

UNIVERSITY OF KERALA

POST GRADUATE PROGRAMMES IN CHEMISTRY

(Revised Syllabi under Semester System with effect from 2013 Admission)

PREAMBLE

The syllabi of M.Sc programmes in Chemistry offered in the affiliated colleges of the University under Semester system have been revised and the revised syllabi are to be effective from 2013 admission. There are three independent PG programmes in Chemistry, namely **M.Sc. Programme in Branch III - Chemistry**, **M.Sc. Programme in Branch IV - Analytical Chemistry** and **M.Sc. Programme in Branch V - Applied Chemistry**. All these three PG programmes are equivalent in all respect for employment and higher studies. Each of these three PG programmes shall extend over a period of two academic years comprising of four semesters, each of 450 hours in 18 weeks duration. The syllabi and scheme of examinations of these three programmes are detailed below. The theory courses of the first three Semesters and the practical courses of the first two semesters of the three programmes are common, and therefore, the examinations of these three PG programmes are to be conducted with common question papers for the first three semesters by a common Board of Examiners. These syllabi are effective from 2013 admission in affiliated colleges of the university.

M.Sc. PROGRAMME IN BRANCH III - CHEMISTRY

(Revised syllabus under semester system with effect from 2013 admission)

SYLLABUS AND SCHEME OF EXAMINATION

Course No. and Title	Hours per week		Duration of ESA in hours	Marks for CA	Marks for ESA	Total marks
	L	P				
SEMESTER I*						
CH 211 Inorganic Chemistry I	5		3	25	75	100
CH 212 Organic Chemistry I	5		3	25	75	100
CH 213 Physical Chemistry I	5		3	25	75	100
CH 214 Inorganic Practicals I		3	(To be continued in Semester II)			
CH 215 Organic Practicals I		3	(To be continued in Semester II)			
CH 216 Physical Practicals I		4	(To be continued in Semester II)			
			Total marks for semester 1			300
*Distribution of teaching hours/week: Theory- 15 hours, Practicals- 10 hours (1 hour for Seminar)						
SEMESTER II*						
CH 221 Inorganic Chemistry II	5		3	25	75	100
CH 222 Organic Chemistry II	5		3	25	75	100
CH 223 Physical Chemistry II	5		3	25	75	100
CH 214 Inorganic Practicals I		3	6	25	75	100
CH 215 Organic Practicals I		3	6	25	75	100
CH 216 Physical Practicals I		4	6	25	75	100
			Total marks for Semester II			600
*Distribution of teaching hours/week: Theory- 15 hours, Practicals- 10 hours (1 hour for Seminar)						

SEMESTER III*						
CH 231 Inorganic Chemistry III	5		3	25	75	100
CH 232 Organic Chemistry III	5		3	25	75	100
CH 233 Physical Chemistry III	5		3	25	75	100
CH 234 Inorganic Practicals II		3	(To be continued in Semester IV)			
CH 235 Organic Practicals II		3	(To be continued in Semester IV)			
CH 236 Physical Practicals II		4	(To be continued in Semester IV)			
			Total marks for semester III			300

*Distribution of teaching hours/week: Theory- 15 hours, Practicals- 10 hours (1 hour for Seminar)

SEMESTER IV*						
CH 241(a) Advanced Inorganic Chemistry**						
CH 241(b) Advanced Organic Chemistry**	15		3	25	75	100
CH 241(c) Advanced Physical Chemistry**						
CH 234 Inorganic Practicals II		3	6	25	75	100
CH 235 Organic Practicals II		3	6	25	75	100
CH 236 Physical Practicals II		4	6	25	75	100
CH 242(a) Dissertation					90	90
CH 242(b) Visit to R & D Centre					10	10
Comprehensive viva-voce					100	100
	Total marks for Semester IV					600
	Grand total (for semesters I-IV)					1800

*Distribution of teaching hours/week: Theory- 15 hours, 10 hours for discussion on project (1 hour for Seminar)

**Each student has to choose either (a), (b), (c) as elective in accordance with the Dissertation chosen.