Instructional Template for Facilitating Implementation of Choice Based Credit System (CBCS)

MINIMUM COURSE CURRICULUM FOR UNDERGRADUATE COURSES UNDER CHOICE BASED CREDIT SYSTEM

Background/Preamble:

Education plays enormously significant role in building of a nation. There are quite a large number of educational institutions, engaged in imparting education in our country. Majority of them have entered recently into semester system to match with international educational pattern. However, our present education system is churning out youth who have to compete locally, regionally, nationally as well as globally. The present alarming situation necessitates transformation and/or redesigning of system, not only by introducing innovations but developing "learner-centric approach.

Majority of Indian higher education institutions have been following the system which obstructs the flexibility for the students to study the subjects/courses of their choice and their mobility to different institutions. There is need to allow the flexibility in education system, so that students depending upon their interests can choose inter-disciplinary, intra-disciplinary and skill-based courses. This can only be possible when choice based credit system (CBCS),an internationally acknowledged system, is adopted. The choice based credit system not only offers opportunities and avenues to learn core subjects but also explore additional avenues of learning beyond the core subjects for holistic development of an individual. The CBCS will undoubtedly facilitate benchmarking of our courses with best international academic practices.

Advantages of the choice based credit system:

- Shift in focus from the teacher-centric to student-centric education.
- Student may undertake as many credits as they can cope with (without repeating all courses in a given semester if they fail in one/more courses).
- CBCS allows students to choose inter-disciplinary, intra-disciplinary courses, skill oriented papers(even from other disciplines according to their learning needs, interests and aptitude) and more flexibility for students.
- CBCS makes education broad-based and at par with global standards. One can take credits by combining unique combinations. For example, Physics with Economics, Microbiology with Chemistry or Environment Science etc.
- CBCS offers flexibility for students to study at different times and at different institutions to complete one course (ease mobility of students). Credits earned at one institution can be transferred to another institution.

CHOICE BASED CREDIT SYSTEM (CBCS):

These courses aim to provide a paradigm shift in the national education policy seeking to bridge an increasing gap between an undergraduate degree and employability. The proposed curriculum endeavors to empower the students and help them in their pursuit for achieving overall

excellence. Being the regulatory authority for higher education in India, the UGC constantly engages itself to suggest and facilitate the implementation of schemes and programs, which improves not only the level of academic excellence but also improves the academic and research environment in this country.

The main feature of the CBCS is to make undergraduate education student centric rather than system centric or teacher centric. For achieving these objectives, the CBCS strives to create a holistic syllabus. Thus in addition to dedicated focus on a discipline through core papers whether in an honours curriculum or a regular curriculum, elective papers have been added which will give students the freedom to choose the allied/applied/broad areas of their discipline and also the areas of other disciplines of their interest. Further in keeping with the vision of the Government, special emphasis has been given to ability enhancement and skill development of students through elective courses under these domains which every student is required to study. However, in keeping with the spirit of CBCS here also the students will have complete freedom to choose these courses from a pool suggested by the UGC/Universities.

All papers except core papers offer complete freedom to the Universities in designing and reviewing the syllabi and enable them to offer their own distinct flavor and maintain their unique character. These elective papers provide them with the opportunity to develop competencies of students in their areas of strength, expertise and specialization. Even in the core papers under the proposed guidelines 30% flexibility is proposed in adopting the syllabus as per the template advised by the UGC. It is pertinent to point out that as per the existing education policy different institutions and universities are required to maintain 70% equivalence in the syllabi and the same is being maintained under the proposed system of CBCS.

There is apprehension amongst the faculty from different institutions that with the implementation of CBCS there will be migration or transfer of the faculty from one institution to another which is far from truth.

The CBCS provides an opportunity for the students to choose courses from the prescribed courses comprising core, elective and skill based courses. The courses can be evaluated following the grading system, which is considered to be better than the conventional marking system. Therefore, it is necessary to introduce uniform grading system. This will benefit the students to move across institutions both within India and across countries. In order to bring the uniformity in evaluation system and computation of the Cumulative Grade Point Average (CGPA) based on student's performance in examinations, the UGC has formulated the guidelines which are also annexed herewith.

