## M.Sc. II SEMESTER

Semester No.	Category	Title of the Paper	Marks			Teaching hours/week			Credit	Duration of SEE
			IA	SEE	Total	L	T	P	(H	(Hrs)
SECOND	HCT21	Advanced Inorganic Chemistry	20	80	100	4	-	-	4	3
	HCT22	Reactions in Organic Chemistry	20	80	100	4	-	-	4	3
	HCT23	Applied Analytical Methods	20	80	100	4	-	-	4	3
	SCT21	Applied Physical Chemistry	20	80	100	4	-	-	4	3
	SCT22	Selected Topics in Physical Chemistry	20	80	100	4	-	-	4	3
	SCT23	Biophysical Chemistry	20	80	100	4	-	-	4	3
	OET21	Chemistry for Daily life	10	40	50	2	-	-	2	2
	OET22	Agro and Environmental Chemistry	10	40	50	2	-	-	2	2
	HCP21	Inorganic Chemistry Practicals – II	10	40	50	-	-	4	2	4
	HCP22	Organic Chemistry Practicals – II	10	40	50	-	-	4	2	4
	SCP21	Physical Chemistry Practicals-II	10	40	50	-	-	4	2	4
Total Marks for II Semester					600				24	

## M.Sc. III-SEMESTER

Semester No.	Category	Title of the Paper	Marks			Teaching hours/week			Credit	Duration of SEE
			IA	SEE	Total	L	T	P		(Hrs)
THIRD	HCT31	Applied Inorganic Chemistry	20	80	100	4	-	-	4	3
	НСТ32	Theoretical and Solid State Chemistry	20	80	100	4	-	-	4	3
	НСТ33	Spectroscopy	20	80	100	4	-	-	4	3
	SCT31	Heterocyclic and Synthetic Organic	20	80	100	4	-	-	4	3
		Chemistry								
	SCT32	Medicinal Chemistry	20	80	100	4	-	-	4	3
	SCT33	Agro, Health and Medicinal Care	20	80	100	4	-	-	4	3
		Chemicals								
	OET31	Instrumental Analytical Techniques	10	40	50	2	-	-	2	2
	OET32	Bioanalytical Techniques	10	40	50	2	-	-	2	2
	HCP31	Inorganic Chemistry Practicals-III	10	40	50	-	-	4	2	4
	HCP32	Physical Chemistry Practicals-III	10	40	50	-	-	4	2	4
	SCP31	Organic Chemistry Practicals – III	10	40	50	-	-	4	2	4
	Total Marks for III Semester				600	_			24	

M.Sc. IV-SEMESTER

Semester No.	Category	Title of the Paper	Marks			Teaching hours/week			Credit	Duration of SEE
			IA	SEE	Total	L	T	P		(Hrs)
	HCT41	Natural Products	20	80	100	4	-	-	4	3
	HCT42	Spectroscopy and Chromatography	20	80	100	4	-	-	4	3
	НСТ43	Advanced Concepts in Physical	20	80	100	4	-	-	4	3
		Chemistry								
FOURTH	SCT41	Selected Topics in Inorganic	20	80	100	4	-	-	4	3
FOURTH		Chemistry								
	SCT42	Inorganic industrial materials	20	80	100	4	-	-	4	3
	SCT43	Energy and Industrial Inorganic	20	80	100	4	-	-	4	3
		Chemistry								
	HCP41	Spectral data interpretation	10	40	50	-	-	4	2	4
	HCRP42	Research project/Internship	20	80	100	-	-	8	4	4
Total Marks for II Semester					550				22	

(I-IV semester)- Total Marks: 2500 and Total credits: 100

HCT – Hard core theory, SCT – Soft core theory, HCP – Hardcore practical, OET – Open Elective theory, OEP- Open elective practical, HCRP-Hard Core Research Project, IA – Internal Assessment, SEE – Semester End Examination, L – Lecture, T – Tutorial, P – Practical.

**Note:** In each semester, HCT, HCP and SCP papers are compulsory whereas students have to opt one soft core paper out of three soft core papers provided. Further, students can conduct either project work in the lab or internship either in industries or institutes. OET papers are for non-Chemistry students. Chemistry students have to take OET papers offered by other departments