

Gondwana University Gadchiroli
FACULTY OF SCIENCE
DIRECTION NO. 207 OF 2016

**EXAMINATIONS LEADING TO THE DEGREE OF MASTER OF SCIENCE, SEMESTER
PATTERN WITH CHOICE BASED CREDIT SYSTEM, DIRECTION, 2016.**

(Issued under Section 14(8) of the Maharashtra Universities Act, 1994)

Whereas, the Maharashtra Universities Act, 1994 (hereinafter referred to as the Act) has come into force from 21st July, 1994 and was amended from time to time,

AND

Whereas, the University Grants Commission, New Delhi vide letter No.D.O.No.F-1-1/2015 (CM) dated 8th January 2015 to introduce Choice Based Credit System at the earliest from the academic session 2015-16 to provide option to students and also seamless mobility across the institutions.

AND

Whereas, the Board of Studies in all the Science subjects in their meetings held during 24.4.2015 prepared the syllabi and scheme of examinations for the M. Sc. courses and recommended for starting of the Choice Based Credit System in the Faculty of Science from the academic session 2015-16,

AND

Whereas, the faculty of Science in its meeting held on 20.5.2015 vide item No. 16 , has considered, accepted and recommended to Academic Council, the policy decision regarding introduction of Choice Based Credit System and the Draft syllabi of M. Sc. Semester-I to IV with Draft Direction and other details.

AND

Whereas, the Academic Council in its meeting held on 23/08/2016 vide has considered, accepted and recommended to Management Council, for M.Sc., along with Draft Direction and other details.

AND

Whereas, the Management Council in its meeting held on 24/08/2016 vide has considered, accepted the Draft Direction and other details.

AND

Whereas, the new Draft Direction and scheme of examinations as per semester pattern are to be implemented from the Academic Session 2016-17 for M.Sc. semester I and onwards which is to be regulated by this Direction and as such there is no ordinance in existence and framing of an Ordinance for the above examinations is a time consuming process.

AND

Whereas, the admission of students in the Choice Based Credit System at M.Sc. Semester I are to be made in the Academic Session 2016-17.

AND

Whereas, ordinance making is a time consuming process, Now, therefore, I, Dr. N.V. Kalyankar, Vice Chancellor Gondwana University, Gadchiroli in exercise of powers vested in me under Section 14(8) of the Act, do hereby issue the following Directions :-

1. This Direction may be called " examinations leading to the Degree of Master of Science, Semester Pattern with Choice Based Credit System, Direction, 2016"
2. This direction shall come into force from the date of its issuance.
3. The duration of the M. Sc. course shall be of two academic years consisting of four semesters with the University examinations at the end of each semester detailed in the following table.
 - a) M. Sc. Semester I Exam,
 - b) M. Sc. Semester II Exam,
 - c) M. Sc. Semester III Exam, and
 - d) M. Sc. Semester IV Exam

TABLE

Sr. No.	Name of the examination	Main Examination	Supplementary Examination
1	2	3	4
1	Semester I, III	Winter	Summer
2	Semester II, IV	Summer	Winter

ELIGIBILITY TO THE COURSE:

4. Subject to their compliance with the provisions of this Direction and of other ordinances in force from time to time, the following applicant candidates shall be eligible for the admission to Master of Science Course and examinations thereof.

