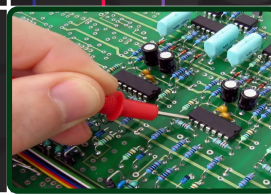


SANGAI INTERNATIONAL UNIVERSITY



Syllabus B.Sc. with Mathematics

Syllabus B.Sc. with Mathematics



Proposed Syllabus and Scheme of Examination

for

B.Sc. with Mathematics

submitted to

*University Grants Commission
New Delhi*

under the

Choice Based Credit System

May 2015

**Proposed Scheme for Choice Based Credit System in
B.Sc. with Mathematics**

Semester	Core Course (12)	Ability Enhancement Compulsory Course (AECC) (2)	Skill Enhancement Course (SEC) (2)	Discipline Specific Elective (DSE) (6)
1	Differential Calculus	AECC1		
	C2A			
	C3A			
2	Differential Equations	AECC2		
	C2B			
	C3B			
3	Real Analysis		SEC1	
	C2C			
	C3C			
4	Algebra		SEC2	
	C2D			
	C3D			
5			SEC3	DSE1A
				DSE2A
				DSE3A
6			SEC4	DSE1B
				DSE2B
				DSE3B

Discipline Specific Electives (DSE)

DSE 1A (choose one)

1. Matrices
2. Mechanics
3. Linear Algebra

DSE 1B (choose one)

1. Numerical Methods
2. Complex Analysis
3. Linear Programming

Skill Enhancement Course (SEC)

SEC 1 (choose one)

1. Logic and Sets
2. Analytical Geometry
3. Integral Calculus

SEC 2 (choose one)

1. Vector Calculus
2. Theory of Equations
3. Number Theory

SEC 3 (choose one)

1. Probability and Statistics
2. Mathematical Finance
3. Mathematical Modeling

SEC 4 (choose one)

1. Boolean Algebra
2. Transportation and Game Theory
3. Graph Theory

Details of Courses under B.Sc. with Mathematics

Course		*Credits
	Theory + Practical	Theory + Tutorials
I. Core Course (12 Papers) 04 Courses from each of the 03 disciplines of choice	$12 \times 4 = 48$	$12 \times 5 = 60$
Core Course Practical / Tutorial* (12 Practical/ Tutorials*) 04 Courses from each of the 03 Disciplines of choice	$12 \times 2 = 24$	$12 \times 1 = 12$
II. Elective Course (6 Papers) Two papers from each discipline of choice including paper of interdisciplinary nature.	$6 \times 4 = 24$	$6 \times 5 = 30$
Elective Course Practical / Tutorials* (6 Practical / Tutorials*) Two Papers from each discipline of choice including paper of interdisciplinary nature	$6 \times 2 = 12$	$6 \times 1 = 6$
• Optional Dissertation or project work in place of one Discipline elective paper (6 credits) in 6th Semester		
III. Ability Enhancement Courses		
1.Ability Enhancement Compulsory (2 Papers of 2 credits each) Environmental Science English/MIL Communication	$2 \times 2 = 4$	$2 \times 2 = 4$

2. Skill Enhancement Course $4 \times 2 = 8$
(Skill Based) (4 Papers of 2 credits each)

$4 \times 2 = 8$

Total credit = 120

Total credit = 120

Institute should evolve a system/ policy about ECA/ General Interest/ Hobby/ Sports/ NCC/ NSS/ related courses on its own.

***wherever there is practical there will be no tutorials and vice -versa**