CBCS Course Structure for B.Sc. (Hons.) Mathematics Programme
SEMESTER WISE PLACEMENT OF THE COURSES

Sem	Core Course(14)	Ability Enhancement Compulsory Course (AECC)(2)	Skill Enhancement Course (SEC)(2)	Discipline SpecificElective (DSE)(4)	GenericElective(GE)(4) (Otherthan Mathematics Honours)
I	MAT-HC-1016: Calculus(including practical) MAT-HC-1026: Algebra	ENG-AE-1014			MAT-HG-1016 / MAT-RC-1016 MAT-HG 1026
II	MAT-HC-2016: Real Analysis MAT-HC-2026: Differential Equations(including practical)	ENV-AE-2014			MAT-HG-2016 / MAT-RC-2016 MAT-HG-2026
III	MAT-HC-3016: Theory of Real Functions MAT-HC-3026: Group Theory-I MAT-HC-3036: Analytical Geometry		MAT-SE-3014 MAT-SE-3024		MAT-HG-3016 / MAT-RC-3016 MAT-HG-3026
IV	MAT-HC-4016:Multivariate Calculus MAT-HC-4026: Numerical Methods (including practical) MAT-HC-4036: Ring Theory		MAT-SE-4014 MAT-SE-4024		MAT-HG-4016 / MAT-RC-4016 MAT-HG-4026
V	MAT-HC-5016: Riemann Integration and Metric spaces MAT-HC-5026: Linear Algebra			DSE-1 MAT-HE-5016 MAT-HE-5026 MAT-HE-5036 DSE-2 MAT-HE-5046 MAT-HE-5056 MAT-HE-5066	
VI	MAT-HC-6016: Complex Analysis MAT-HC-6026: Partial Differential Equations (including practical)			DSE-3 MAT-HE-6016 MAT-HE-6026 MAT-HE-6036 MAT-HE-6046 DSE-4 MAT-HE-6056 MAT-HE-6066 MAT-HE-6076 Project In lieu of DSE-3 and DSE-4	

Legends:HC: Core Papers HE: Discipline Specific Elective Papers

SE: Skill Enhancement PapersHG: Generic Elective Papers

Course Structure for CBCS in B. Sc. Botany Hounours as per requirement of UGC

SEMESTER	COURSE OPTED	COURSE NAME	Credits
I	**ENG-AE-1014**	English communications	4
	BOT-HC-1016	Phycology and Microbiology	4
	BOT-HC-1016 **(Practical)**	Phycology and Microbiology	2
	BOT-HC-1026	Biomolecules and Cell Biology	4
	BOT-HC-1026 **(Practical)**	Biomolecules and Cell Biology-Practical	2
II	**ENV-AE-2014**	Environmental Studies	4
	BOT-HC-2016	Mycology and Phytopathology	4
	BOT-HC-2016 **(Practical)**	Mycology and Phytopathology-Practical	2
	BOT-HC-2026	Archegoniate	4
	BOT-HC-2026 **(Practical)**	Archegoniate- Practical	2
III	BOT-HC-3016	Morphology Anatomy and of Angiosperm	4
	BOT-HC-3016 **(Practical)**	Morphology Anatomy and of Angiosperm –Practical	2
	BOT-HC-3026	Economic Botany	4
	BOT-HC-3026 **(Practical)**	Economic Botany-Practical	2
	BOT-HC-3036	Genetics	4
	BOT-HC-3036 **(Practical)**	Genetics- Practical	2
	1. BOT-SE-3014 2. BOT-SE-3024	SEC-1 (any one) 1. Biofertilizers 2. Herbal Technology	4

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IV	BOT-HC-4016	Molecular Biology	4
	BOT-HC-4016 **(Practical)**	Molecular Biology- Practical	2
	BOT-HC-4026	Plant Ecology and Phytogeography	4
	BOT-HC-4026 **(Practical)**	Plant Ecology and Phytogeography – Practical	2
	BOT-HC-4036	Plant Systematics	4
	BOT-HC-4036 **(Practical)**	Plant Systematics Practical	2
	1. BOT-SE-4014 2. BOT-SE-4024 3. BOT-SE-4034	SEC-II (any one) 1. Nursery and Gardening 2. Floriculture 3. Intellectual Property Rights	4
V	BOT-HC-5016	Reproductive Biology of Angiosperms	4
	BOT-HC-5016 **(Practical)**	Reproductive Biology of Angiosperm – Practical	2
	BOT-HC-5026	Plant Physiology	4
	BOT-HC-5026 **(Practical)**	Plant Physiology- Practical	2
	BOT-HE-5016	DSE-1 Natural Resource Management	4
	BOT-HE-5016 **(Practical)**	DSE-1 Practical Natural Resource Management – Practical	2
	BOT-HE-5026	DSE-2 Horticultural Practices and Post-Harvest Technology	4
	BOT-HE-5026 **(Practical)**	DSE-2 Practical Horticultural Practices and Post-Harvest Technology-Practical	2

