

**Table-I: Certificate Course (Chemistry)–Exit after First Academic Year
(One Academic year: First & Second Semester and Summer/Vocational Course)**

Semester	Core-I	Core-II	Core-III	Multidisciplinary	AEC	SEC	VAC	Community Engagements & Services/Field Work/Internship	Total Minimum Credit
I	Paper-I Atomic Structure, Periodicity of Elements and Chemical Bonding	Paper-I Atomic Structure, Periodicity of Elements and Chemical Bonding		Biochemistry	Odia/Hindi/Sanskrit/Urdu/English.		Environmental Studies and Disaster Management		22
	Paper-II Fundamental Organic Chemistry								
II	Paper-III States of matter, and Ionic equilibrium		Fundamental Organic Chemistry	Environmental Chemistry	English	Vermicomposting			22
	Paper-IV Chemical thermodynamics, equilibrium, and Colligative property								
Total	4X4=16	1x4=4	1x4=4	2x3=6	2x4=8	1x3=3	1x3=3		44

Vocational course (4 credits): Environmental Monitoring/Floriculture/Cultivation of Medicinal, Aromatic, and Spice plant crops