Tentative list of Undergraduate Disciplines/Courses to be covered under CBCS developing common minimum structure and syllabi:

BACHELOR COURSES UNDER CBCS IN INDIAN UNIVERSITIES AND COLLEGES

1. B. Sc. (Honours) Physics
2. B. Sc. Physical Sciences (Physics, Chemistry, Mathematics)
3. B. Sc. Physical Sciences (Physics, Mathematics, Electronics)
4. B. Sc. Physical Sciences (Physics, Mathematics, Computer Science)
5. B. Sc. with Physics
6. B. Sc. with Electronics
7. B. Sc. (Honours) Electronic Science
8. B. Sc. (Honours) Instrumentation
9. B. Sc. (Honours) Chemistry
10. B. Sc. with Chemistry
11. B. Sc. (Honours) Zoology
12. B. Sc. with Zoology
13. B. Sc. (Honours) Botany
14. B. Sc. with Botany
15. B. Sc. Life Sciences (Botany, Zoology, Chemistry)
16. B. Sc. (Honours) Biomedical Sciences
17. B. Sc. (Honours) Biotechnology
18. B. Sc. (Honours) Microbiology
19. B. Sc. (Honours) Biochemistry
20. B. Sc. (Honours) Forensic Science
21. B. Sc. (Honours) Environmental Science
22. B. Sc. (Honours) Biological Sciences
23. B. Sc. (Honours) Anthropology
24. B. Sc. (Honours) Computer Science
25. B. A. with Computer Applications
26. B. Sc with Computer Science
27. B. Sc. (Honours) Operational Research
28. B. A. with Mathematics
29. B. Sc. Mathematical Science

30. B. Sc. (Honours) Applied Mathematics

31. B. Sc. (Honours) Mathematics

32. B. Sc. with Mathematics

33. B. Sc. with Mathematics and Computer Application

34. B. Com. (Honours)

35. B. Com

36. B.A. with Economics

37. B.A. (Honours) Economics

38. B.A. (Honours) Business Economics

39. B.A. (Honours) Psychology

40. B.A. with Psychology

41. B.A. (Honours) Applied Psychology

42. B.A with History

43. B.A. (Honours) History

44. B.A. (Honours) Geography

45. B.A. (Honours) Political Science

46. B.A. with Political Science

47. B. B. A./B. M. S

48. B. A. (Honours) Hindi

49. B. A. with Hindi

50. B. A. (Honours) Sanskrit

51. B. A. with Sanskrit

52. B. A. (Honours) Urdu

53. B. A. with Urdu

54. B. A. with Tamil

55. B. A. with Telugu

56. B. A. (Honours) Punjabi

57. B. A. with Punjabi

58. Bachelor of Hotel Management

59. B. A. (Honours) English

60. B. A. with English

61. B. A. with Comparative Literature

62. B. A. (Honours) Comparative literature

63. **B. A. (Honours) Italian**

64. **B. A. Honours Spanish**

65. **B. A. (Honours) French**

66. **B. A. (Honours) German**

67. **B. Sc. (Honours) Home Science**

68. **B. Sc. with Home Science**

69. **B. A. with Persian**

70. **B. A. (Honours) Persian**

71. **B. A. (Honours) Tamil**

72. B. A. (Honours) Bengali

73. **B. A. with Bengali**

74. **B. A. (Honours) Gujarati**

75. **B. A. with Gujarati**

76. **B. A. with Manipuri**

77. **B. A. with Assamese**

78. **B. A. with Sindhi**

79. **B. A. with Odia**

80. **Compulsory course (AECC) in English**

81. **Compulsory course (AECC) in Environmental Studies**

82. **B. A. (Honours) Hindustani Music (Vocal/Instrumental)**

83. **B. A. (Honours) Karnatak Music**

84. **B. A. (Honours) Percussion Music**

85. B. A. with Hindustani Music (Vocal and Instrumental)

86. **B. Sc. (Honours) Geology**

87. **B. Sc. (Honours) Statistics**

List of Supplementary Courses

1. **Bachelor of Tourism and Travel Management**

2. **B. A. (Honors) Multi Media and Mass Communication**

3. **Bachelor of Business Administration (Financial Investment Analysis)**

4. **B. A. (Honors) Journalism**

5. **B. A. (Honors) Hindi Journalism**

6. **B. A. with Apparel Design & Construction**

7. **B.A. with Development Communication and Extension**

8. **B.A. with Food Technology**

9. **B.A. with Human Development and Family Empowerment**

10. **B. A. with Nutrition and Health Education**

11. **B. A. with Resource Management & Design Application**

12. **B. Sc. (Honours) Food Technology**

13. **B. A. (Vocational Studies): Human Resource Management**

14. **B.A. (Vocational Studies): Tourism Management Three-Year (6-Semester) CBCS Programme**

