



BRAINWARE UNIVERSITY
School of Biotechnology & Biosciences
Department of Biotechnology
Bachelor of Science in Biotechnology/
Bachelor of Science (Honours) in Biotechnology/
Bachelor of Science (Honours with Research) in Biotechnology-2024
SEMESTER – I

Sl. No.	Course Code	Course	L	T	P	Evaluation Scheme		Total	Credits	Course Type
						CIA	TEE			
1	BBT17101	Microbiology	3	0	2	40	60	100	4	Major
2	BBT10201	Indian Agriculture	4	0	0	40	60	100	4	Minor
3	BBT10001	Computer Application for Biotechnology	2	1	0	40	60	100	3	IC
4	AEC00005	Functional English	2	0	0	40	60	100	2	AEC
5	BBT10002	Food Technology	3	0	0	40	60	100	3	SEC
6	VAC00006	Environmental Studies	2	0	0	40	60	100	2	VAC
7	VAC00007	Human Values and Ethics	2	0	0	40	60	100	2	VAC
TOTAL			18	1	2	280	420	700	20	

SEMESTER – II

Sl. No.	Course Code	Course	L	T	P	Evaluation Scheme		Total	Credits	Course Type
						CIA	TEE			
1	BBT27102	Chemistry	3	0	2	40	60	100	4	Major
2	BBT20202	Emerging Trends in Biotechnology	2	0	0	40	60	100	2	Minor
3	BBT20203	Bioethics and Biosafety	2	0	0	40	60	100	2	Minor
4	BBT20001	Forensic Sciences	3	0	0	40	60	100	3	IC
5	AEC00002	Communicative English	2	0	0	40	60	100	2	AEC
6	BBT27002	Bioanalytical Tools and Techniques	2	0	2	40	60	100	3	SEC
7	VAC00009	Industrial Fermentations	3	1	0	40	60	100	4	VAC
TOTAL			17	1	4	280	420	700	20	



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SEMESTER – III

Sl. No.	Course Code	Course	L	T	P	Evaluation Scheme		Total	Credits	Course Type
						CIA	TEE			
1	BBT37103	Biochemistry and Metabolism	3	0	2	40	60	100	4	Major
2	BBT37104	Molecular Biology	3	0	2	40	60	100	4	Major
3	BBT30204	Bioprocess Technology	3	1	0	40	60	100	4	Minor
4	BBT30001	Indian Health Sciences	3	0	0	40	60	100	3	IC
5	AEC00006	Modern Indian Language A. Hindi B. Bengali C. Alternative English	2	0	0	40	60	100	2	AEC
6	BBT30002	Soft Skills	3	0	0	40	60	100	3	SEC
TOTAL			17	1	4	240	360	600	20	

SEMESTER – IV

Sl. No.	Course Code	Course	L	T	P	Evaluation Scheme		Total	Credits	Course Type
						CIA	TEE			
1	BBT40105	Plant Biotechnology	4	0	0	40	60	100	4	Major
2	BBT49106	Plant Biotechnology Lab	0	0	4	40	60	100	2	Major
3	BBT40107	Cell Biology	4	0	0	40	60	100	4	Major
4	BBT49108	Cell Biology Lab	0	0	4	40	60	100	2	Major
5	BBT40109	Fundamentals of Biostatistics	2	0	0	40	60	100	2	Major
6	BBT40205	Bioentrepreneurship	2	0	0	40	60	100	2	Minor
7	BBT40206	Aquaculture	2	0	0	40	60	100	2	Minor
8	AEC09001	Communicative English Lab	0	0	4	40	60	100	2	AEC
TOTAL			14	0	12	320	480	800	20	



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SEMESTER – V

Sl. No.	Course Code	Course	L	T	P	Evaluation Scheme		Total	Credits	Course Type
						CIA	TEE			
1	BBT50110	Recombinant DNA Technology	3	0	0	40	60	100	3	Major
2	BBT59111	Recombinant DNA Technology Lab	0	0	4	40	60	100	2	Major
3	BBT50112	Genetics	3	0	0	40	60	100	3	Major
4	BBT59113	Genetics Lab	0	0	4	40	60	100	2	Major
5	BBT50114	Genomics and Proteomics	3	1	0	40	60	100	4	Major
6	BBT50207	Environmental Biotechnology	3	1	0	40	60	100	4	Minor
7	BBT58001	Internship/Project	0	0	0	0/40	100/60	100	2	IAPC
TOTAL			12	2	8	240/280	460/420	700	20	

SEMESTER – VI

Sl. No.	Course Code	Course	L	T	P	Evaluation Scheme		Total	Credits	Course Type
						CIA	TEE			
1	BBT60115	Immunology	4	0	0	40	60	100	4	Major
2	BBT69116	Immunology Lab	0	0	4	40	60	100	2	Major
3	BBT60117	Rural Biotechnology	3	0	0	40	60	100	3	Major
4	BBT69118	Rural Biotechnology Lab	0	0	4	40	60	100	2	Major
5	BBT60119	Animal Biotechnology	3	0	0	40	60	100	3	Major
6	BBT69120	Animal Biotechnology Lab	0	0	4	40	60	100	2	Major
7	BBT60208	Nanobiology	3	1	0	40	60	100	4	Minor
TOTAL			13	1	12	280	420	700	20	



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SEMESTER VII (Honours/ Honours with Research)

Sl. No.	Course Code	Course	L	T	P	Evaluation Scheme		Total	Credits	Course Type
						CIA	TEE			
1	BBT70121	Research Methodology	3	1	0	40	60	100	4	Major
2	BBT70122	Biophysics	4	0	0	40	60	100	4	Major
3	BBT79123	Biophysics Lab	0	0	4	40	60	100	2	Major
4	BBT70124	Drug Designing	4	0	0	40	60	100	4	Major
5	BBT79125	Drug Designing Lab	0	0	4	40	60	100	2	Major
6	BBT70209	Biomathematics	3	1	0	40	60	100	4	Minor
TOTAL			14	2	8	240	360	600	20	

SEMESTER VIII (Honours)

Sl. No.	Course Code	Course	L	T	P	Evaluation Scheme		Total	Credits	Course Type
						CIA	TEE			
1	BBT80126H	Intellectual Property Rights	3	0	0	40	60	100	3	Major
2	BBT80127H	Developmental Biology	2	1	0	40	60	100	3	Major
3	BBT80128H	Bioinformatics	3	0	0	40	60	100	3	Major
4	BBT89129H	Bioinformatics Lab	0	0	4	40	60	100	2	Major
5	BBT80130H	Clinical Biochemistry	3	0	0	40	60	100	3	Major
6	BBT89131H	Clinical Biochemistry Lab	0	0	4	40	60	100	2	Major
7	BBT80210H	Cell Culture Techniques	2	0	0	40	60	100	2	Minor
8	BBT89211H	Cell Culture Techniques Lab	0	0	4	40	60	100	2	Minor
TOTAL			13	1	12	320	480	800	20	

SEMESTER – VIII (Honours with Research)

Sl. No.	Course Code	Course	L	T	P	Evaluation Scheme		Total	Credits	Course Type
						CIA	TEE			
1	BBT80126R	Research Ethics	4	0	0	40	60	100	4	Major
2	BBT80210R	Computational Biology	2	0	0	40	60	100	2	Minor
3	BBT89211R	Computational Biology Lab	0	0	4	40	60	100	2	Minor
4	BBT88001R	Research Project	0	0	0	40	60	100	12	RPC
TOTAL			6	0	4	160	240	400	20	