Eligibility for Semester I

A For M.Sc. (Physics)	For admission to the M. Sc. Semester I in Physics, a candidate shall have offered Physics as one of the subjects at the qualifying B.Sc. Examination.
B For M.Sc. (Chemistry)	For admission to the M. Sc. Semester I in Chemistry, a candidate shall have offered Chemistry / Industrial Chemistry as one of the subjects at the qualifying B.Sc. Examination.
C For M.Sc. (Mathematics)	For admission to the M. Sc. Semester I in Mathematics, a candidate shall have offered Mathematics as one of the subjects at the qualifying B.Sc. Examination.
D For M.Sc. (Computer Science)	For admission to the M. Sc. Semester I in Computer Science, a candidate shall have offered Computer Science as one of the subjects at the qualifying B.Sc. examination or with Post B.Sc. diploma course in Computer Science of Gondwana University or any other statutory university with optional subjects Computer Maintenance / B.Sc. (Information Technology) / B.C.A/MCA* *Studied Maths subject at B.Sc. level.
E For M.Sc. (Electronics)	For admission to the M. Sc. Semester I in Electronics, a candidate shall have offered Electronics / Computer Maintenance/ B.Sc. IT and BCA as one of the subjects at the Qualifying B.Sc.; B.Sc. IT and BCA Examination.
F For M.Sc. (Botany)	For admission to the M. Sc. Semester I in Botany, a candidate shall have offered Botany as one of the subjects at the qualifying B.Sc. Examination / B.Sc. Agriculture Science.
G For M.Sc. (Zoology)	For admission to the M. Sc. Semester I in Zoology, a candidate shall have offered Zoology as one of the subjects at the qualifying B.Sc. Examination.
H For M.Sc. (Microbiology)	For admission to the M. Sc. Semester I in Microbiology, a candidate shall have offered Microbiology/ Biotechnology as a subject of study at qualifying B.Sc. Examination.
I For M.Sc. (Biochemistry)	For admission to the M. Sc. Semester I in Biochemistry, a candidate shall have offered Chemistry and Biochemistry as subjects of study at B.Sc. Examination.
J For M.Sc. (Biotechnology)	For admission to the M. Sc. Semester I in Biotechnology, a candidate shall be a Life Science graduate / Veterinary / Fishery Sciences / Pharmacy / Engineering Technology / Medicine (MBBS) / B.D.S. / B.Sc. Agriculture Science.

K For M.Sc. (Environmental Science)	For admission to the M. Sc. Semester I in Environmental Science, a candidate shall have offered Environmental Science as one of the subjects at the qualifying B.Sc. Examination or B.Sc. Agriculture Science.
L For M.Sc. (Geology)	For admission to the M. Sc. Semester I in Geology, a candidate shall have offered Geology as one of the subjects at the qualifying B.Sc. Examination.

Candidates shall have passed any one of the above examinations from Gondwana University Gadchiroli or any other statutory University of India or abroad, recognized by the UGC or any other concerned apex regulatory authority / body in India.

5. Without prejudice to other provisions of Ordinance No. 6 relating to the examinations in general, provisions of Para 5, 8, 9, 10, 26, 31 and 32 of the said ordinance shall apply to every student admitted to the courses.
6. The fees for the tuition, examination, laboratory and other fees shall be as prescribed by the university from time to time.
 - (a) The scope of the subjects shall be as prescribed in the syllabus.
 - (b) The medium of instruction and examination shall be English.
7. The number of papers and maximum marks assigned to each paper and minimum marks / grade/credits, an examinee must obtain in order to pass the examination shall be as prescribed in Appendices appended with this Direction.
8. The examinee at each of the examination shall have option of not being declared successful at the examination in case he / she does not secure a minimum of grade B+ equivalent to 55% marks at the examination. This option will have to be exercised every time the application is submitted to any of the examinations. Once this option is exercised, the option shall be binding on the examinee and it shall not be evoked under any circumstances.
9. The classification of the examinee successful at the semester end examinations and at the end of final semester examinations shall be as per the rules and regulations of Choice Based Credit System as prescribed in Appendices, appended with this direction.
10. The provisions of Direction No. 3 of 2007 for the award of grace marks for passing an examination, securing higher grade in subject(s) as updated from time to time shall apply to examinations under this Direction.
11. No candidate shall be admitted to an examination under this Direction, if he / she has already passed the same examination of this university or of any other university.
12. Successful examinees shall be entitled to receive a Grade Card after each semester end examinations and successful examinees at the end of M. Sc. Sem IV examinations shall, receive a Degree in the prescribed format, signed by the Vice-Chancellor.
13. This course is based on Choice Based Credit System and therefore, it will be also regulated by guidelines and regulation given in Appendices which are part of this Direction.
14. Absorption scheme for failure students of the credit based semester pattern:
 - a) While switching over to Choice Based Credit System, the failure students of credit based semester pattern will be given **Five** chances to clear the examinations starting from session 2016-2017.

- b) The candidates who have cleared first and second semester of Part I of the Credit Based Semester Pattern examinations in the concerned subject shall get admission to Third Semester of Part II of the Choice Based Credit System directly. However, candidates who are allowed to keep term will not be eligible for admission to Third Semester of Part II of the Choice Based Credit System unless they clear all the papers and practical of first and second semester of Part I of the Credit Based Semester Pattern examinations.

