

SYLLABUS FOR ^{B.A.}B.SC. (General)

IN

MATHEMATICS

Under Choice Based Credit System (CBCS)

Effective from 2017-2018



**The University of Burdwan
Burdwan-713104
West Bengal**

Details of Courses of B.A. (General) under CBCS

Course		Credit		Marks
1.	Core Course (8 papers) 4 core papers each in 2 disciplines of choice	Theory + Practical $8 \times (4+2) = 48$	Theory + Tutorial $8 \times (5+1) = 48$	$8 \times 75 = 600$
2.	Language course (4 Papers)		Theory + Tutorial $4 \times (5+1) = 24$	$4 \times 75 = 300$
3.	Elective Course A. DSE (4 Papers)	$4 \times (4+2) = 24$	$4 \times (5+1) = 24$	$4 \times 75 = 300$
	B. GE (2 Papers)	$2 \times (4+2) = 12$	$2 \times (5+1) = 12$	$2 \times 75 = 150$
4.	Ability Enhancement Course			
	A. AECC (2 Papers) AECC1 (ENVS) AECC2 (English/MIL)	$4 \times 1 = 4$ $2 \times 1 = 2$	$4 \times 1 = 4$ $2 \times 1 = 2$	100 50
	B. SEC (4 Papers)	$4 \times 2 = 8$	$4 \times 2 = 8$	$4 \times 50 = 200$
	Total Credit :	122	122	1700

Details of Courses of B.Sc. (General) under CBCS

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 + Tutorial $12 \times (5+1) = 72$	$12 \times 75 = 900$
2.	Elective Course DSE (6 Papers)	$6 \times (4+2) = 36$	$6 \times (5+1) = 36$	$6 \times 75 = 450$
3.	Ability Enhancement Course			
	A. AECC (2 Papers) AECC1 (ENVS) AECC2 (English/MIL)	$4 \times 1 = 4$ $2 \times 1 = 2$	$4 \times 1 = 4$ $2 \times 1 = 2$	100 50
	B. SEC (4 Papers)	$4 \times 2 = 8$	$4 \times 2 = 8$	$4 \times 50 = 200$
	Total Credit :	122	122	1700

B.A. Mathematics General Course Structure

Semester	Core Course (CC)(8)	Language Course (4)	Elective Course		Ability Enhancement Course	
			DSE(4)	GE(2)	AECC (2)	SEC (4)
I	CC1A (Mathematics) CC2A(Other discipline)	L ₁ -1			AECC1	
II	CC1B (Mathematics) CC2B(Other discipline)	L ₂ -1			AECC2	
III	CC1C (Mathematics) CC2C(Other discipline)	L ₁ -2				SEC1 (Mathematics) Or SEC1 (Other discipline)
IV	CC1D (Mathematics) CC2D(Other discipline)	L ₂ -2				SEC2 (Mathematics) Or SEC2 (Other discipline)
V			DSE1A (Mathematics) DSE2A(Other discipline)	GE-1 (Other discipline)		SEC3 (Mathematics) Or SEC3 (Other discipline)
VI			DSE1B (Mathematics) DSE2B(Other discipline)	GE-2 (Other discipline)		SEC4 (Mathematics) Or SEC4 (Other discipline)

B.Sc. Mathematics General Course Structure

Semester	Core Course (CC)(12)	Discipline Specific Elective (DSE)(6)	Ability Enhancement Course	
			AECC (2)	SEC (4)
I	CC1A (Mathematics) CC2A(Other discipline) CC3A(Other discipline)		AECC1	
II	CC1B (Mathematics) CC2B(Other discipline) CC3B(Other discipline)		AECC2	
III	CC1C (Mathematics) CC2C(Other discipline) CC3C(Other discipline)			SEC1 (Mathematics) Or SEC1 (Other discipline)
IV	CC1D (Mathematics) CC2D(Other discipline) CC3D(Other discipline)			SEC2 (Mathematics) Or SEC2 (Other discipline)
V		DSE1A(Mathematics) DSE2A(Other discipline) DSE3A(Other discipline)		SEC3 (Mathematics) Or SEC3 (Other discipline)
VI		DSE1B(Mathematics) DSE2B(Other discipline) DSE3B(Other discipline)		SEC4 (Mathematics) Or SEC4 (Other discipline)

Core Courses of Mathematics :

Semester	Course Type	Course Code	Name of the Course	Credit Pattern (L:T:P)	Total class hrs./week	Marks	Credit
I	CC	BMG1CC1A	Differential Calculus	5:1:0	6	75	6
II	CC	BMG2CC1B	Differential Equations	5:1:0	6	75	6
III	CC	BMG3CC1C	Real Analysis	5:1:0	6	75	6
IV	CC	BMG4CC1D	Algebra	5:1:0	6	75	6

Discipline Specific Electives (DSE)

Choices for BMG5DSE1A (Choose any one)

Semester	Course Type	Course Code	Name of the Course	Credit Pattern (L:T:P)	Total class hrs./week	Marks	Credit
V	DSE	BMG5DSE1A1	Matrices	5:1:0	6	75	6
	DSE	BMG5DSE1A2	Mechanics	5:1:0	6	75	6
	DSE	BMG5DSE1A3	Linear Algebra	5:1:0	6	75	6

Choices for DSE1B (Choose any one)

Semester	Course Type	Course Code	Name of the Course	Credit Pattern (L:T:P)	Total class hrs./week	Marks	Credit
VI	DSE	BMG6DSE1B1	Numerical Methods	5:1:0	6	75	6
	DSE	BMG6DSE1B2	Complex Analysis	5:1:0	6	75	6
	DSE	BMG6DSE1B3	Linear Programming	5:1:0	6	75	6

Skill Enhancement Courses (SEC)

Choices for SEC 1 (Choose any one)

Semester	Course Type	Course Code	Name of the Course	Credit Pattern (L:T:P)	Total class hrs./week	Marks	Credit
III	SEC	BMG3SEC11	Logic and Sets	2:0:0	2	50	2
	SEC	BMG3SEC12	Analytical Geometry	2:0:0	2	50	2
	SEC	BMG3SEC13	Integral Calculus	2:0:0	2	50	2

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