	Courses	Credits	Marks		Duration
			CCA	End Term Examination	
1 st Semester	3 core courses of 4 credits each and 3 proficiency courses of 4 credits each	6 X 4 = 24	300	300	16 Weeks
2 nd Semester	Research work of 12 credits of dissertation	12 X 1 = 12	150	150	16 Weeks
Total	6 courses of 4 credits each + 12 credits of Dissertation = 36 Credits	24 + 12 = 36	450	450	32 Weeks

Programme Details (M.Phil. / Pre-Ph.D. in Geography)

1 st Semester (6 Core + Proficiency Courses of 4 Credits each)						
Course No.	Course Title	Credits	Marks		Number of Lectures-Tutorials-Practicals (L-T-P)	Course Coordinator / Teacher
			CCA	End Term Examination		
Geo 501 (A or B)	Research Methods in Physical / Human Geography	4	50	50		
Geo 502 (A or B)	Recent Philosophical Issues in Physical / Human Geography	4	50	50		
Geo 503	Thesis Writing	4	50	50		
Edu / Psy / Mat	Multivariate Statistical Techniques	4	50	50		
Lib	Library (Bibliographic) Research	4	50	50		
Com	General Computer Techniques (Word Processing, Spread Sheet, Data Representation, Presentation Techniques)	4	50	50		
Total	6 Courses	24	300	300		

CBCS Post Graduate Courses

2nd Semester (12 Credits of Research Dissertation)						
Course No.	Course Title	Credits	Marks		Number of Lectures-Tutorials-Practicals (L-T-P)	Course Coordinator / Teacher
			CCA	End Term Examination		
Geo 601	Research Dissertation	12	150	150		
Total		12	150	150		

Appendix IV
Programme outline for Ph. D.:

Programme Outline

Semester / Year	Courses	Credits	Marks		Duration
			CCA	End Term Examination	
1 st	3 core courses of 4 credits each and 3 proficiency courses of 4 credits each (same as for the M.Phil. programme, in case the candidate is not M.Phil. already) <i>Note: Course work is not required for the candidates who are M.Phil already.</i>	6 × 4 = 24	300	300	Usually not more than 2 Semesters
2 nd to 5 th Year from registration	Research work (Dissertation) of 24 credits	24 × 1 = 24	300	300	Usually upto 5 years after registration, but not more than 7 years after registration.
Total	6 courses of 4 credits each + 12 credits of Dissertation = 48 or 36 Credits	24 + 24 = 48	600	600	Usually upto 5 years after registration, but not more than 7 years after registration.

APPENDIX-V

Programme Outline for Certificate /Diploma/PG Diploma/ Advanced Diploma.

- Certificate Course (2 Sem)
- Diploma Course (4 Sem Course)
- Advance Diploma (6 Sem Course)
- PG Diploma (2 Semester Course)

(A) Structure outline of Certificate Courses (Min. Credits to be earned=16)'

Semester	Course Code	Course Type	Course Name	Credit (s) Week	Marks		Cumulated credits category wise	Duration
					CCA	End Term Examination		
I (ODD)	CER__0101 (LAB)	Core 1	Course 1	3 1	37.5	37.5		
					12.5	12.5		
	CER__0102	Core 2	Course 2	4	50	50	8	16 Weeks
II (EVEN)	CER__0203 (LAB)	Core 3	Course 3	3 1	37.5	37.5		
					12.5	12.5		
	CER__0204	Core 4	Course 4	4	50	50	8	16 Weeks
							4×4=16	32 Weeks

Note: 4 Courses of 4 Credits each.

After the completion of 16 credits a Certificate in Russian will be awarded.

(B) Structure outline of Diploma Courses (Min. Credits to be earned=16)

Semester	Course Code	Course Type	Course Name	Credit (s) Week	Marks		Cumulated credits category wise	Duration
					CCA	End Term Examination		
III (ODD)	DIP__0301 (LAB)	Core 1	Course 1	3 1	37.5	37.5		
					12.5	12.5		
	DIP__0302	Core 2	Course 2	4	50	50	8	16 Weeks
IV (EVEN)	DIP__0403 (LAB)	Core 3	Course 3	3 1	37.5	37.5		
					12.5	12.5		
	DIP__0404	Core 4	Course 4	4	50	50	8	16 Weeks
							4×4=16	32 Weeks

Note: 4 Courses of 4 Credits each.

After the completion of (16×2) 32 credits a Diploma in Russian will be awarded.

(C) Structure outline of Advanced Diploma Courses (Min. Credits to be earned=16)

Semester	Course Code	Course Type	Course Name	Credit (s) Week	Marks		Cumulated credits category wise	Duration
					CCA	End Term Examination		
V (ODD)	ADV__0501 (LAB)	Core 1	Course 1	3 1	37.5	37.5		
					12.5	12.5		
	ADV__0502	Core 2	Course 2	4	50	50	8	16 Weeks
VI	ADV__0603	Core 3	Course	3	37.5	37.5		

CBCS Post Graduate Courses

(EVEN)	(LAB)		3	1	12.5	12.5		
	ADV___0604	Core 4	Course 4	4	50	50		
							8	16 Weeks
							4×4=16	32 Weeks

Note: 4 Courses of 4 Credits each.