15. Absorption scheme for failure students of annual pattern:

The candidates who have cleared first year of annual pattern shall get admission to Semester III of the Choice Based Credit System directly. However, candidates who are allowed to keep term will not be eligible for admission to Third Semester of the Choice Based Credit System unless they clear all the papers and practical of First year of the annual pattern examination.

16. The ATKT rules for admission for the M. Sc. Course (Theory, Practical and **Seminar etc.** as separate passing head and on calculation fraction, if any, shall be ignored) shall be as given in the following table

Admission to Semester	Rules
Semester I	As provided in the para 4 of the Direction
Semester II	Candidate should have appeared in semester I of University Examination.
Semester III	For Practical Subjects: Candidate should have passed at least 8 papers out of 12 in semester I and II together including practicals. For Non-Practical Subjects (Example Maths): Candidate should have passed at least 6 papers out of 10 in semester I and II together.
Semester IV	Candidate should have appeared in at least one paper of semester III of University Examination.

Gadchiroli.
Date :- 24 / 08 /2016.

Sd/-
(Dr. N.V. Kalyankar)
Vice-Chancellor

Appendix-1

Scheme of teaching and examination under semester pattern Choice Based Credit System (CBCS) for M.Sc. Program in all subjects, except Mathematics.

	Core Course	Ability Enhancement	Skill Based Course	Discipline Specific Elective
SEM I	Core 1 Th. Paper 1 (4 Credits) (4 Hours/Week)	Seminar I (1 Credit) (2 Hours/Week)		
	Core 2 Th. Paper 2(4 Credits) (4 Hours/Week)			
	Core 3 Th. Paper 3 (4 Credits) (4 Hours/Week)			
	Core 4 Th. Paper 4 (4 Credits) (4 Hours/Week)			
	Pract. Core Pr. 1 {Based on Core Th. 1&2} (4 Credits) (3-8 Hours/Week)			
	Pract. Core Pr. 2 {Based on Core Th. 3&4} (4 Credits) (3-8 Hours/Week)			
	Total 25 Credits			

Appendix-2

	Core Subject	Ability Enhancement	Skill Based Course	Discipline Specific Elective
SEM II	Core 5 Th. Paper 5 (4 Credits) (4 Hours/Week)	Seminar II (1 Credit) (2 Hours/Week)		
	Core 6 Th. Paper 6 (4 Credits) (4 Hours/Week)			
	Core 7 Th. Paper 7 (4 Credits)			
	Core 8 Th. Paper 8 (4 Credits) (4 Hours/Week)			
	Pr. Core Pr. 3 {Based on Core Th. 5&6} (4 Credits) (3-8 Hours/Week)			
	Pr. Core Pr. 4 {Based on Core Th. 7&8} (4 Credits) (3-8 Hours/Week)			
Total 25 Credits				

Appendix-3

	Core Subject	Ability Enhancement	Skill Enhancement Course	Discipline Specific Elective
SEM III	Core 9 Th. Paper 9 (4 Credits) (4 Hours/Week)	Seminar III (1 Credit) (2 Hours/Week)	Foundation Course I (SEC I) Paper 12 (4 Credits) (4 Hours/Week)	Core Elective I (DSE I) Th. Paper 11 (4 Credits) (4 Hours/Week)
	Core 10 Th. Paper 10(4 Credits) (4 Hours/Week)			Pr. Core Elective I (DSE I) Practical 6 (4 Credits) (3-8 Hours/Week)
	Pract. Core Pr. 5 {Based on Core Th. 9&10} (4 Credits) (3-8 Hours/Week)			
Total 25 Credits				

Appendix-4

Course	Core Subject	Ability Enhancement	Skill Based Course	Discipline Specific Elective
SEM IV	Core 11 Th. Paper 13 (4 Credits) (4 Hours/Week)	Project /Dissertation (4 Credits) (3-8 Hours/Week)	Foundation Course II (SEC II) Th. Paper 16 (4 Credits) (4 Hours/Week)	Core Elective II (DSE II) Th. Paper 15 (4 Credits) (4 Hours/Week)
	Core 12 Th. Paper 14 (4 Credits) (4 Hours/Week)	Seminar IV (1 Credit) (2 Hours/Week)		
	Pr.7 Based on Core Th. Paper 11;12 & Core Elective II (DSE II) (4 Credits) (3-8 Hours/Week)			
Total 25 Credits				

Note: Th. = Theory; Pr. = Practical/lab,

The Practical and Project/Dissertation shall be evaluated by both the External and Internal Examiner in the respective University Department / Center / Affiliated College as per guidelines appended with this Direction.