15. **B.A. (Vocational Studies): Small and Medium Enterprise Three-Year (6-Semester) CBCS Programme**

16. **B.A. (Vocational Studies): Material Management Three-Year (6-Semester) CBCS Programme**

17. **B.A. (Vocational Studies) Marketing Management and Retail Business: Three-Year (6-Semester)**

18. **B.A. (Vocational Studies) Management and Marketing of Insurance: Three-Year (6-Semester)**

Outlines of Choice Based Credit System:

1. **Core Course**(14 for honours courses; 4 discipline specific papers each for regular courses and 2 papers each for English and Hindi/MIL in B.A./B.Com): The papers under this category are going to be taught uniformly across all universities with 30% deviation proposed in the draft. The purpose of fixing core papers is to ensure that all the institutions follow a minimum common curriculum so that each institution/university adheres to common minimum standard. Also the course designed for papers under this category aim to cover the basics that a student is expected to imbibe in that particular discipline. A course, which should compulsorily be studied by a candidate as a core requirement is termed as a Core course.

2. **Elective Course:** Generally a course which can be chosen from a pool of courses and which may be very specific or specialized or advanced or supportive to the discipline/ subject of study or which provides an extended scope or which enables an exposure to some other discipline/subject/domain or nurtures the candidate's proficiency/skill is called an Elective Course.

   2.1 **Discipline Specific Elective (DSE) Course**(4 for honours courses and 2 each for regular courses): Elective courses offered under the main discipline/subject of study is referred to as Discipline Specific Elective. The list provided under this category are suggestive in nature and each University has complete freedom to suggest their own papers under this category based on their expertise, specialization, requirements, scope and need. The University/Institute may also offer discipline related Elective courses of interdisciplinary nature (to be offered by main discipline/subject of study).

   2.2 **Dissertation/Project***: An elective course designed to acquire special/advanced knowledge, such as supplement study/support study to a project work, and a candidate studies such a course on his own with an advisory support by a teacher/faculty member is called dissertation/project.

   2.3 **Generic Elective (GE) Course**(4 for honours courses and 2 each for B.A./B.Com. regular courses): An elective course chosen from an unrelated discipline/subject, with an intention to seek exposure beyond discipline/s of choice is called a Generic Elective. The purpose of this category of papers is to offer the students the option to explore disciplines of interest beyond the choices they make in Core and Discipline Specific Elective papers. The list provided under this category are suggestive in nature and each University has complete freedom to suggest their own papers under this category based on their expertise, specialization, requirements, scope and need.
   P.S.: A core course offered in a discipline/subject may be treated as an elective by other discipline/subject and vice versa and such electives may also be referred to as Generic Elective.

3. **Ability Enhancement Courses (AEC):** The Ability Enhancement (AE) Courses may be of two kinds: Ability Enhancement Compulsory Courses (AECC)and Skill Enhancement Courses (SEC). "AECC" courses are the courses based upon the content that leads to Knowledge enhancement; i. Environmental Science and ii. English/Hindi/MIL Communication. These are mandatory for all disciplines. SEC courses are value-based

and/or skill-based and are aimed at providing hands-on-training, competencies, skills, etc.

 3.1 **Ability Enhancement Compulsory Courses (AECC)**: Environmental Science, English Communication/Hindi Communication/MIL Communication.

 3.2 **Skill Enhancement Courses (SEC)**(minimum 2 for honours courses and 4 for regular courses): These courses may be chosen from a pool of courses designed to provide value-based and/or skill-based knowledge and should contain both theory and lab/hands-on/training/field work. The main purpose of these courses is to provide students life-skills in hands-on mode so as to increase their employability. The list provided under this category are suggestive in nature and each University has complete freedom to suggest their own papers under this category based on their expertise, specialization, requirements, scope and need.

4. **Practical/tutorials** (One each with every core and discipline/generic specific elective paper): The list of practical provided is suggestive in nature and each university has the freedom to add/subtract/edit practical from the list depending on their faculty and infrastructure available. Addition will however be of similar nature.

 ∗ **Introducing Research Component in Under-Graduate Courses**

Project work/Dissertation is considered as a special course involving application of knowledge in solving / analyzing /exploring a real life situation / difficult problem. A Project/Dissertation work would be of 6 credits. A Project/Dissertation work may be given in lieu of a discipline specific elective paper.