After the completion of (16×3) 48credits a Advanced Diploma in Russian will be awarded.

Appendix – VI
Examples of Courses of Reading of a Master Degree Programme

Name of the Student: Mr. / Ms.

Roll No.

Subject of Master Degree Programme: Geography

Semester	Course	Credit (C)	Grade Point (G)	$C \times G$	GPA and CGPA	Cumulated Credits Category-wise
I (Odd)	History of Geographical Thought	4	6.5	26	$\sum C = 24;$ $\sum C \times G = 172;$ Semester GPA $= 172 / 24 =$ 7.17 CGPA = $172 /$ $24 = 7.17$	Core Courses = 24 (Cumulated = 24)
	Geomorphology	4	5.0	20		
	Climatology	4	8.0	32.0		
	Human Geography	4	8.5	34.0		
	Basic Cartography	4	8.0	32.0		
	Map Projections	4	7.0	28.0		
II (Even)	Economic Geography	4	6.0	24	$\sum C = 48;$ $\sum C \times G = 350;$ Semester GPA $= 178 / 24 =$ 7.42 CGPA = $350 / 48 = 7.29$	Core Courses = 24 (Cumulated = 48) (Core Courses Completed)
	Population Geography	4	6.0	24		
	Bio-Geography	4	8.0	32.0		
	Oceanography	4	9.0	36.0		
	Basic Remote Sensing	4	8.5	34.0		
	Quantitative Techniques	4	7.0	28.0		
III (Odd)	Fluvial Geomorphology	4	7.5	30	$\sum C = 72;$ $\sum C \times G = 542;$ Semester GPA $= 192 / 24 = 8.0$ CGPA = $542 / 72 = 7.53$	Elective Courses (within) = 16; Elective Courses (outside) = 8; Total = 24; (Cumulated = 72)
	Regional Planning	4	7.0	28		
	Desert Geomorphology	4	9.0	36.0		
	Political Geography	4	8.5	34.0		
	Outside Department (Option)	4	8.0	32.0		
	Outside Department (Option)	4	8.0	32.0		
IV (Even)	Geography of Resources	4	8.5	34.0	$\sum C = 100;$ $\sum C \times G = 770;$ Semester GPA $= 228 / 28 =$ 8.14 CGPA = $770 / 100 =$ 7.53	Elective Courses (within) = 8; Elective Courses (outside) = 8; Elective Courses (self Study) = 8; Total = 28; (Cumulated = 100)
	Glacial Geomorphology	4	8.0	32.0		
	Geography of South Asia / India's Neighbours (Self Study)	4	9.0	36.0		
	Geography of North America (Self Study)	4	8.0	32.0		
	Outside Department (Option)	4	8.5	34.0		
	Outside Department (Option)	4	7.5	30.0		
	Minor Research Project	4	7.5	30		

Core (C) Courses Completed : 48 Credits

Elective Courses (EC) Within Department Completed : 24 Credits

Elective Courses Outside (OE) Department Completed: 16 Credits

Elective Courses Self Study (SS) Completed: 8 Credits

Minor Research Project (P) Completed: 4 Credits

Total Credits Accumulated: 100 Credits

CGPA (Core and Elective Courses + Minor Research Project): 7.53

Letter Grade: 'O'

APPENDIX-VII

Example of a Master/M.Phil./Pre-Ph.D./Certificate Courses etc. Programmes
(Sample)PHYSICS DEPARTMENT
HIMACHAL PRADESH UNIVERSITYOUT LINES OF SYLLABI AND COURSES OF READING
IN THE SUBJECT OF PHYSICS FOR M. Sc. (Master of Science in Physics) (2013-2014
onwards)

(A) Structure Outline of M.Sc. in Physics (Minimum Credits to be Earned=100)

Semester	Course Code	Course Type	Course Name	Credit(s)/week	Marks		Cumulated Credits Category-wise
					CCA	End Terms Examination	
I (Odd)	MSCPHY0101	Core Course I	Math Physics	4	50	50	24
	MSCPHY0102	Core Course II	Classical Mechanics	4	50	50	
	MSCPHY0103	Core Course III	Electronics-I	4	50	50	
	MSCPHY0104	Core Course IV	Computational methods in Physics	4	50	50	
	MSCPHY0105	Core Course V	Lab (Experiments)	4	50	50	
	MSCPHY0106	Core Course VI	Lab (Computational)	4	50	50	
II (Even)	MSCPHY0207	Core Course VII	Quantum Mechanics-I	4	50	50	24+24=48
	MSCPHY0208	Core Course VIII	Condensed Matter Physics	4	50	50	
	MSCPHY0203	Core Course IX	Statistical Physics	4	50	50	
	MSCPHY0204	Core Course X	Electrodynamics	4	50	50	
	MSCPHY0205	Core Course XI	Lab (Experiment)	4	50	50	
	MSCPHY0206	Core Course XII	Lab (Computational)	4	50	50	
III (Odd)	MSCPHY0317	Core/Elective I (Departmental)	Quantum Mechanics-II	4	50	50	48+24= 72
	MSCPHY0318	Core/Elective II (Departmental)	Material Science	4	50	50	
	MSCPHY0319	Core/Elective III (Departmental)	Nuclear Physics	4	50	50	
	MSCPHY0320	Core/Elective IV (Departmental)	High Energy Physics	4	50	50	
	MSCPHY0321	Core/Elective V (Departmental)	Lab (Experiment)	4	50	50	
	MSCPHY0322	Core/Elective VI (Departmental)	Lab (Computational)	4	50	50	

