

## 1. Programme Matrix

**ESE** – End Semester Examination

**CIA** – Continuous Internal Assessment

**MC** - Major Core, **MC Lab** - Major Core Laboratory, **MS** - Major Special, **MS Lab** - Major Special Laboratory, **NC** - Non Core, **Lang** - Language

### I Semester

Course Code	Course Title	Nature of the Course	Hrs / Week	Credits	CIA	ESE	Max Marks
	II Language	Lang	4	3	40	60	100
13ENG1201	English	Eng	4	3	40	60	100
13MBG1201	Basic Microbiology & Microbiological Techniques	MC	4	3	40	60	100
13MBG12L1	Basic Microbiology and Control of Microorganisms Practical	MC Lab	2	1	20	30	50
13BCH1201	Biophysical Chemistry	MC	4	3	40	60	100
13BCH12L1	Biochemistry practical-I	MC Lab	2	1	20	30	50
13GEN1201	Fundamentals of Cell Biology	MC	4	3	40	60	100
13GEN12L1	Fundamentals of Cell Biology Practical	MC Lab	2	1	20	30	50
13NHU0102	Indian Constitution	NC	2	1	10	40	50
	<b>Total</b>		<b>30</b>	<b>19</b>	<b>270</b>	<b>430</b>	<b>700</b>

### II Semester

Course Code	Course Title	Nature of the Course	Hrs / Week	Credits	CIA	ESE	Max Marks
	II Language	Lang	4	3	40	60	100
13ENG2201	English	Eng	4	3	40	60	100
13MBG2201	Microbial Taxonomy & Culture Techniques	MC	4	3	40	60	100
13MBG22L1	Microbial Taxonomy & Culture Techniques Practical	MC Lab	2	1	20	30	50
13BCH2201	Biomolecules	MC	4	3	40	60	100
13BCH22L1	Biochemistry practical-II	MC Lab	2	1	20	30	50

13GEN2201	Principles of Genetics	MC	4	3	40	60	100
13GEN22L1	Principles of Genetics Practical	MC Lab	2	1	20	30	50
12NCS0101	Computer Fundamentals	NC	2	1	10	40	50
	<b>Total</b>		<b>28</b>	<b>19</b>	<b>270</b>	<b>430</b>	<b>700</b>

### III Semester

Course Code	Course Title	Nature of the Course	Hrs / Week	Credits	CIA	ESE	Max Marks
13ENG3201	English	Eng	4	3	40	60	100
13MBG3201	Microbiology-Microbial Physiology Biostatistics & Bioinformatics	MC	4	3	40	60	100
13MBG32L1	Microbial Physiology & Biostatistics & Bioinformatics Practical	MC Lab	2	1	20	30	50
13MBG4201	Microbial Genetics & Genetic Engineering	MC	4	3	40	60	100
13MBG42L1	Microbial Genetics & Genetic Engineering	MC Lab	2	1	20	30	50
13BCH3202	Human Physiology	MC	4	3	40	60	100
13BCH32L2	Biochemistry practical-III	MC Lab	2	1	20	30	50
13GEN3201	Molecular Genetics and rDNA Technology	MC	4	3	40	60	100
13GEN32L1	Molecular Genetics Practical	MC Lab	2	1	20	30	50
	<b>Total</b>		<b>26</b>	<b>19</b>	<b>260</b>	<b>390</b>	<b>700</b>

### IV Semester

Course Code	Course Title	Nature of the Course	Hrs / Week	Credits	CIA	ESE	Max Marks
13ENG4201	English	Eng	4	3	40	60	100

13MBG2202	Agricultural & Environmental Microbiology	MC	4	3	40	60	100
13MBG32L2	Agricultural & Environmental Microbiology Practical	MC Lab	2	1	20	30	50
13MBG5202	Immunology & Medical Microbiology	MC	4	3	40	60	100
13MBG52L2	Immunology & Medical Microbiology Practical	MC Lab	2	1	20	30	50
13BCH4201	Enzyme & Enzyme Technology	MC	4	3	40	60	100
13BCH42L1	Biochemistry practical-IV	MC Lab	2	1	20	30	50
13GEN4201	Cytogenetics	MC	4	3	40	60	100
13GEN42L1	Cytogenetics practical	MC Lab	2	1	20	30	50
	Environment Studies & Civic Sense	NC	2	1	10	40	50
	<b>Total</b>		<b>28</b>	<b>20</b>	<b>270</b>	<b>430</b>	<b>750</b>

#### V Semester

Course Code	Course Title	Nature of the Course	Hrs / Week	Credits	CIA	ESE	Max Marks
13MBG5201	Food & Dairy Microbiology	MC	4	3	40	60	100
13MBG52L1	Food & Dairy Microbiology practical	MC Lab	2	1	20	30	50
13BCH5202	Bio-analytical Techniques	MC	4	3	40	60	100
13BCH52L2	Biochemistry practical-VI	MC Lab	2	1	20	30	50
13BCH5201	Biopolymers	MC	4	3	40	60	100
13BCH52L1	Biochemistry practical-V	MC Lab	2	1	20	30	50
13GEN5201	Developmental Genetics	MC	4	3	40	60	100
13GEN52L1	Developmental Genetics Practical	MC Lab	2	1	20	30	50
13GEN5202	Basic Human Genetics	MC	4	3	40	60	100
13GEN52L2	Basic Human Genetics practical	MC Lab	2	1	20	30	50
	<b>Total</b>		<b>30</b>	<b>20</b>	<b>360</b>	<b>540</b>	<b>750</b>

#### VI Semester

Course Code	Course Title	Nature of the Course	Hrs / Week	Credits	CIA	ESE	Max Marks
13MBG6202	Industrial Microbiology & Microbial Technology	MC	4	3	40	60	100
13MBG62L2	Industrial Microbiology & Microbial Technology Practical	MC Lab	2	1	20	30	50
13BCH6201	Intermediary Metabolism	MC	4	3	40	60	100
13BCH62L1	Biochemistry practical-VII	MC Lab	2	1	20	30	50
13BCH6202	Clinical Biochemistry	MC	4	3	40	60	100
13BCH62L2	Biochemistry practical-VIII	MC Lab	2	1	20	30	50
13GEN6201	Population and Evolutionary Genetics	MC	4	3	40	60	100
13GEN62L1	Population and Evolutionary Genetics practical	MC Lab	4	1	20	30	50
13GEN6202	Applied Genetics	MC	4	3	40	60	100
13GEN62L2	Applied Genetics practical	MC Lab	4	1	20	30	50
	Project			5			
	<b>Total</b>		<b>30</b>	<b>20+5</b>	<b>360</b>	<b>540</b>	<b>750</b>