Implementation:

1. The CBCS may be implemented in Central/State Universities and the stakeholders agree to follow common minimum curriculum and syllabi of the core papers and given by the UGC. The allowed deviation from the syllabi being 30 % at the maximum.
2. The universities may be allowed to finally design their own syllabi for the core and elective papers subject to point no. 1. UGC may prepare a list of elective papers but the universities may further add to the list of elective papers they want to offer as per the facilities available.
3. Number of Core papers for all Universities has to be same for both UG Honors as well as UG regular courses.
4. Credit score earned by a student for any elective paper has to be included in the student's overall score tally irrespective of whether the paper is offered by the parent university (degree awarding university/institute) or not.
5. For the introduction of AE Courses, they may be divided into two categories:
 a) AE Compulsory Courses: The universities participating in CBCS system may have common curriculum for these papers. There may be one paper each in the 1st

two semesters viz. (i) English/Hindi/MIL Communication, (ii) Environmental Science.

    b) **Skill Enhancement Courses**: The universities may decide the papers they may want to offer from a common pool of papers decided by UGC or the universities may choose such papers themselves in addition to the list suggested by UGC. The universities may offer one paper per semester for these courses.

6. The university/Institute may plan the number of seats per elective paper as per the facility and infrastructure available.

7. An undergraduate degree with Honours in a discipline may be awarded if a student completes 14 core papers in that discipline, 2Ability Enhancement Compulsory Courses (AECC), minimum 2Skill Enhancement Courses (SEC)and4 papers each from a list of Discipline Specific Elective and Generic Elective papers, respectively.

8. An undergraduate degree in Science disciplines may be awarded if a student completes 4 core papers each in three disciplines of choice, 2Ability Enhancement Compulsory Courses (AECC), minimum 4Skill Enhancement Courses (SEC)and 2 papers each from a list of Discipline Specific Elective papers based on three disciplines of choice selected above, respectively.

9. An Undergraduate degree in Humanities/ Social Sciences/ Commerce may be awarded if a student completes 4 core papers each in two disciplines of choice, 2 core papers each in English and Hindi/MIL, respectively, 2 Ability Enhancement Compulsory Courses (AECC), minimum 4 Skill Enhancement Courses (SEC), 2 papers each from a list of Discipline Specific Elective papers based on the two disciplines of choice selected above, respectively, and two papers from the list of Generic Electives papers.

10. For the purpose of computation of work-load the following mechanism may be adopted:
    i)   1 Credit = 1 Theory period of one hour duration
    ii) 1 Credit = 1 Tutorial period of one hour duration
    iii) 1 Credit = 1 Practical period of two hour duration

11. The credit(s) for each theory paper/practical/tutorial/project/dissertation will be as per the details given in A, B, C, D for B.Sc. Honours, B.A./B.Com. Honours, B. Sc. and B.A./B.Com., respectively (Page 12 onwards).

12. Wherever a University requires that an applicant for a particular M.A./M.Sc. /Technical/Professional course should have studied a specific discipline at the undergraduate level, it is suggested that obtaining 24 credits in the concerned discipline at the undergraduate level may be deemed sufficient to satisfy such a requirement for admission to the M.A./M.Sc./Technical/Professional course.

13. The CBCS Committee unanimously recommended that after running the CBCS for under-graduate courses in Universities/Colleges/Institutes for one academic session UGC should review the course structure and syllabi in order to rectify anomalies, if any, based on the feedback from stakeholders.

A
Details of courses under B.Sc. (Honors)

Course	*Credits	
	Theory+ Practical	Theory + Tutorial

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I. Core Course (6 Credits)
(14 Papers) 14X4= 56 14X5=70
Core Course Practical / Tutorial*
(14 Papers) 14X2=28 14X1=14

II. Elective Course (6 Credits)
(8 Papers)
A.1. Discipline Specific Elective 4X4=16 4X5=20
(4 Papers)

A.2. Discipline Specific Elective
      Practical/ Tutorial* 4 X 2=8 4X1=4
(4 Papers)

B.1. Generic Elective/
      Interdisciplinary 4X4=16 4X5=20
(4 Papers)
B.2. Generic Elective
      Practical/ Tutorial* 4 X 2=8 4X1=4
(4 Papers)
- **Optional Dissertation or project work in place of one Discipline Specific Elective paper (6 credits) in 6th Semester**