CBCS Post Graduate Courses

IV (Even)	MSCPHY	Core/Elective VII (Departmental)		4	50	50	72+28=100
	MSCPHY	Core/Elective VIII (Departmental)		4	50	50	
	/	Core/Elective IX (Departmental/outside)		4	50	50	
	MSCPHY	Core/Elective X (Departmental/outside)		4	50	50	
	.....	Core/Elective XI (Departmental/outside)		4	50	50
	.....	Core/Elective XII (Departmental/outside)		4	50	50
	MSCPHY	Department Project (Theoretical/Computational// Experiments in lieu of two practicals)		4	50	50	

List of Departmental Electives

1. Advanced High Energy Physics
2. Nuclear & Particle Astrophysics
3. Advanced Quantum Mechanics
4. Nano Physics
5. Mesoscopic Physics
6. Advanced Computational Physics
7. Advanced Nuclear Physics
8. Nuclear Technology
9. Opto-Electronics

List of Open Electives (For students outside Department)

1. History of Modern Physics
2. High Performance Computing
3. Characterization Techniques

Appendix VIII
Post-Graduate (PG) Programmes in Geography
(A) M.A. / M. Sc.:

Programme Outline

Note: One credit is equivalent of one one-hour lecture class, or one two-hour tutorial or practical class per week.

Year / Semester	Courses	Credits	Marks		Duration
			CCA	End Terms Examination	
First Year					
1 st Semester	6 core courses of 4 credits each	6 X 4 = 24	300	300	16 Weeks
2 nd Semester	6 core courses of 4 credits each	6 X 4 = 24	300	300	16 Weeks
Second Year					
3 rd Semester	6 elective courses of 4 credits each	6 X 4 = 24	300	300	16 Weeks
4 th Semester	6 elective courses of 4 credits each plus Research	6 X 4 = 24 1 X 4 = 4	300 50	300 50	16 Weeks
Total	24 courses of 4 credits each	(24 X 4) + 4 = 100	1250	1250	64 Weeks

Programme Details

Notes for I and II Semesters:

1. All students enrolled for M.A. / M. Sc. in Geography will have to take all the courses listed below. There is available **no choice**.
2. Students enrolled for M.A. / M. Sc. in Geography will be allowed not more than one four-credit course per semester as **self-study course** if no teacher is available for a particular course.
3. The possible breakup of credits in the I and II semesters is as given below:
 - i. Up to 48 credits of **Core Courses** (24 x 2 = 48) from within the Department of Geography.
 - ii. Up to 8 credits as **self-study courses** from within the Department of Geography.
 - iii. When a course is taken as self-study course, the student will be evaluated on the basis of one semester-end examination to be conducted by a teacher selected by the Department Chairperson.

1st Semester (6 Core Courses of 4 Credits each)						
Course No.	Course Title	Credits	Marks		Number of Lectures-Tutorials-Practicals (L-T-P)	Course Coordinator / Teacher
			CCA	End Terms Examination		
Geo 301	History of Geographical Thought	4	50	50	48-0-0	
Geo 302	Geomorphology	4	50	50	48-0-0	
Geo 303	Climatology	4	50	50	48-0-0	
Geo 304	Human Geography	4	50	50	48-0-0	
Geo 305	Basic Cartography	4	50	50	24-10-14	
Geo 306	Map Projections	4	50	50	20-10-18	
Total	6 Courses	24	300	300	236-20-29	

CBCS Post Graduate Courses

2nd Semester (6 Core Courses of 4 Credits each)						
Course No.	Course Title	Credits	Marks		Number of Lectures-Tutorials-Practicals (L-T-P)	Course Coordinator / Teacher
			CCA	End Terms Examination		
Geo 311	Economic Geography	4	50	50	48-0-0	
Geo 312	Population Geography	4	50	50	48-0-0	
Geo 313	Bio-Geography	4	50	50	48-0-0	
Geo 314	Oceanography	4	50	50	48-0-0	
Geo 315	Basic Remote Sensing	4	50	50	24-10-14	
Geo 316	Quantitative Techniques	4	50	50	20-10-18	
Total	6 Courses	24	300	300	236-20-29	

Notes for III and IV Semesters:

