Title	Syllabus Distribution (CBCS)
Session	2018-19 (Odd Semester)
Department	B.Sc General in Mathematics
Institution Name	Hiralal Bhakat College, Nalhati, Birbhum, W.B.
Coordinator	Dr. Banshidhar Sahoo, Assistant Professor in Mathematics

Details of Courses of B.Sc. General under CBCS

Sl.	Course	Credit		Marks
1.	Core Course (12 Papers) 4 core papers each in 3 disciplines of choice	Theory+Practical $12\times(4+2)=72$	Theory+Tuitorial $12\times(5+1)=72$	$12\times75=900$
2.	Elective Course DSE (6 Papers)	$6\times(4+2)=36$	$6\times(5+1)=36$	$6\times75=450$
3	Ability Enhancement Core Course (AECC) AECC-1 (ENVS) AECC-2 (English/MIL)	$4\times1=4$ $2\times1=2$	$4\times1=4$ $2\times1=2$	100 50
4.	SEC (4 Papers)	$4\times2=8$	$4\times2=8$	$4\times50=200$
	Total Credit:	122	122	1700

B.Sc. Mathematics General Course Structure

Semester	Course Course (CC)	Discipline Specific Elective (DSE)	Ability Enhancement Course	
			AECC (2)	SEC (4)
I	CC1A (Mathematics) CC2A (Physics) CC3A (Computer Sc.)		AECC-1	
II	CC1B (Mathematics) CC2B (Physics) CC3B (Computer Sc.)		AECC-2	
III	CC1C (Mathematics) CC2C (Physics) CC3C (Computer Sc.)			SEC-1 (Mathematics) or SEC-1 (Computer Sc.)
IV	CC1D (Mathematics) CC2D (Physics) CC3D (Computer Sc.)			SEC-2 (Mathematics) or SEC-2 (Computer Sc.)
V		DSE1A (Mathematics) DSE2A (Physics) DSE3A (Computer Sc.)		SEC-3 (Mathematics) or SEC-3 (Physics)
VI		DSE1B (Mathematics) DSE2B (Physics) DSE3B (Computer Sc.)		SEC-4 (Mathematics) or SEC-4 (Physics)

Semester-I

Core Course (CC 1A): Differential Calculus (M a r k s : 7 5)

Syllabus	Number of Lecture	Name of Teacher
Limit and Continuity, Types of discontinuities, Differentiability of function, Successive derivative, Leibnitz's Theorem, Partial differential, Euler's Theorem.	20 L	
Tangent and Normal, Curvature, Asymptotes, Singular Points, Tracing of Curves. Polar Coordinates and tracing of curves in polar coordinates.	15 L	Dr. Banshidhar Sahoo
Rolles's Theorem, MVT, Taylor's theorem with Lagrange's and Cauchy's form of remainder. Taylor's series, Maclaurin's series of sin(x), cos(x), e^x, log(1+x). Maxima and minima. Indeterminate form.	25 L	

Reference Books:

1. G.B. Thomas and R.I. Finney: Calculus, Pearson Education, 2007
2. U.L.Rohde, G.C.Jain, A.K. Poddar and A.K.Ghosh: Introduction to differential Calculus, John Wiley & Sons Inc.
3. R.K.Ghosh and K.C.Maity: An Introduction to Analysis: Differential Calculus (Part I), New Central Book Agency.
4. S.K.Mapa: Introduction to Real Analysis, Sarat Book Distributor, 2019.

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