III. Ability Enhancement Courses
1. **Ability Enhancement Compulsory Courses (AECC)**
(2 Papers of 4 credit each) 2 X 4=8 2 X 4=8
   Environmental Science
   English/Hindi/MIL Communication
2. **Skill Enhancement Courses(SEC)**
   (Minimum 2) 2 X 4=8 2 X 4=8
(2 Papers of 4 credit each)

Total credit	**148**	**148**

Institute should evolve a system/policy about ECA/ General Interest/Hobby/Sports/NCC/NSS/related courses on its own.
* wherever there is a practical there will be no tutorial and vice-versa

A

PROPOSED SCHEME FOR CHOICE BASED CREDIT SYSTEM IN B. Sc. Honours

	CORE COURSE (14)	Ability Enhancement Compulsory Course (AECC) (2)	Skill Enhancement Course (SEC) (2)	Elective: Discipline Specific DSE (4)	Elective: Generic (GE) (4)
I	C 1 C 2	(English/Hindi/MIL Communication)/ Environmental Science			GE-1
II	C 3 C 4	Environmental Science/(English/ Hindi/MIL Communication)			GE-2
III	C 5 C 6 C 7		SEC -1		GE-3
IV	C 8 C 9 C 10		SEC -2		GE-4
V	C 11 C 12			DSE-1 DSE -2	
VI	C 13 C 14			DSE -3 DSE -4	

Details of courses under B.A./ B.Com. (Honors)

Course	*Credits	
	Theory+ Practical	Theory + Tutorial
===		
I. Core Course (6 Credits)		
(14 Papers)	14X[5+1]=84	14X[5+1]=84
II. Elective Course (6 Credits)		
(8 Papers)		
A1. Discipline Specific Elective	4X6=24	4X6=24
(4 Papers)		
B.1. Generic Elective/Interdisciplinary	4X6=24	4X6=24
(4 Papers from other subjects)		
III. Ability Enhancement Courses		
1. **Ability Enhancement Compulsory Courses (AECC)**		
(2 Papers of 4 credits each)		
Environmental Science	4	4
English/Hindi/MIL Communication	2	2
2. **Skill Enhancement Courses (SEC)**		
	2 X 2=4	2 X 2=4

Total credit= 142   Total credit= 142

Institute should evolve a system/policy about ECA/ General Interest/Hobby/Sports/NCC/NSS/related courses on its own.
*wherever there is a practical there will be no tutorial and vice-versa.

B

PROPOSED SCHEME FOR CHOICE BASED CREDIT SYSTEM IN
B.A./B.Com.Honours

	CORE COURSE (14)	Ability Enhancement Compulsory Course (AECC) (2)	Skill Enhancement Course (SEC) (2)	Elective: Discipline Specific DSE (4)	Elective: Generic (GE) (4)
I	C 1 C 2	(English/Hindi/MIL Communication)/ Environmental Science			GE-1
II	C 3 C 4	Environmental Science/(English/ Hindi/MIL Communication)			GE-2
III	C 5 C 6 C 7		SEC -1		GE-3
IV	C 8 C 9 C 10		SEC -2		GE-4
V	C 11 C 12			DSE-1 DSE -2	
VI	C 13 C 14			DSE -3 DSE -4	

C

Details of Courses Under Undergraduate (B.Sc.)

Course	*Credits	
	Theory+ Practical	Theory+Tutorials

I. Core Course (6 Credits)

(12 Papers)	12X4= 48	12X5=60
04 Courses from each of the 03 disciplines of choice		
Core Course Practical / Tutorial*	12X2=24	12X1=12
(12 Practical/ Tutorials*)		
04 Courses from each of the 03 Disciplines of choice		

II. Elective Course (6 Credits)

(6 Papers)	6x4=24	6X5=30
Two papers from each discipline of choice including paper of interdisciplinary nature.		
Elective Course Practical / Tutorials*	6 X 2=12	6X1=6
(6 Practical / Tutorials*)		
Two Papers from each discipline of choice including paper of interdisciplinary nature		

- **Optional Dissertation or project work in place of one Discipline elective paper (6 credits) in 6th Semester**

III. Ability Enhancement Courses

1**. Ability Enhancement Compulsory Courses (AECC)**

(2 Papers of 4 credits each)	2 X 4=8	2X4=8
Environmental Science		
English/Hindi/MIL Communication		

2**. Skill Enhancement Courses (SEC)**	4 X 4=16	4 X 4=16
(4 Papers of 4 credits each)		
	Total credit= 132	**Total credit= 132**

Institute should evolve a system/policy about ECA/ General Interest/Hobby/Sports/NCC/NSS/related courses on its own.
*wherever there is practical there will be no tutorials and vice -versa

C

PROPOSED SCHEME FOR CHOICE BASED CREDIT SYSTEM IN B. Sc.