- Students can choose **elective courses** out of those listed below and also from **outside the department** (departments other than the Department of Geography) as detailed in No. 2 below as well as one self-study elective (1 x 4 = 4 credits) course per semester (4 x 2 = 8 credits) from the ones listed at the end.
- In the III and the IV semesters, students can choose **not more than two four-credit courses (2 x 4 = 8 credits) per semester (8 x 2 = 16 credits) from outside of the department** (departments other than the Department of Geography).
- In the IV Semester, the students will be doing a **Minor Research Project** for 4 credits that will be done under the guidance of one teacher of the Department and evaluated by an external examiner through a viva voce examination.
- Thus the possible breakup of credits in the III and IV semesters is as given below:
 - Up to 48 credits** (but not less than 32 credits) from **within** the Department of Geography.
 - Up to 16 credits** from the departments other than the Department of Geography.
 - Up to 8 credits of self-study courses** (these will be included in the 48 or 32 credits of within Department of Geography courses).
 - In the self-study courses, the student will be evaluated on the basis of one semester-end examination to be conducted by a teacher nominated by the Department Council.
 - 4 Credits of Minor Research Project.**

3rd Semester (6 Elective Courses of 4 Credits each)						
Course No.	Course Title	Credits	Marks		Number of Lectures-Tutorials-Practicals (L-T-P)	Course Coordinator / Teacher
			CCA	End Terms Examination		
Geo 321	Fluvial Geomorphology	4	50	50	48-0-0	
Geo 322	Regional Planning	4	50	50	48-0-0	
Geo 323	Desert Geomorphology	4	50	50	48-0-0	
Geo 324	Political Geography	4	50	50	48-0-0	
Geo 325	Social Geography	4	50	50	48-0-0	
Geo 326	Cultural Geography	4	50	50	48-0-0	

CBCS Post Graduate Courses

Geo 327	Advanced Cartography	4	50	50	24-10-14	
Geo 328	Digital Remote Sensing	4	50	50	24-10-14	
Geo 329	Map Projections (Math. Treatment)	4	50	50	24-10-14	
Geo 330	Field Methods in Geomorphology	4	50	50	24-10-14	
Total	6 Courses	24	300	300		

4th Semester (6 Elective Courses of 4 Credits each plus 4 credits of Minor Research Project)						
Course No.	Course Title	Credits	Marks		Number of Lectures-Tutorials-Practicals (L-T-P)	Course Coordinator / Teacher
			CCA	End Terms Examination		
Geo 331	Geography of Resources	4	50	50	48-0-0	
Geo 332	Glacial Geomorphology	4	50	50	48-0-0	
Geo 333	Geography of Human Well-being	4	50	50	48-0-0	
Geo 334	Geography of Himachal Pradesh	4	50	50	48-0-0	
Geo 335	Geographical Information System	4	50	50	24-10-14	
Geo 336	Digital Cartography	4	50	50	20-10-18	
Geo 337	Advanced Quantitative Techniques	4	50	50	20-10-18	
Geo 338	Photogrammetry	4	50	50	20-10-18	
Geo 339	Advanced Climatology	4	50	50	48-0-0	
Geo 340	Field Methods in Human Geography	4	50	50	20-10-18	
Geo 600	Minor Research Project	4	50	50	.....
Total	6 Courses	24	300	300		

List of Courses for Self-Study in the 3rd and 4th Semesters

3rd and 4th Semester Self-Study Courses of 4 Credits each (maximum of one per semester).						
Course No.	Course Title	Credits	Marks		Number of Lectures-Tutorials-Practicals (L-T-P)	Course Coordinator / Teacher
			CCA	End Terms Examination		
Geo 411	Geography of South Asia / India's Neighbours	4	50	50		
Geo 412	Geography of Punjab	4	50	50		
Geo 413	Geography of Haryana	4	50	50		
Geo 414	Geography of Jammu & Kashmir	4	50	50		
Geo 415	Geography of Uttaranchal	4	50	50		
Geo 416	Geography of North America	4	50	50		

CBCS Post Graduate Courses

Geo 417	Geography of South America	4	50	50		
Geo 418	Geography of Asia	4	50	50		
Geo 419	Geography of Europe	4	50	50		
Geo 420	Geography of Africa	4	50	50		
Geo 421	Geography of Australia	4	50	50		
Total	2 Courses	2 X 4= 8	100	100		

(B) M. Phil. / Pre - Ph. D.:

Programme Outline

Semester	Courses	Credits	Marks		Duration
			CCA	End Terms Examination	
1 st Semester	*3 core courses of 4 credits each and *3 proficiency courses of 4 credits each	6 X 4 = 24	300	300	16 Weeks
2 nd Semester	Research work of 12 credits of dissertation	12 X 1 = 12	150	150	16 Weeks
Total	6 courses of 4 credits each + 12 credits of Dissertation = 36 Credits	24 + 12 = 36	900	900	32 Weeks

* Core Course & proficiency courses may be distributed over Ist and IInd Semesters if desired by BoS.

Programme Details

1 st Semester (6 Core + Proficiency Courses of 4 Credits each)						
Course No.	Course Title	Credits	Marks		Number of Lectures-Tutorials-Practicals (L-T-P)	Course Coordinator / Teacher
			CCA	End Terms Examination		
Geo 501 (A or B)	Research Methods in Physical / Human Geography	4	50	50		
Geo 502 (A or B)	Recent Philosophical Issues in Physical / Human Geography	4	50	50		
Geo 503	Thesis Writing	4	50	50		
Edu / Psy / Mat	Multivariate Statistical Techniques	4	50	50		
Lib	Library (Bibliographic) Research	4	50	50		
Com	General Computer Techniques (Word Processing, Spread Sheet, Data Representation, Presentation Techniques)	4	50	50		
Total	6 Courses	24	300	300		

CBCS Post Graduate Courses

2nd Semester (12 Credits of Research Dissertation)						
Course No.	Course Title	Credits	Marks		Number of Lectures-Tutorials-Practicals (L-T-P)	Course Coordinator / Teacher
			CCA	End Terms Examination		
Geo 601	Research Dissertation	12	150	150		
Total		12	150	150		

Details of Courses (Syllabi etc.)