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VI	BOT-HC-6016	Plant Metabolism	4	
	BOT-HC-6016 (**Practical**)	Plant Metabolism- Practical	2	
	BOT-HC-6026	Plant Biotechnology	4	
	BOT-HC-6026 (**Practical**)	Plant Biotechnology- Practical	2	
	BOT-HE-6016	DSE-3 Industrial and Environmental Microbiology	4	
	BOT-HE-6016 (**Practical**)	DSE-3 Industrial and Environmental Microbiology-Practical	2	
	Discipline Centric Elective-4 (Theory & practical / Project Work)	Either 1 or 2 below		
	1.BOT-HE-6026	DSE-4 1.Analytical Techniques in Plant Sciences	4	6
	1.BOT-HE-6026 (**Practical**)	DSE-4 1.Analytical Techniques in Plant Sciences-Practical	2	
	2.BOT-HE-6036	DSE-4 2. Project Work/ Dissertation	6	
Total Credits in B. Sc. Botany Honours: 116				

SCHEME FOR CHOICE BASED CREDIT SYSTEM IN B. Sc.

Honours (ZOOLOGY)

SEMESTER	COURSE CODE	COURSE NAME	Credits
I	ENG-AE-1014	English Communications	4
	ZOO-HC-1016	Non Chordates I: Protista to Pseudocoelomates	4+2=6
		NON Chordates-I Lab	
	ZOO-HC-1026	Principles of Ecology	4+2=6
		Principles of Ecology Lab	
	AAA-HG-1YY6	GE-1	4/5
		Generic Elective 1 Practical/Tutorial	2/1
Total Credits in Semester I			22
II	Ability Enhancement Compulsory Course-II**	Environmental Studies	4
	ZOO-HC-2016	Non Chordates-II: Coelomate	4+2=6
		NON Chordates-II Lab	
	ZOO-HC-2026	Cell Biology	4+2=6
		Cell Biology Lab	
	AAA-HG-2YY6*	GE-2	4/5
		Generic Elective 2 Practical/Tutorial	2/1
Total Credits in Semester II			22
III	ZOO-HC-3016	Diversity of Chordates	4+2=6
		Diversity of Chordates Lab	
	ZOO-HC-3026	Physiology: Controlling and Coordinating Systems	4+2=6
		Physiology Controlling and Coordinating Systems Lab	
	ZOO-HC-3036	Fundamental of Biochemistry	4+2=6
		Fundamental of Biochemistry Lab	
	ZOO-SE-3YY4†	SEC-1	4
	AAA-HG-3YY6*	GE-3	4/5

		Generic Elective Practical/Tutorial 3	2/1
Total Credits in Semester III			28
IV	ZOO-HC-4016	Comparative anatomy of Vertebrate	4+2=6
		Comparative Anatomy of Vertebrate Lab	
	ZOO-HC-4026	Physiology Life Sustaining systems	4+2=6
		Physiology Life Sustaining systems Lab	
	ZOO-HC-4036	Biochemistry of Metabolic process	4+2=6
		Biochemistry of Metabolic Process Lab	
	ZOO-SE-4YY4†	SEC -2	4
	AAA-HG-4YY 6*	GE-4	4/5
		Generic Elective Practical/tutorial	2/1
Total Credits in Semester IV			28
V	ZOO-HC-5016	Molecular Biology	4+2=6
		Molecular Biology Lab	
	ZOO-HC-5026	Principles of Genetics	4+2=6
		Principles of genetics Lab	
	ZOO-HE-5YY6‡	DSE-1	4+2=6
		DSE-1 Lab	
	ZOO-HE-5YY6‡	DSE-2	4+2=6
		DSE-2 Lab	
Total Credits in Semester V			24
VI	ZOO-HC-6016	Developmental Biology	4+2=6
		Developmental Biology Lab	
	ZOO-HC-6026	Evolutionary Biology	4+2=6
		Evolutionary Biology Lab	
	ZOO-HE-6YY6‡	DSE-3	4+2=6
		DSE-3 Lab	
	ZOO-HE-6YY6‡	DSE-4	4+2=6