	CORE COURSE (12)	Ability Enhancement Compulsory Course (AECC) (2)	Skill Enhancement Course (SEC) (2)	Discipline Specific Elective DSE (6)
I	DSC- 1 A DSC- 2 A DSC- 3 A	(English/Hindi/MIL Communication)/ Environmental Science		
II	DSC- 1 B DSC- 2 B DSC- 3 B	Environmental Science / (English/Hindi/MIL Communication)		
III	DSC- 1 C DSC- 2 C DSC- 3 C		SEC-1	
IV	DSC- 1 D DSC- 2 D DSC- 3 D		SEC-2	
V			SEC -3	DSE-1 A DSE-2 A DSE-3 A
I			SEC -4	DSE-1 B DSE-2 B DSE-3 B

D

Details of Courses Under Undergraduate (B.A./ B.Com.)

Course   ***Credits**

== CREDITS

12X6=72

I. Core Course (6 Credits)

(12 Papers)

Two papers – English [LCC]

Two papers – MIL
       [LCC]

Four papers – Discipline 1.   [C]

Four papers – Discipline   2.[C]

II. DSE & Elective Course (6 Credits)   CREDITS 6X6=36

(6 Papers)

   Two papers- Discipline 1 specific   Two
   papers- Discipline 2 specific Two papers- Inter
   disciplinary

Two papers from each discipline of choice and two papers
of interdisciplinary nature.

III. Ability Enhancement Courses

1**. Ability Enhancement Compulsory Courses (AECC)**

   Environmental Science CREDITS 4

   English/Hindi/MIL Communication CREDITS 2

2**. Skill Enhancement Courses (SEC)**

TWO FROM ANY DEPARTMENT ALLOWED BY THE COLLEGE   CREDITS 2X4=8

                                   Total credit= 122   **Total = 122**

D

PROPOSED SCHEME FOR CHOICE BASED CREDIT SYSTEM IN
B.A./B.Com

	CORE COURSE (12)	Ability Enhancement Compulsory Course (AECC) (2)	Skill Enhancement Course (SEC) (2)	Discipline Specific Elective DSE (4)	Generic Elective GE (2)
I	LCC1 MIL	(English/Hindi/MIL Communication) /			

	DSC- 1 A	Environmental Science			
	DSC- 2 A				
II	LCC2	Environmental Science/ (English/Hindi/MIL Communication)			
	DSC- 1 B				
	DSC- 2 B				
III	LCC3 MIL		SEC -1		
	DSC- 1 C				
	DSC- 2 C				
IV	LCC4		SEC -2		
	DSC- 1 D				
	DSC- 2 D				
V				DSE-1 A	GE-1

				DSE-2 A	
VI				DSE-1 B	GE-2
				DSE-2 B	

14. The Universities/Institutes may offer any number of choices of papers from different disciplines under Generic Elective and Discipline Specific Elective as per the availability of the courses/faculty.
15. Universities/Institutes may evolve a system/policy about Extra Curricular Activities/ General Interest and Hobby Courses/Sports/NCC/NSS/Vocational courses/related courses on their own.
16. A student can opt for more number of Elective and AE Elective papers than proposed under the model curriculum of UGC. However the total credit score earned will not exceed 160 credits for UG Honours and 140 credits for UG degree.
17. The new scheme of UG courses should be given due consideration while framing the admission eligibility requirement for PG/ Technical courses in Indian Universities/Institutions to ensure that students following inter and multi-disciplinary format under CBCS are not at a disadvantage It is suggested that wherever required, obtaining 24 credits in particular discipline may be considered as the minimum eligibility, for admission in the concerned discipline, for entry to PG/Technical courses in Indian Universities/Institutions.