Course No.:	Geo 302
Course Title:	Geomorphology
Number of Credits:	4 (4-0-0)
Number of Lecture-Tutorial-Practical:	48-0-0
Course Coordinator / Teacher:	Prof. Bhupinder S. Marh

Course Outline

The purpose of this course is to introduce to the students the basic understanding of the geomorphic principles. The basic concepts of geomorphology will be introduced and their evolution will be discussed. Understanding of the geomorphic landscape of the earth will be the prime objective of the course. Mega geomorphic features (global), meso level (regional) geomorphic features, and micro level (local) features will be discussed in a scientific manner.

Evaluation Procedure (Percentage of marks to be allotted to each component)

- Classroom Attendance: 10
- Two Minor Tests:
 - Test – I: 15
 - Test – II: 15
- Homework Assignment: 10
- One Major Test (Semester End) 50

Total: 100

Details of Course Content and Allotted Time

No.	Topics	Allotted Time (Hours)*		
		Lectures*	Tutorials*	Practicals*
1.	History (brief) of geomorphology Basic Concepts	6		
2.	Structure of the earth Rocks, rock deformation, and weakness Plate tectonics and earth's surface configuration	6		
3.	Geologic Time Weathering and soil formation	6		
4.	Streams and their work: Drainage networks Genetic Classification of Streams Sediment transport and deposition	6		
5.	Semi-arid and arid landscapes: Causes of aridity Weathering and erosion in deserts Desert landscape	6		
6.	Glacial forms and processes:	6		

CBCS Post Graduate Courses

	Mechanics of glacial movement Glacial erosion Glacial Deposition Periglacial forms and processes			
7.	Coastal forms and processes: Tides, waves and currents Rocky and non-rocky coasts Coastal sand dunes and wetlands Deltas, coral reefs	6		
8.	Karst landforms and processes: Conditions for karst Groundwater and its role Karst surface forms Karst caves	6		
9.	Applied Geomorphology: Application of geomorphology Natural hazards Geomorphology in environmental management	6		
Examinations and tests (including preparatory days)*		10		
Total		64		

* Exact dates be specified at the beginning of the Semester.

Recommended Textbook:

Kale, Vishwas S. and Avijit Gupta. (2001) *Introduction to Geomorphology*. Orient Longman.

Other readings:

Bloom, A.L. (1979) *Geomorphology*, New Delhi: Prentice Hall of India Pvt. Ltd.
 Dayal, P. (1995) *A Textbook of Geomorphology*, Patna: Shukla Book Depot.
 Embleton, C. and King, C.A.M. (1975) *Glacial Geomorphology*, London: Edward Arnold.
 Fairbridge, R.W. (1968) *Encyclopedia of Geomorphology*, New York: Reinholds.
 Morisawa, M (1968) *Streams*, New York: McGraw Hill.
 Pitty, A.F. (1982) *The Nature of Geomorphology*, New York: Methuen.
 Rice, R.J. (1990) *Fundamentals of Geomorphology*, London: ELBSL.
 Schumn, S. (1977) *The Fluvial System*, New York: John Wiley and Sons.
 Sharma, H.S.(ed.) (1980) *Perspectives in Geomorphology*, New Delhi: Concept.
 Sharma, V.K. (1986) *Geomorphology*, New Delhi: Tata McGraw Hill.
 Singh, Savindra (1998) *Geomorphology*, Allahabad: Prayag Pustak Bhawan.
 Small, R.J. (1978) *The Study of Landforms*, Cambridge: Cambridge University.
 Sparks, B.W. (1960) *Geomorphology*, London: Longman.
 Strahler, A.N. (1992) *Physical Geography*, New York: John Wiley and Sons.
 Thornbury, W.D. (1969) *Principles of Geomorphology*, New York: John Wiley and Sons.

Course No.: Geo 303
 Course Title: **Climatology**
 Number of Credits: 4 (4-0-0)
 Number of Lecture-Tutorial-Practical: 48-0-0
 Course Coordinator / Teacher: Prof. Bhupinder S. Marh

Course Outline

Basic understanding the climatic system of the earth will be the purpose of this course. The characteristics of the atmosphere, their spatial distribution, and temporal variation will form the focus of the course. Attempt will be made to develop a basic understanding of the associated processes as well.