1. In each semester, the student will have to deliver a seminar on any topic relevant to the syllabus / subject encompassing the recent trends and development in that field / subject. The topic of the seminar will be decided at the beginning of each semester in consultation with the supervising teachers. The student has to deliver the seminar which will be followed by discussion. The seminar will be open to all the teachers of the department, invitees, and students.
2. The student will have to carry out the project work (based on guidelines appended to this direction) in lieu of practical in the fourth semester in the department or depending on the availability of placement; he / she will be attached to any of the national / regional / private research institute / organization.
3. Internal Assessment Marks will be as per appendix attached in this direction.
4. Skill Enhancement Course: Student can choose this paper from any skill enhancement courses available in the University Department / Center / Affiliated College.
5. One credit will be for 25-30 hours spent by the learner for one paper.

Appendix-5

Scheme of teaching and examination under semester pattern Choice Based Credit System (CBCS) for M.Sc. Program in Mathematics.

	Core Course	Ability Enhancement	Skill Based Course	Discipline Specific Elective
SEM I	Core 1 Th. (4 Credits)	Seminar I (1 Credit)		
	Core 2 Th.(4 Credits)	Seminar II (1 Credit)		
	Core 3 Th. (4 Credits)	Seminar III (1 Credit)		
	Core 4 Th. (4 Credits)	Seminar IV (1 Credit)		
	Core 5 Th. (4 Credits)	Seminar V (1 Credit)		
Total 25 Credits				

Appendix-6

	Core Subject	Ability Enhancement	Skill Based Course	Discipline Specific Elective
SEM II	Core 6 Th. (4 Credits)	Seminar VI (1 Credit)		
	Core 7 Th.(4 Credits)	Seminar VII (1Credit)		
	Core 8 Th. (4 Credits)	Seminar VIII (1 Credit)		
	Core 9 Th. (4 Credits)	Seminar IX (1 Credit)		
	Core 10 Th. (4 Credits)	Seminar X (1 Credit)		
Total 25 Credits				

Appendix-7

	Core Subject	Ability Enhancement	Skill Enhancement Course	Discipline Specific Elective
SEM III	Core 11 Th. (4 Credits)	Seminar XI (1 Credit)	Foundation Course I (SEC I) Th. Paper 15 (4 Credits)	Core Elective I (DSE I) Th. Paper 14 (4 Credits)
	Core 12 Th. (4 Credits)	Seminar XII (1 Credit)	Seminar (SEC I) XV (1 Credit)	Seminar XIV (1 Credit)
	Core 13 Th. (4 Credits)	Seminar XIII (1 Credit)		
Total 25 Credits				

Appendix-8

Course	Core Subject	Ability Enhancement	Skill Based Course	Discipline Specific Elective
SEM IV	Core 14 Th. Paper 16 (4 Credits)	Project/Dessertation (5 Credits)	Foundation Course II (SEC II) Th. Paper 20 (4 Credits)	Core Elective II (DSE II) Th. Paper 19 (4 Credits)
	Core 15 Th. Paper 17 (4 Credits)			
	Core 16 Th. Paper 18 (4 Credits)			

Note: Th = Theory;

Project/Dissertation shall be evaluated by the Internal and External Examiner in the respective University Department / Center / Affiliated College.

Appendix-9

Scheme of teaching and examination under semester pattern Choice Based Credit System (CBCS) for M.Sc. Program in all subjects except Mathematics.