Conversion of percentage into credit(s) and grade(s):The following illustrations could be taken as an example for computing SGPA and CGPA from percentage to credits for Honours courses in all disciplines, degree Program courses in Science subjects and degree Program courses in Humanities, Social Sciences and Commerce subjects:

1.Percentage to Grades and Grade Points

The following formula may be used to convert marks (%) into letter grades.

Let μ = mean of % age marks of all student appeared in the paper.

σ = Standard deviation

m = % of marks obtained

Letter grade	Numerical grade	Formula
O (outstanding)	10	$m \geq \mu + 2.5\sigma$
A+ (Excellent)	9	$\mu + 2.0\sigma \leq m < \mu + 2.5\sigma$
A (Very Good)	8	$\mu + 1.5\sigma \leq m < \mu + 2.0\sigma$
B+ (Good)	7	$\mu + 1.0\sigma \leq m < \mu + 1.5\sigma$
B (Above average)	6	$\mu \leq m < \mu + \sigma$
C (Average)	5	$\mu - 0.5\sigma \leq m < \mu$
D (Pass)	4	$\mu - \sigma \leq m < \mu - 0.5\sigma$
F (Fail)	0	$m < \mu - \sigma$
Ab (Absent)	0	

* Minor variations may be adjusted by the individual institution.

1 A student obtaining Grade F shall be considered failed and will be required to reappear in the examination.
2 For non credit courses 'Satisfactory' or "Unsatisfactory' shall be indicated instead of the letter grade and this will not be counted for the computation of SGPA/CGPA.
3 The Universities can decide on the grade or percentage of marks required to pass in a course and also the CGPA required to qualify for a degree taking into consideration the recommendations of the statutory professional councils such as AICTE, MCI, BCI, NCTE etc.,
4 The statutory requirement for eligibility to enter as assistant professor in colleges and universities in the disciplines of arts, science, commerce etc., is a minimum average mark of 50% and 55% in relevant postgraduate degree respectively for reserved and general category. Hence, it is recommended that the cut-off marks for grade B shall not be less than 50% and

for grade B+, it should not be less than 55% under the absolute grading system. Similarly cut-off marks shall be fixed for grade B and B+ based on the recommendation of the statutory bodies (AICTE, NCTE etc.,) of the relevant disciplines.

Illustration of Computation of SGPA and CGPA and Format for Transcripts

2.B.Sc. / B.Com./ B.A. Honors Course

Course	Credit	Grade Letter	Grade Point	Credit Point (Credit X Grade)	SGPA(Credit Point/Credit)
Semester I					
C-1	06	A	8	48	
C-2	06	B+	7	42	
AECC-1	04	B	6	24	
GE-1	06	B	6	36	
Total	**22**			**150**	**6.8 (150/22)**
Semester II					
C-3	06	B	6	36	
C-4	06	C	5	30	
AECC -2	04	B+	7	28	
GE-2	06	A+	9	54	
Total	**22**			**148**	**6.73 (148/22)**
Semester III					
C-5	06	A+	9	54	
C-6	06	0	10	60	
C-7	06	A	8	48	
SEC-1	04	A	8	32	
GE-3	06	0	10	60	
Total	**28**			**254**	**9.07 (254/28)**

Semester IV					
C-8	06	B	6	36	
C-9	06	A+	9	54	
C-10	06	B	6	36	
SEC-2	04	A+	9	36	
GE-4	06	A	8	48	
Total	**28**			**210**	**7.5 (210/28)**
Semester V					
C-11	06	B	6	36	
C-12	06	B+	7	42	
DSE-1	06	0	10	60	
DSE-2	06	A	8	48	
Total	**24**			**186**	**7.75 (186/24)**
Semester VI					
C-13	06	A+	9	54	
C-14	06	A	8	48	
DSE-3	06	B+	7	42	
DSE-4	06	A	8	48	
Total	**24**			**192**	**8.0 (192/24)**
CGPA					
Grand Total	**148**			**1140**	**7.7 (1140/148)**

Semester 1	Semester 2	Semester 3	Semester 4
Credit: 22; SGPA:6.8	Credit: 22; SGPA:6.73	Credit: 28; SGPA: 9.07	Credit: 28; SGPA:7.5

Semester 5	Semester 6
Credit: 24; SGPA:7.75	Credit: 24; SGPA: 8.0

Thus, **CGPA =** (22 x 6.8 + 22 x 6.73 + 28 x 9.07 + 28 x 7.5 + 24 x 7.75 + 24 x 8.0)/ 148 = **7.7**