CBCS Post Graduate Courses

Evaluation Procedure (Percentage of marks to be allotted to each component)

• Classroom Attendance:	10
• Two Minor Tests:	
○ Test – I:	15
○ Test – II:	15
• Homework Assignment:	10
• One Major Test (Semester End)	50
Total:	100

Details of Course Content and Allotted Time

No.	Topics	Allotted Time (Hours)		
		Lectures	Tutorials	Practicals
1.	The standard Atmosphere: Atmospheric chemistry, Constant gases, the Gas laws, Variable gases. Vertical structure of the atmosphere	5		
2.	Energy in the atmosphere: Nature of radiation, Radiation laws Solar source Atmosphere and solar radiation Planetary energy budget	6		
3.	Atmospheric temperature: The Seasons, Daily temperature Cycles Vertical distribution of temperature Horizontal distribution of temperature	6		
4.	Moisture in the atmosphere: States of water, the Hydrological Cycle Relative humidity Evaporation and transpiration. Condensation, Clouds Precipitation	6		
5.	Motion in the atmosphere: Atmospheric Pressure Factors influencing air motion General circulation on the globe – Tropical, Mid-latitude, and polar circulation Seasonal Changes in the global patterns – Monsoons	7		
6.	Oceanic Effects: Walker circulation, El Nino, La Nina, ENSO	3		
7.	Air Masses: Origin (source regions) and classification of air masses Fronts and Mid-latitude Cyclones Cyclogenesis	6		
8.	Atmospheric Extreme Events: Tropical cyclones – formation and effects. Thunderstorms. Tornadoes Floods and droughts	6		
Examinations and tests		10		
Total		48		

CBCS Post Graduate Courses

Recommended Textbook:

Oliver, J.E. and John J. Hidore. 2002. *Climatology – An Atmospheric Science (2nd Ed.)* Pearson Education (Low Price Edition).

Other readings:

Barry, R.G. and Chorley P.J., *Atmosphere, Weather and Climate*, Routledge, London and New York, 1998.

Critchfield, J.H.: *General Climatology*, Prentice Hall, India, New Delhi, 1993.

Das, P.K.: *Monsoons*. National Book Trust, New Delhi, 1987.

Fein, J.S. and Stephens, P.N.: *Monsoons*, Wiley Inter-science, 1987.

India Meteorological Department.: *Climatological Tables of Observatories in India*, Government of India, 1968.

Lal. D.S.: *Climatology*, Chaitanya Publications, Allahabad, 1986.

Lydolph, P.E.: *The Climate of the Earth*, Rowman, 1985.

Menon, P.A.: *Our Weather*, National Book Trust., New Delhi, 1989.

Peterson, S.: *Introduction to Meteorology*, McGraw Hill Book, London, 1969.

Robinson, P.J. and Henderson S.: *Contemporary Climatology*, Henow, 1999.

Thompson, R.D. and Perry, A (ed.): *Applied Climatology, Principles and Practice*, Rourtledge, London 1997.

Course No.:	Geo 304
Course Title:	Oceanography
Number of Credits:	4 (4-0-0)
Number of Lecture-Tutorial-Practical:	48-0-0
Course Coordinator / Teacher:	Prof. Bhupinder S. Marh

Course Outline

Evaluation Procedure (Percentage of marks to be allotted to each component)

- Classroom Attendance: 10
- Two Minor Tests:
 - Test – I: 15
 - Test – II: 15
- Homework Assignment: 10
- One Major Test (Semester End) 50

Total: 100

Details of Course Content and Allotted Time

No.	Topics	Allotted Time (Hours)		
		Lectures	Tutorials	Practicals
1.		5		
2.		6		
3.		6		
4.		6		
5.		7		
6.		3		
7.		6		
8.		6		
Examinations and tests		3		
Total		48		

Recommended Textbook:

Oliver, J.E. and John J. Hidore. 2002. *Climatology – An Atmospheric Science* (2nd Ed.) Pearson Education (Low Price Edition).

Other readings:

Barry, R.G. and Chorley P.J., *Atmosphere, Weather and Climate*, Routledge, London and New York, 1998.

Critchfield, J.H.: *General Climatology*, Prentice Hall, India, New Delhi, 1993.

Das, P.K.: *Monsoons*. National Book Trust, New Delhi, 1987.

Fein, J.S. and Stephens, P.N.: *Monsoons*, Wiley Inter-science, 1987.

India Meteorological Department.: *Climatological Tables of Observatories in India*, Government of India, 1968.

Lal. D.S.: *Climatology*, Chaitanya Publications, Allahabad, 1986.

Lydolph, P.E.: *The Climate of the Earth*, Rowman, 1985.

Menon, P.A.: *Our Weather*, National Book Trust., New Delhi, 1989.

Peterson, S.: *Introduction to Meteorology*, McGraw Hill Book, London, 1969.

Robinson, P.J. and Henderson S.: *Contemporary Climatology*, Henow, 1999.

Thompson, R.D. and Perry, A (ed.): *Applied Climatology, Principles and Practice*, Rourtledge, London 1997.

Sample of General Interest Course at M.Phil/Pre-Ph.D./Ph.D. Level

GI: Ethical issues in academic and research.

