Title	**Modules of Syllabus, Classes and Examinations**
Session	**2018-19 (Even 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×(4+2)=72	Theory+Tuitorial 12×(5+1)=72	12×75=900
2.	Elective Course DSE (6 Papers)	6×(4+2)=36	6×(5+1)=36	6×75=450
3	Ability Enhancement Core Course (AECC) AECC-1 (ENVS) AECC-2 (English/MIL)	 4×1=4 2×1=2	 4×1=4 2×1=2	 100 50
4.	SEC (4 Papers)	4×2=8	4×2=8	4×50=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-II

Core Course (CC 1B): Differential Equation

- Total 75 Marks
- 60 Marks for Semester-end-Examination[#] (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_1)	Component 2 (C_2)
Weightage	5 Marks	5 Marks
Number of Questions	4	4
Date	16.04.2019	07.05.2019
Time	11.30 am	11.30 am
Syllabus	First order exact differential equations, Integrating factor. First order higher degree equation. Solvable for x, y, p. Methods for solving higher-differential equations. Basic Theory of differential equations. Wronskian and its Properties. Linear homogeneous equations with constant coefficients. Linear non-homogeneous equations. Methods of variable of parameters. Cauchy-Euler equation. Simultaneous differential equation.	Order and degree of partial differential equations. Concept of linear and non-linear partial differential equations. Formation of first order partial differential equations. Linear partial differential equation of first order. Lagrange's method. Charpit's method. Classification of second order partial differential equations into elliptic, parabolic and hyperbolic through illustration only.
Name of Teacher	Dr. Banshidhar Sahoo	
Number of Classes	63 (Tentative)	120 (Tentative)

**** Component 3 (C_3):**

- 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 1B**

Head
Department of Mathematics
Hiralal Bhakat College
Nalhati, Birbhum

HIRALAL BHAKAT COLLEGE Estd-1986 W.B NALHATI, BIRBHUM

Teacher-in-Charge
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