

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 | Lang | 4 | 3 | 40 | 60 | 100 |
| 13BTG1201 | Biotechnology I - Cell Biology | MC | 4 | 3 | 40 | 60 | 100 |
| 13BTG12L1 | Cell Biology Practical | MC Lab | 2 | 1 | 20 | 30 | 50 |
| 13BCH1201 | Biochemistry I - Biophysical Chemistry | MC | 4 | 3 | 40 | 60 | 100 |
| 13BCH12L1 | Biochemistry practical-I | MC Lab | 2 | 1 | 20 | 30 | 50 |
| 13GEN1201 | Genetics I - 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 |
| | Life Skill Education | NC | 2 | 2 | | | |
| | Total | | 30 | 22 | 270 | 430 | 700 |

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 |
| | English | Lang | 4 | 3 | 40 | 60 | 100 |
| 13BTG2201 | Microbiology | MC | 4 | 3 | 40 | 60 | 100 |
| 13BTG22L2 | Microbiology Practical | MC Lab | 2 | 1 | 20 | 30 | 50 |
| 13BCH2001 | 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 |
| | Computer Fundamentals | NC | 2 | 1 | 10 | 40 | 50 |
| | Total | | 28 | 20 | 270 | 430 | 700 |

III Semester

| Course Code | Course | Nature of the Course | Hrs / Week | Credits | CIA | ESE | Max Marks |
|------------------|-----------------------------------------------------|----------------------|------------|---------|-----|-----|-----------|
| 13ENG3201 | English | Eng | 4 | 3 | 40 | 60 | 100 |
| 13BTG3201 | Bioinstrumentation, Biostatistics, Bioinformatics | MC | 4 | 3 | 40 | 60 | 100 |
| 13BTG32L1 | Bioinstrumentation practical | MC Lab | 2 | 1 | 20 | 30 | 50 |
| 13BTG3202 | Molecular Biology and Genetic Engineering | MC | 4 | 3 | 40 | 60 | 100 |
| 13BTG32L2 | Molecular Biology and Genetic Engineering Practical | MC Lab | 2 | 1 | 20 | 30 | 50 |
| 13BCH3201 | Human Physiology | MC | 4 | 3 | 40 | 60 | 100 |
| 13BCH32L1 | Biochemistry practical-III | MC Lab | 2 | 1 | 20 | 30 | 50 |
| 13GEN3201 | Molecular genetics rDNA technology | MC | 4 | 3 | 40 | 60 | 100 |
| 13GEN32L1 | Molecular genetics rDNA technology practicals | MC Lab | 2 | 1 | 20 | 30 | 50 |
| | | | 24 | 19 | 280 | 420 | 700 |

IV Semester

| Course Code | Course | Nature of the Course | Hrs / Week | Credits | CIA | ESE | Max Marks |
|------------------|--------------------------------------------------------|----------------------|------------|---------|-----|-----|-----------|
| 13ENG4201 | English | Eng | 4 | 3 | 40 | 60 | 100 |
| 13BTG4201 | Agricultural and Environmental Biotechnology | MC | 4 | 3 | 40 | 60 | 100 |
| 13BTG42L1 | Agricultural and Environmental Biotechnology Practical | MC Lab | 2 | 1 | 20 | 30 | 50 |
| 13BTG4202 | Immunology and Animal Biotechnology | MC | 4 | 3 | 40 | 60 | 100 |
| 13BTG42L2 | Immunology and Animal Biotechnology 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 |
| 13GEN42L1 | Cytogenetics | MC | 4 | 3 | 40 | 60 | 100 |
| 13GEN42L1 | Cytogenetics practical | MC Lab | 2 | 1 | 20 | 30 | 50 |
| | Environment Studies & Civic Sense | NC | 2 | 1 | 20 | 30 | 50 |
| | | | 30 | 20 | 300 | 460 | 750 |

V Semester

| Course Code | Course | Nature of the Course | Hrs / Week | Credits | CIA | ESE | Max Marks |
|------------------|----------------------------------|----------------------|------------|---------|-----|-----|-----------|
| 13BTG5201 | Plant Biotechnology | MC | 4 | 3 | 40 | 60 | 100 |
| 13BTG52L1 | Plant Biotechnology Practical | 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 |
| 13BCH5202 | Bio-analytical Techniques | MC | 4 | 3 | 40 | 60 | 100 |
| 13BCH52L2 | Biochemistry practical-VI | 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 |
| | | | 30 | 20 | 300 | 450 | 750 |

VI Semester

| Course Code | Course | Nature of the Course | Hrs / Week | Credits | CIA | ESE | Max Marks |
|------------------|--------------------------------------|----------------------|------------|---------|-----|-----|-----------|
| 13BTG6201 | Industrial Biotechnology | MC | 4 | 3 | 40 | 60 | 100 |
| 13BTG62L1 | Industrial Biotechnology Practical | MC Lab | 2 | 1 | 20 | 30 | 50 |
| 13BCH5201 | Intermediary Metabolism | MC | 4 | 3 | 40 | 60 | 100 |
| 13BCH52L1 | Biochemistry practical-VII | MC Lab | 2 | 1 | 20 | 30 | 50 |
| 13BCH5202 | Clinical Biochemistry | MC | 4 | 3 | 40 | 60 | 100 |
| 13BCH52L2 | Biochemistry practical-VIII | MC Lab | 2 | 1 | 20 | 30 | 50 |
| 13GEN5201 | Population and Evolutionary Genetics | MC | 4 | 3 | 40 | 60 | 100 |

| | | | | | | | |
|------------------|------------------------------------------------|--------|----|----|-----|-----|-----|
| 13GEN52L1 | Population and Evolutionary Genetics practical | MC Lab | 2 | 1 | 20 | 30 | 50 |
| 13GEN5202 | Applied Genetics | MC | 4 | 3 | 40 | 60 | 100 |
| 13GEN52L2 | Applied Genetics practical | MC Lab | 2 | 1 | 20 | 30 | 50 |
| | | | 30 | 20 | 300 | 450 | 750 |
| | Project | | | 3 | | | |