16 lectures, 1 credit

Courses on:

1. Using Internet resources
 2. Using Library
 3. Ethics in Research
 4. Preparation of Bibliography
 5. Thesis writing Techniques
 6. Preparing of paper writing
 7. Synopsis writing
 8. Scientific document processing
 9. Plagiarism
 10. Project writing
 11. Patenting
 12. Research methodology
 13. Current research trends
 14. Thesis and paper writing
 15. Synopsis writing
 16. Abstract writing etc.
-

**Department of Modern European and other Foreign Languages
Himachal Pradesh University**

**OUTLINE OF SYLLABI AND COURSES OF READING IN THE SUBJECT OF CERTIFICATE
IN RUSSIAN (2013-14 ONWARDS)**

(D) Structure outline of Certificate Courses (Min. Credits to be earned=16)'

Semester	Course Code	Course Type	Course Name	Credit (s) Week	Marks		Cumulated credits category wise	Duration
					CCA	End Term Examination		
I (ODD)	CER__0101 (LAB)	Core 1	Introduction to Russian 1	3	37.5	37.5		
				1	12.5	12.5		
	CER__0102	Core 2	Writing Skill 1	4	50	50	8	16 Weeks
II (EVEN)	CER__0203 (LAB)	Core 3	Introduction to Russian 2	3	37.5	37.5		
				1	12.5	12.5		
	CER__0204	Core 4	Writing Skill 2	4	50	50	8	16 Weeks
							4×4=16	32 Weeks

Note: 4 Courses of 4 Credits each.

After the completion of 16 credits a Certificate in Russian will be awarded.

SAMPLES OF CERTIFICATE, DIPLOMA & ADVANCED DIPLOMA COURSES

**Department of Modern European and other Foreign Languages
Himachal Pradesh University**

**OUTLINE OF SYLLABI AND COURSES OF READING IN THE SUBJECT OF DIPLOMA IN
RUSSIAN (2013-14 ONWARDS)**

(A) Structure outline of Diploma Courses (Min. Credits to be earned=16)

Semester	Course Code	Course Type	Course Name	Credit (s) Week	Marks		Cumulated credits category wise	Duration
					CCA	End Term Examination		
III (ODD)	DIP__0301 (LAB)	Core 1	Applied Grammar 1	3	37.5	37.5		
				1	12.5	12.5		
	DIP__0302	Core 2	Translation 1	4	50	50	8	16 Weeks
IV (EVEN)	DIP__0403 (LAB)	Core 3	Applied Grammar 2	3	37.5	37.5		
				1	12.5	12.5		
	DIP__0404	Core 4	Translation 2	4	50	50	8	16 Weeks
							4×4=16	32 Weeks

Note: 4 Courses of 4 Credits each.

After the completion of (16×2) 32 credits a Diploma in Russian will be awarded.

**Department of Modern European and other Foreign Languages
Himachal Pradesh University**

**OUTLINE OF SYLLABI AND COURSES OF READING IN THE SUBJECT OF ADVANCED
DIPLOMA IN RUSSIAN (2013-14 ONWARDS)**

(A) Structure outline of Advanced Diploma Courses (Min. Credits to be earned=16)

Semester	Course Code	Course Type	Course Name	Credit (s) Week	Marks		Cumulated credits category wise	Duration
					CCA	End Term Examination		
V (ODD)	ADV__0501 (LAB)	Core 1	Advanced Grammar 1	3	37.5	37.5		
				1	12.5	12.5		
	ADV__0502	Core 2	Literature 1	4	50	50		
							8	16 Weeks
VI (EVEN)	ADV__0603 (LAB)	Core 3	Advanced Grammar 2	3	37.5	37.5		
				1	12.5	12.5		
	ADV__0604	Core 4	Literature 2	4	50	50		
							8	16 Weeks
							4×4=16	32 Weeks

Note: 4 Courses of 4 Credits each.

After the completion of (16×3) 48credits a Advanced Diploma in Russian will be awarded.

Annexure-IX**Suggestive Templates****Title of the-I (Course Code)****Semester-XXX**

Course Code	XXXXXX
Credit-X	L-X, T-X, P-X
Name of the Course	XXXXXX (Type of the course, Core/Softcore, Departmental Elective, Open Elective)
Lectures to be delivered	Number (1 Hr Each) (L=Number of lectures, T=Number of tutorials, P=Number for each semester)

Semester End Examination Max Marks:? Min Pass Marks:? Maximum Time: 3 hrs.

Continuous Comprehensive Assessment (based on Minor Test (2)?, class tests, Tutorials/ Assignments?, Quiz/Seminar?, Attendance?)

Max Marks:?

Instructions

1. For Paper Setters: The question paper will consist of five sections, A (COMPULSORY), B (UNIT-I), C (UNIT-II), D (UNIT-III) and E (UNIT-IV). It will consist of a single question with? subparts of ? type (regulations), which will cover the entire syllabus and will carry 36% of the total marks of the end term examination for the course. Section B, C, D and E will have two questions each from the respective units and sub units of the syllabus and each question will carry 16% of the total marks of the end term examination for the purpose.
2. For Candidates: Candidates are required to attempt five question in all selecting one question from each of the section B, C, D and E of the question paper and all the subparts of the questions in section A. Use of non-programmable calculators is allowed.