Semester I

Code	Theory / Practical	Teaching Scheme			Credit	Examination Scheme					
		Hrs/ week				Duration in hrs.	Max. Marks		Total	Minimum Marks	
		Theory	Practical	Total			External	Internal		Theory	Practical
Core 1	Paper 1	4	-	4	4	3	80	20	100	40	
Core 2	Paper 2	4	-	4	4	3	80	20	100	40	
Core 3	Paper 3	4	-	4	4	3	80	20	100	40	
Core 4	Paper 4	4	-	4	4	3	80	20	100	40	
Pract. Core 1 & 2	Practical 1	-	8	8	4	3-8*	80	20	100	40	40
Pract. Core 3 & 4	Practical 2	-	8	8	4	3-8*	80	20	100	40	40
Seminar 1	Seminar 1	2	-	2	1			25	25	10	
TOTAL		18	16	34	25		480	145	625	170	80

Appendix-10

Semester II

Code	Theory / Practical	Teaching Scheme			Credit	Examination Scheme					
		Hrs/ week				Duration in hrs.	Max. Marks		Total	Minimum Marks	
		Theory	Practical	Total			External	Internal		Theory	Practical
Core 5	Paper 5	4	-	4	4	3	80	20	100	40	
Core 6	Paper 6	4	-	4	4	3	80	20	100	40	
Core 7	Paper 7	4	-	4	4	3	80	20	100	40	
Core 8	Paper 8	4	-	4	4	3	80	20	100	40	
Pract. Core 5 & 6	Practical 3	-	8	8	4	3-8*	80	20	100	40	40
Pract. Core 7 & 8	Practical 4	-	8	8	4	3-8*	80	20	100	40	40
Seminar 2	Seminar 2	2	-	2	1			25	25	10	
TOTAL		18	16	34	25		480	145	625	170	80

Appendix-11

Semester III

Code	Theory / Practical	Teaching Scheme			Credit	Examination Scheme					
		Hrs/ week				Duration in hrs.	Max. Marks		Total	Minimum Marks	
		Theory	Practical	Total			External	Internal		Theory	Practical
Core 9	Paper 9	4	-	4	4	3	80	20	100	40	
Core 10	Paper 10	4	-	4	4	3	80	20	100	40	
Core Elective 1	Paper 11	4	-	4	4	3	80	20	100	40	
Foundation Course 1	Paper 12	4	-	4	4	3	80	20	100	40	
Pract. Core 9 & 10	Practical 5	-	8	8	4	3-8*	80	20	100	40	40
Pract. Core Elective 1	Practical 6	-	8	8	4	3-8*	80	20	100	40	40
Seminar 3	Seminar 3	2	-	2	1			25	25	10	
TOTAL		18	16	34	25		480	145	625	170	80

Semester IV

Code	Theory / Practical	Teaching Scheme			Credit	Examination Scheme					
		Hrs/ week				Duration in hrs.	Max. Marks		Total	Minimum Marks	
		Theory	Practical	Total			External	Internal		Theory	Practical
Core 11	Paper 13	4	-	4	4	3	80	20	100	40	
Core 12	Paper 14	4	-	4	4	3	80	20	100	40	
Core Elective 2	Paper 15	4	-	4	4	3	80	20	100	40	
Foundation Course 2	Paper 16	4	-	4	4	3	80	20	100	40	
Pract. Core 11, 12 & Elective 2	Practical 7	-	8	8	4	3-8*	80	20	100	40	40
Project	Project		8	8		-	80	20	100		40
Seminar 4	Seminar 4	2	-	2	1			10			
TOTAL		18	16	34	25		480	145	625	170	80

Appendix-13

Scheme of teaching and examination under semester pater Choice Based Credit System (CBCS) for M.Sc. Program in Mathematics.

Semester I for M.Sc. Program in Mathematics												
Code	Theory / Practical	Teaching scheme (Hours/Week)		Credits			Examination Scheme					
		Th	Total	Theory	Seminar	Total	Duration in hrs.	Max. Marks		Total Marks	Minimum Passing Marks	
								External Marks	Internal Asst.		Th. External	Internal Ass.
Core 1	Paper 1	5	5	4	1	5	3	100	25	125	50	
Core 2	Paper 2	5	5	4	1	5	3	100	25	125	50	
Core 3	Paper 3	5	5	4	1	5	3	100	25	125	50	
Core 4	Paper 4	5	5	4	1	5	3	100	25	125	50	
Core 5	Paper 5	5	5	4	1	5	3	100	25	125	50	
	TOTAL	25	25	20	5	25		500	125	625	250	

