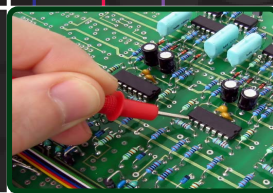


SANGAI INTERNATIONAL UNIVERSITY



Syllabus B.Sc.(Hons.) Biotechnology

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CHOICE BASED CREDIT SYSTEM

B.Sc.(Hons.) Biotechnology

SEMESTER I		SEMESTER II	
C1	Biochemistry & Metabolism	C3	Mammalian Physiology
C2	Cell Biology	C4	Plant Physiology
AECC1	English/EVS/MIL communication	AECC2	English/EVS/MIL communication
GE	GE1	GE	GE2

SEMESTER III		SEMESTER IV	
C5	Genetics	C8	Molecular Biology
C6	General Microbiology	C9	Immunology
C7	Chemistry - 1	C10	Chemistry -2
SEC	SEC1	SEC	SEC2
GE	GE3	GE	GE4

SEMESTER V		SEMESTER VI	
C11	Bioprocess Technology	C13	Bio Analytical Tools
C12	Recombinant DNA Technology	C14	Genomics and Proteomics
DSE	DSE1	DSE	DSE3
DSE	DSE2	DSE	DSE4

C: Core Courses; **GE:** Generic Elective; **AECC:** Ability Enhancement Compulsory Course; **SEC:** Skill Enhancement Courses; **DSE:** Discipline Specific Elective

GENERIC ELECTIVE SUBJECTS (any one per semester in semesters 1-4)

- Entrepreneurship Development
- Bioethics and Biosafety
- Biotechnology and Human Welfare
- Developmental Biology

SKILL ENHANCEMENT COURSES (any one per semester in semesters 3-4)

- Molecular Diagnostics
- Enzymology
- Industrial Fermentations
- Drug Designing
- Basics of Forensic Science

DISCIPLINE CENTRIC SUBJECTS (any two per semester in semesters 5-6)

- Bioinformatics
- Animal Biotechnology
- Medical Microbiology
- Animal Diversity I
- Plant Diversity I
- Animal Diversity II

- Plant Diversity II
- Plant Biotechnology
- Environmental Biotechnology
- Intellectual Property Rights
- Microbial Physiology
- Biostatistics
- Ecology and Environment Management
- Evolutionary Biology
- Chemistry 3
- Chemistry

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BIOCHEMISTRY AND METABOLISM

UNIT I: Introduction to Biochemistry:

(10 Periods)