Unit-I

Sub Unit 1 (Number of Lectures)

Sub Unit 2 (Number of Lectures)

Unit-II

Sub Unit 1 (Number of Lectures)

Sub Unit 2 (Number of Lectures)

Unit-III

Sub Unit 1 (Number of Lectures)

Sub Unit 2 (Number of Lectures)

Unit-IV

Sub Unit 1 (Number of Lectures)

Sub Unit 2 (Number of Lectures)

Books/Readings:**Text Books****Reference Books****Internet Resources**

**Title of the –I (Course Code) Lab
Semester-XXX**

Course Code	AS-1003
Credit-2	L-0, T-0, P-2
Name of the Course	Applied Physics Lab
Lectures to be delivered	26 Hours of Lab, work (2hrs. per week)

Term End Examination Max Marks:? Min Pass Marks:? Maximum Time: 3 hrs.

Continuous Comprehensive Assessment (based on Lab Seminar ?% Lab work ?%

Lab Record ?% Viva/Hands on ?% Attendance ?%

Max Marks:? Min Pass Marks:?

Instructions for paper setter/candidates

Laboratory examination will consist of two parts:

- (i) Performing a practical exercises assigned by the examiner (? Marks). (ii) Viva-voce examination (? marks)

Viva-voce examination will be related to the practicals performed/project executed by the candidate related to the paper during the course of the semester.

List of Experiments

Note: (Two experiments to be done from each section, total number of experiments required to be performed 10 to be decided by the teacher concerned and availability of equipment.)

Unit-I

List of Experiments

Unit-II

List of Experiments

Unit-III

List of Experiments

Unit-IV

List of Experiments

Books/Readings:

Text Books

Reference Books

Internet Resources

**Vocational Training/Industrial Training Course Code
Semester-XXX**

Course Code	XXX	Credit-XXX	L-X, T-X, P-X
Name of the Course	Vocational Training/Industrial Training		
Semester End Examination	Max Marks: ?	Min Pass Marks: ?	Maximum Time: 3 Hrs
Comprehensive Continuous Assessment	To be decided by the board of studies	Max Marks: ?	Min Pass Marks: ?

Instructions for paper setter/candidates:

This training will be related to Industrial Projects to be undertaken under the guidance of Faculty preferably at Industry/Software Park/Incubation Centre or related areas. This may also be undertaken within the Institute. This training will be undertaken during vacation. Student is supposed to submit the project report at the end of the training.

Evaluation will be based on Project Report, presentation and comprehensive viva-voce examination related to the project.

Semester-XXXX**Major/Minor Project- (course code)**

Course Code	XXXXXX	Credits-?	L-?, T-0?, P-?
Name of the course	XXXXXX		
Project Evaluation	On the basis of Multimedia Presentation of the Project executed	Max Marks: ?	Min Pass Marks: ?

Instructions for paper setter/Candidates

Project evaluation will consist of three parts:

- (i) Evaluation of the Project report along with a copy on a CD/DVD (with source code etc. if any) in the required format by an external examiner/supervisor/mentor 60%.
- (ii) Viva voce examination 40% marks

Viva-voce examination will be related to the project executed by the candidate during the course of semester.

Aim of the Project (Following is only suggestive may vary from department to department)

Project is one of the culmination points of the learning process, which puts to test the acquired ability of the candidate to independently take charge of the project or system development. The effort should be made to open up a window of opportunity with the industry the project can proceed in three steps using software engineering methodology

1. Preparation of required document
2. Preparation of Design Document
3. For example - writing of Code and its testing with demonstration cases.
4. An effort should be made by the institute faculty to liaison with the industry and conduct three reviews to meet the dead lines and satisfactory completion of the project.

Following format for documentation for the project be followed:

A. Forwarding Page

1. Title of the project
2. Objectives
3. Definitions of Key Term
 - Approach to Problem Solving
 - Limitations. If any
4. Output Generated
5. Details of Hardware platform used
6. Details of software Tools used
7. Implementation Issues (Clearly defining the area of Application)
8. Miscellaneous
9. Signature of Candidate & date

B. Recommended Chapters/Section (Not Mandatory but only)

1. Microscopic Summary
2. Details of candidate and supervisor along with certificate of
 - original work
 - Assistance. If any.
 - Credits;

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3. Aims and Objectives
4. Approach to project and Time Frame
5. Project Design Description with Appendices to cover
 - Flow Charts/Data Flow Diagram- Macro/Micro level
 - Source Code; If any
 - Hardware tools;
 - Software tools;
 - Security Measures
 - Quality Assurance
 - Auditability
6. Test Date and Result

Study of writing and presentation must follow the guidelines for effective technical writing. Times of submission.

Project must be submitted by the day of last paper in semester end examination Seminar/Viva a comprehensive seminar/viva-voce should be conducted as part of evaluation.

At the time of seminar/viva-voce the industry guide/supervisor may be invited.

Semester-XXX Project Seminar (Course Code)

Course Code	XXXX	Credits-X	L-X, T-0, P-X
Name of the Course	Project Seminar		
Evaluation	On the basis of Multimedia Presentation of the Project Executed	Max Marks: X	Min Pass Marks: X

Instructions for paper setter/candidates

This Seminar/Viva will be conducted on the project done by the candidate. At the time of Seminar/Viva-voce the industry guide/supervisor be invited.