Semester II for M.Sc. Program in Mathematics												
Code	Theory / Practical	Teaching scheme (Hours/Week)		Credits			Examination Scheme					
		Th	Total	Theory	Seminar	Total	Duration in hrs.	Max. Marks		Total Marks	Minimum Passing Marks	
								External Marks	Internal Asst.		In. External	Internal Ass.
Core 6	Paper 6	5	5	4	1	5	3	100	25	125	50	
Core 7	Paper 7	5	5	4	1	5	3	100	25	125	50	
Core 8	Paper 8	5	5	4	1	5	3	100	25	125	50	
Core 9	Paper 9	5	5	4	1	5	3	100	25	125	50	
Core 10	Paper 10	5	5	4	1	5	3	100	25	125	50	
	TOTAL	25	25	20	5	25		500	125	625	250	

Semester III for M.Sc. Program in Mathematics												
Code	Theory / Practical	Teaching scheme (Hours/Week)		Credits			Examination Scheme					
		Th	Total	Theory	Seminar	Total	Duration in hrs.	Max. Marks		Total Marks	Minimum Passing Marks	
								External Marks	Internal Asst.		In. External	Internal Ass.
Core 11	Paper 11	5	5	4	1	5	3	100	25	125	50	
Core 12	Paper 12	5	5	4	1	5	3	100	25	125	50	
Core 13	Paper 13	5	5	4	1	5	3	100	25	125	50	
Discipline Specific Elective I	Paper 14	5	5	4	1	5	3	100	25	125	50	
Skill Enhancement	Paper 15	5	5	4	1	5	3	100	25	125	50	
	TOTAL	25	25	20	5	25		500	125	625	250	

Semester IV for M.Sc. Program in Mathematics												
Code	Theory / Practical	Teaching scheme (Hours/Week)		Credits			Examination Scheme					
		Th	Total	Theory	Desertion / Project	Total	Duration in hrs.	Max. Marks		Total Marks	Minimum Passing Marks	
								External Marks	Internal Asst.		In. External	Internal Ass.
Core 14	Paper 16	5	5	4		5	3	100	25	125	50	
Core 15	Paper 17	5	5	4		5	3	100	25	125	50	
Core 16	Paper 18	5	5	4		5	3	100	25	125	50	
Discipline Specific Elective 2	Paper 19	5	5	4		5	3	100	25	125	50	
Skill Enhancement Course 2	Paper 20	5	5	4		5	3	100	25	125	50	
	TOTAL	25	25	20	5	25		500	125	625	250	

Project Work/Dissertation Scheme / Guidelines for the Students, Supervisors and Examiners

Every student is required to carry out a project work in semester IV. The project can be of following types. A) Experimental Project Work; OR B) Field Based Project Work; OR C) Review writing based Project Work.

Experimental Project Work and Field Based Project Work:

Student can carry out Experimental / Field Based Project Work on a related research topic of the subject /course. It must be an original work and must indicate some degree of experimental work / Field work. On the basis of this work, student must submit the Project Report (typed and properly bound) in one copy (Hard and Soft) prior to commencement of the final Practical / lab Examination of Semester IV. The project report shall comprise of Introduction, Material and Methods, Results, Discussion, Summary, Conclusion and, References along with the declaration by the candidate that the work is original and not submitted to any University or Organization for award of the degree and certificate by the supervisor and forwarded through Head / Course-coordinator / Director of the Department / Centre or the Principal of the College.

Review writing based Project Work.

Student can carry out review writing Based Project Work on a related topic of the subject / course. It must be a review of topic based on research publications. Student shall refer peer reviewed original research publications and based on findings, write a summary of the same. The pattern of review writing shall be based on reputed reviews published in a standard, peer reviewed journals. On the basis of this work, student must submit the Project Report (typed and properly bound) in one copy (Hard and Soft) prior to commencement of the final Practical /lab/University Examination of Semester IV. The project report shall comprise of Abstract, Introduction, detailed review, Discussion, Summary, Conclusion and, References along with the declaration by the candidate that the work is original and not submitted to any University or Organization for award of the degree and certificate by the supervisor and forwarded through Head / Course-coordinator / Director of the Department / Centre or the Principal of the College.

*The supervisors for the Project Work shall be from the following.

