

<b>Title</b>	<b>Modules of Syllabus, Classes and Examinations</b>
<b>Session</b>	<b>2018-19 (Odd Semester)</b>
<b>Department</b>	<b>B.Sc General in Mathematics</b>
<b>Institution Name</b>	<b>Hiralal Bhakat College, Nalhati, Birbhum, W.B.</b>
<b>Coordinator</b>	<b>Dr. Banshidhar Sahoo, Assistant Professor in Mathematics</b>

## Details of Courses of B.Sc. General under CBCS

Sl.	Course	Credit		Marks
1.	<b>Core Course (12 Papers)</b> 4 core papers each in 3 disciplines of choice	<b>Theory+Practical</b> $12 \times (4+2) = 72$	<b>Theory+Tutorial</b> $12 \times (5+1) = 72$	<b><math>12 \times 75 = 900</math></b>
2.	<b>Elective Course DSE</b> ( 6 Papers)	$6 \times (4+2) = 36$	$6 \times (5+1) = 36$	<b><math>6 \times 75 = 450</math></b>
3	<b>Ability Enhancement Core Course (AECC)</b> AECC-1 (ENVS) AECC-2 (English/MIL)	$4 \times 1 = 4$ $2 \times 1 = 2$	$4 \times 1 = 4$ $2 \times 1 = 2$	<b>100</b> <b>50</b>
4.	<b>SEC (4 Papers)</b>	$4 \times 2 = 8$	$4 \times 2 = 8$	<b><math>4 \times 50 = 200</math></b>
	<b>Total Credit:</b>	<b>122</b>	<b>122</b>	<b>1700</b>

## *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

- Total 75 Marks
- 60 Marks for Semester-end-Examination<sup>#</sup> (will be organized by University)
- 10+5=15 Marks for Internal Assessment (will be organized by College in general and Department in Particular )
- 10 Marks for Class Test/ Assignment/ Seminar
- 5 Marks for Attendance

Attendance: 50% & above but below 60% - 2 Marks

Attendance: 60% & above but below 75% - 3 Marks

Attendance: 75% & above but below 90% - 4 Marks

Attendance: 90% & Above - 5 Marks

Internal Assessment	Component 1 (C <sub>1</sub> )	Component 2 (C <sub>2</sub> )
Weightage	5 Marks	5 Marks
Number of Questions	4	4
Date	14.09.2018	26.11.2018
Time	11.30 am	11.30 am
Syllabus	Limit and Continuity, Types of discontinuities, Differentiability of function, Successive derivative, Leibnitz's Theorem, Partial differential, Euler's Theorem. Tangent and Normal, Curvature, Asymptotes, Singular Points, Tracing of Curves. Polar Coordinates and tracing of curves in polar coordinates.	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 <sup>x</sup> , log(1+x). Maxima and minima. Indeterminate form.
Name of Teacher	Dr. Banshidhar Sahoo	
Number of Classes	62 (Tentative)	125 (Tentative)

### \*\* Component 3 (C<sub>3</sub>):

- 60Marks for Semester-end-Examination (will be organized by University)
- Answer 10 questions out of 15 carrying 02 marks each = 10 x 02 = 20 marks
- Answer 04 questions out of 06 carrying 05 marks each = 04 x 05 = 20 marks
- Answer 02 questions out of 04 carrying 10 marks each = 02 x 10 = 20 marks

Whole Syllabus of CC 1A

B.S.

**Head**  
Department of *Mathematics*  
**Hiralal Bhakat College**  
Nalhati, Birbhum



Sha.

*Teacher-in-Charge*  
**Hiralal Bhakat College**  
Nalhati, Birbhum