2.B. Sc. Course

Course	Credit	Grade Letter	Grade Point	Credit Point (Credit X Grade)	SGPA(Credit Point/Credit)
Semester I					
DSC-1A	06	B	6	36	
DSC-2A	06	B+	7	42	
DSC-3A	06	C	5	30	
AECC -1	04	B	6	24	
Total	**22**			**132**	**6.0**
Semester II					
DSC-1B	06	B	6	36	
DSC-2B	06	B	6	36	
DSC-3B	06	C	5	30	
AECC-2	04	A+	9	36	
Total	**22**			**138**	**6.27**
Semester III					
DSC-1C	06	A	8	48	

DSC-2C	06	A+	9	54	
DSC-3C	06	A	8	48	
SEC-1	04	A	8	32	
Total	**22**			**182**	**8.27**
Semester IV					
DSC-1D	06	C	5	30	
DSC-2D	06	B	6	36	
DSC-3D	06	B+	7	42	
SEC-2	04	A+	9	36	
Total	**22**			**144**	**6.54**
Semester V					
DSE-1A	06	B	6	36	
DSE-2A	06	A+	9	54	
DSE-3A	06	A	8	48	
SEC-3	04	B	6	24	
Total	**22**			**162**	**7.36**
Semester VI					
DSE-1B	06	B+	7	42	
DSE-2B	06	B	6	36	
DSE-3B	06	C	5	30	
SEC-4	04	C	5	20	
Total	**22**			**128**	**5.82**
CGPA					
Grand Total	**132**			**886**	**6.71 (886/132)**

Semester 1	Semester 2	Semester 3	Semester 4
Credit: 22; SGPA: 6.0	Credit: 22; SGPA: 6.27	Credit: 22; SGPA: 8.27	Credit: 22; SGPA: 6.54

Semester 5	Semester 6
Credit: 22; SGPA: 7.36	Credit: 22; SGPA: 5.82

Thus, **CGPA =** (22 x 6.0 + 22 x 6.27 + 22 x 8.27 + 22x 6.54 + 22 x 7.36 + 22 x 5.82)/ 132 = **6.71**

3.B.A. / B.Com. Course

Course	Credit	Grade Letter	Grade Point	Credit Point (Credit X Grade)	SGPA(Credit Point/Credit)
Semester I					
English-1	06	A	8	48	
DSC-1A	06	B	6	36	
DSC-2A	06	A	8	48	
AECC-1	04	B+	7	28	
Total	**22**			**160**	**7.27**
Semester II					
MIL-1	06	A+	9	54	
DSC-1B	06	B+	7	42	
DSC-2B	06	B+	7	42	
AECC-2	04	B	6	24	
Total	**22**			**162**	**7.36**

Semester III					
English -2	06	B	6	36	
DSC-1C	06	A	8	48	
DSC-2C	06	B	6	36	
SEC-1	04	A	8	32	
Total	**22**			**152**	**6.91**
Semester IV					
MIL - 2	06	B+	7	42	
DSC-1D	06	A+	9	54	
DSC-2D	06	A	8	48	
SEC-2	04	B	6	24	
Total	**22**			**168**	**7.63**
Semester V					
SEC-3	04	A+	9	36	
DSE-1A	06	A	8	48	
DSE-2A	06	A+	9	54	
GE-1	06	A+	9	54	
Total	**22**			**192**	**8.73**
Semester VI					
SEC-4	04	A+	9	36	
DSE-2A	06	B	6	36	
DSE-2B	06	A	8	48	
GE-2	06	A	8	48	
Total	**22**			**168**	**7.63**
CGPA					

Grand Total	132			1002	7.59 (1002/132)

Semester 1	Semester 2	Semester 3	Semester 4
Credit: 22; SGPA: 7.27	Credit: 22; SGPA: 7.36	Credit: 22; SGPA: 6.91	Credit: 22; SGPA: 7.63

Semester 5	Semester 6
Credit: 22; SGPA: 8.73	Credit: 22; SGPA: 7.63

Thus, **CGPA =** (22 x 7.27 + 22 x 7.36 + 22 x 6.91 + 22 x 7.63 + 22 x 8.73 + 22 x 7.63)/ 132 = **7.59**

*Transcript (Format): Based on the above recommendations on Letter grades, grade points and SGPA and CCPA, the HEIs may issue the transcript for each semester and a consolidated transcript indicating the performance in all semesters.