

# Sidho-Kanho-Birsha University

## Syllabus for Postgraduate Department of

### Biotechnology

#### Brief Outline of the course structure

<b>1st Semester</b>	<b>Core Courses</b>	<b>Theory</b>	<b>Practical</b>	<b>Credits24</b>
MBITCCT101	Biochemistry	50		4
MBITCCT 102	Cell Biology and Molecular Biology	50		4
MBITCCT 103	Microbiology	50		4
MBITCCT 104	Bio-Instrumentation and Biophysical Chemistry	50		4
MBITCCS 105	Biochemistry and Microbial techniques		50	4
MBITCCS 106	Cell Biology and Molecular Biology		50	4
<b>2<sup>nd</sup>Semester</b>	<b>Core Courses</b>	<b>Theory</b>	<b>Practical</b>	<b>Credits 24</b>
MBITCCT 201	Genetics and Biostatistics	50		4
MBITCCT 202	Metabolism and Recombinant DNA technology	50		4
MBITCCT 203	Evolution, behavior, Cognition, Diversity of Life and Environmental Biotechnology	50	-	4
MBITCCT 204	Immunology	50		4
MBITCCS 205	Genetics, Biostatistics, Metabolism and Immunology		50	4
MBITCCS 206	Recombinant DNA technology, Biodiversity and environmental biotechnology		50	4
<b>3<sup>rd</sup>Semester</b>	<b>Core Courses</b>	<b>Theory</b>	<b>Practical</b>	<b>Credits 24</b>
MBITCCT 301	Genomics Proteomics & Protein Engineering	50		4
MBITCCT 302	Bioprocess Engineering and Microbial Technology, Entrepreneurship	50		4
MBITCCT 303	Bioinformatics and Computer Application	50		4
MBITCCS 304	Genomics Proteomics and Protein Engineering, Bioprocess Engineering and Microbial Technology, Bioinformatics and Computer Application		50	4
	<b>Choice Based Credit Courses</b>			<b>Credit 8</b>
MBITOET 305	Open elective	50		4
MBITOPP 306	Outreach	-	50	4
<b>4<sup>th</sup>Semester</b>	<b>Core Courses</b>	<b>Theory</b>	<b>Practical</b>	<b>Credits 24</b>
MBITCCT 401	IPR, Biosafety and Bioethics and Medical Biotechnology	50	-	4
MBITCCT 402	Plant and Animal Biotechnology	50		4
MBITCCS 403	Plant and Animal Biotechnology		50	4
MBITCEP 404	Dissertation/ project	-	50	4
MBITCCS 405	Seminar & Grand Viva/Industrial training	-	50	2+2
MBITACT 406	Add on	50	-	4