Course Structure for B.Sc. in Physics (Honours) under CBCS

Type→	Core	AECC	SEC	DSE	GE
Credits→	14 × 6 = 84	2 × 4 = 8	2 × 4 = 8	4 × 6 = 24	4 × 6 = 24
Semester I	PHY-HC-1016	ENG-AE-1014			AAA-HG-1016
	PHY-HC-1026				
Semester II	PHY-HC-2016	ENV-AE-2014			BBB-HG-2016
	PHY-HC-2026				
Semester III	PHY-HC-3016		PHY-SE-3XX4		CCC-HG-3016
	PHY-HC-3026				
	PHY-HC-3036				
Semester IV	PHY-HC-4016		PHY-SE-4XX4		DDD-HG-4016
	PHY-HC-4026				
	PHY-HC-4036				
Semester V	PHY-HC-5016			PHY-HE-5XX6	
	PHY-HC-5026			PHY-HE-5YY6	
Semester VI	PHY-HC-6016			PHY-HE-6XX6	
	PHY-HC-6026			PHY-HE-6YY6	

SCHEME FOR CHOICE BASED CREDIT SYSTEM IN B. Sc. Honours (Chemistry)

SEMESTER	COURSE CODE	COURSE NAME	Credits
I	ENG-AE-1014	English Communications	4
	CHE-HC-1016	Inorganic Chemistry-I	4+2=6
		Inorganic Chemistry-I Lab	
	CHE-HC-1026	Physical Chemistry-I	4+2=6
		Physical Chemistry-I Lab	
	AAA-HG-1YY6*	GE-1	4+2/5+1=6
		Generic Elective -1 Practical/Tutorial	
Total Credits in Semester I			22
II	Ability Enhancement Compulsory Course-II**	Environmental Studies	4
	CHE-HC-2016	Organic Chemistry-I	4+2=6
		Organic Chemistry-I Lab	
	CHE-HC-2026	Physical Chemistry-II	4+2=6
		Physical Chemistry-II Lab	
	AAA-HG-2YY6*	GE-2	4+2/5+1=6
		Generic Elective -2 Practical/Tutorial	
Total Credits in Semester II			22
III	CHE-HC-3016	Inorganic Chemistry-II	4+2=6
		Inorganic Chemistry-II Lab	
	CHE-HC-3026	Organic Chemistry-II	4+2=6
		Organic Chemistry-II Lab	
	CHE-HC-3036	Physical Chemistry-III	4+2=6
		Physical Chemistry-III Lab	
	CHE-SE-3YY4†	SEC-1	4
	AAA-HG-3YY6*	GE-3	4+2/5+1=6
		Generic Elective -3 Practical/Tutorial	
Total Credits in Semester III			28
IV	CHE-HC-4016	Inorganic Chemistry-III	4+2=6
		Inorganic Chemistry-III Lab	
	CHE-HC-4026	Organic Chemistry-III	4+2=6
		Organic Chemistry-III Lab	
	CHE-HC-4036	Physical Chemistry-IV	4+2=6
		Physical Chemistry-IV Lab	
	CHE-SE-4YY4†	SEC -2	4
	AAA-HG-4YY6*	GE-4	4+2/5+1=6
		Generic Elective -4 Practical	
Total Credits in Semester IV			28
V	CHE-HC-5016	Organic Chemistry-IV	4+2=6

		Organic Chemistry-IV Lab	
	CHE-HC-5026	Physical Chemistry-V	4+2=6
		Physical Chemistry-V Lab	
	CHE-HE-5YY6‡	DSE-1	4+2=6
		DSE-1 Lab	
	CHE-HE-5YY6‡	DSE-2	4+2=6
		DSE-2 Lab	
Total Credits in Semester V			24
VI	CHE-HC-6016	Inorganic Chemistry-IV	4+2=6
		Inorganic Chemistry-IV Lab	
	CHE-HC-6026	Organic Chemistry-V	4+2=6
		Organic Chemistry-V Lab	
	CHE-HE-6YY6‡	DSE-3	4+2=6
		DSE-3 Lab	
	CHE-HE-6YY6‡	DSE-4	4+2=6
		DSE-3 Lab/tutorial	
Total Credits in Semester VI			24
Grand Total Credits			148