A person shall be an approved faculty member in the relevant subject.

OR

Scientists of National Laboratories / Regional Research Laboratories/ Experts from R&D in Industry who are approved by competent authority in such facilities by the Union Government / the State Government / Gondwana University / Other Universities recognized by UGC.

The Project Work will carry total 100 marks and will be evaluated by both external and internal examiner in the respective Department / Center / Affiliated College.

The examiners will evaluate the Project Work/Dissertation taking into account the coverage of subject matter, arrangement and presentation, references, etc.

For written Project work	40	Marks – Evaluated jointly by External & Internal examiner
Oral Presentation	20	Marks – Evaluated jointly by External & Internal examiner
For Viva-Voce	20	Marks – Evaluated by External examiner
Internal Assessment	20	Marks – Evaluated by Internal examiner
Total	100	

Seminar**Guidelines for Students, Supervisors and Examiners**

In each semester, the student will have to deliver a seminar on any topic relevant to the syllabus / subject encompassing the recent trends and development in that field / subject. The topic of the seminar will be decided at the beginning of each semester in consultation with the supervising teachers. The student has to deliver the seminar which will be followed by discussion. The seminar will be open to all the teachers of the department, invitees, and students.

The students should submit the seminar report typed and properly bound in two copies to the head of the department. The said shall be evaluated by the concerned supervisor / head of the department. The marks of the seminar shall be forwarded to the university within due period through head of the Department. The record of the seminar should be preserved till the declaration of the final result.

Internal Assessment:

1. The internal assessment marks shall be awarded by the concerned teacher.
2. The internal assessment marks shall be sent to the University after the Assessment in the prescribed format.
3. For the purpose of internal assessment the University Department / College shall conduct any three assignments described below. Best two scores of a student in these tests shall be considered to obtain the internal assessment score of that student.
4. If the student does not appear for the Practical Exam he shall be declared failed in Practical Examination irrespective of marks obtained in Internal Practical Assessment. However the Internal Practical Assessment marks will be carried forward for his next supplementary Practical Exam.
5. General guidelines for Internal Assessment are:
 - a) The internal assessment marks assigned to each theory paper as mentioned in Appendix 1 shall be awarded on the basis of assignments like class test, attendance, home assignments, study tour, industrial visits, visit to educational institutions and research organizations, field work, group discussions or any other innovative practice / activity.
 - b) There shall be three assignments (as described above) per course.
 - c) There shall be no separate / extra allotment of work load to the teacher concerned. He/ She shall conduct the Internal assessment activity during the regular teaching days / periods as a part of regular teaching activity.
 - d) The concerned teacher / department / college shall have to keep the record of all the above activities until six months after the declaration of the results of that semester.
 - e) **At the beginning of each semester, every teacher / department / college shall inform his / her students unambiguously the method he / she proposes to adopt and the scheme of marking for internal assessment. (Prescribed in syllabus of respective Subjects).
 - f) Teacher shall announce the schedule of activity for internal assessment in advance in consultation with HOD / Principal.

**To be included in syllabus by BOS.

Practical Examination

1. Each practical carries 100 (80 Pr + 20 Int) marks. The scheme of marking shall be as per given in the syllabi of respective subjects.
2. Practical performance shall be jointly evaluated by the External and Internal Examiner. In case of discrepancy, the External Examiner's decision shall be final.
3. Duration of practical examination will be as per given in the syllabi of respective subjects.
4. The Practical Record of every student shall carry a certificate as shown below, duly signed by the teacher-in-charge and the Head of the Department. If the student fails to submit his / her certified Practical Record duly signed by the Teacher-In-Charge and the Head of the Department, he / she shall not be allowed to appear for the Practical Examination and no Marks shall be allotted to the student.

5. The certificate template shall be as follows:

CERTIFICATE

Name of the college / institution _____
Name of the Department: _____

This is to certify that this Practical Record contains the bonafide record of the Practical work of Shri / Shrimati / Kumari _____ of M. Sc. _____ Semester _____ during the academic year _____. The candidate has satisfactorily completed the experiments prescribed by Gondwana University Gadchiroli for the subject _____

Dated ___/___/_____

Signature of the teacher who taught the examinee

Head of the Department

1. _____
2. _____

Appendix-21

to be finalized after obtaining information from BOS

Appendix 10 Decided by BOS

Skill Enhancement Course

Candidate can opt for any one skill enhancement course (paper) as shown below in the semester III and IV.

Appendix-22

General Rules and Regulations regarding pattern of question paper for the semester end examination:

A) Pattern of Question Paper

1. There will be four units in each paper.
2. Maximum marks of each theory paper will be 80.
3. Question paper will consist of five questions, each of 16 marks.
4. Four questions will be on four units with internal choice (One question on each unit).
5. Fifth question will be compulsory with questions from each of the four units having equal weightage and there will be no internal choice.

B) Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA)

Among the 100 credits which candidate needs to complete and clear for M. Sc. in any concerned subjects, at least 92 credits must be taken from the parent department where he / she is registered for M. Sc. Course. The remaining 08 credits can be taken from any other department of university or affiliated colleges offering skill enhancement courses of PG programs.

Grade and Grade Points

Letter Grade	O	A+	A	B+	B	C	P	F	Ab
Grade Point	10	09	08	07	06	05	04	0	0

Letter Grade	Grade Points	Marks
O (Outstanding)	10	91-100
A+ (Excellent)	9	81-90
A (Very good)	8	71-80
B+ (Good)	7	55-70
B (above average)	6	51-54
C (Average)	5	46-50
P (Pass)	4	40-45
F (Fail)	0	0 to 39
AB (absent)	0	0

A student obtaining Grades F and Ab shall be considered failed and will be required to reappear for the examination.

Valuation pattern:

Marks obtained in Theory / Practical out of 100 marks	Letter Grade	Grade point

Computation of SGPA and CGPA

Following is the procedure to compute the Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA):

i. The SGPA is the ratio of sum of the product of the number of credits with the grade points scored by a student in all the courses taken by a student and the sum of the number of credits of all the courses undergone by a student, i.e

$$SGPA (S_i) = \frac{\sum(C_i \times G_i)}{\sum C_i}$$

where C_i is the number of credits of the i^{th} course and G_i is the grade point scored by the student in the i^{th} course.

Illustration for SGPA

Code	Theory/Practical	Credits	Marks Obtained	Out of	Grade Point	Grade Letter	Credit Points (Credit x Grade Points)
Core 1	Paper 1	4	91	100	9	O	4x9=36
Core 2	Paper 2	4	89	100	8	A+	4x8=32
Core 3	Paper 3	4	50	100	4	C	4x4=16
Core 4	Paper 4	4	78	100	7	A	4x7=28
Practical	Practical Core 1 & 2	4	89	100	8	A+	4x8=32
Practical	Practical Core 3 & 4	4	85	100	8	A+	4x8=32
Seminar I	Seminar 1	1	46	50	9	O	1x9=9
	Total	25					185

Thus, **SGPA = 185/25 = 7.4**

The CGPA is also calculated in the same manner taking into account all the courses undergone by a student over all the semesters of a program, i.e.

$$\text{CGPA} = \frac{\sum (C_i \times S_i)}{\sum C_i}$$

where S_i is the SGPA of the i^{th} semester and C_i is the total number of credits in that semester.

Illustration for CGPA

Semester 1	Semester 2	Semester 3	Semester 4
Credit : 25	Credit : 25	Credit : 25	Credit : 25
SGPA: 8.46	SGPA: 7.83	SGPA: 5.69	SGPA: 6.31
Thus, $\text{CGPA} = \frac{25 \times 8.46 + 25 \times 7.83 + 25 \times 5.69 + 25 \times 6.31}{100} = \frac{211.5 + 195.15 + 142.25 + 157.75}{100}$			
$= \frac{706.65}{100} = 7.0665$			
i.e. CGPA = 7.06			

The SGPA and CGPA shall be rounded off to 2 decimal points and reported in the transcripts. For example $7.0765 = 7.08$ or $6.5168 = 6.52$ etc.

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.

The course code may be given as follows for different courses

P-Postgraduate; S-Science

PSFC01	-	Foundation Course
PSCHT01	-	Chemistry theory
PSCHP01	-	Chemistry Practical
PSPHT01	-	Physics theory
PSPHT01	-	Physics Practical
PSBOT01	-	Botany Theory
PSBOP01	-	Botany Practical