**Mangalayatan University**

**Beswan, Aligarh – 202145**

****

**Curriculum**

B.Voc in Medical Lab Technology

**Institute of Vocational Studies**

**2022**

**Total Program Credits for B.Voc**

|  |  |  |
| --- | --- | --- |
| **S.N.** | **Semester** | **Credits** |
| **1** | **I** | **24** |
| **2** | **II** | **28** |
| **3** | **III** | **26** |
| **4** | **IV** | **24** |
| **5** | **V** | **24** |
| **6** | **VI** | **22** |
| **Total** | | **148** |

**Induction Program**

Conduction of induction program as per UGC/Regulatory Body‘s guideline.

**Course Structure**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **I – Year** | | | | |
| **Semester-I** | | | | |
| **S. No.** | **Course Code** | **Course Title** | **Course Type** | **Credits** |
| 1 | BVOMLT-101 | Functional English | General Academic Component | 4 |
| 2 | BVOMLT-102 | Fundamentals of Microbiology | General Academic Component | 4 |
| 3 | BVOMLT-103 | Biomolecules | General Academic Component | 4 |
| 4 | BVOMLT-104 | Cell Biology and Biodiversity–I | General Academic Component | 4 |
| 5 | BVOMLT-105 | Special Laboratory Techniques-I) | Skill Development Component | 4 |
| 6 | BVOMLT-106 | Routine Laboratory Techniques-I | Skill Development Component | 4 |
| 7 | BVOMLT-107 | General & Human Anatomy , Physiology –I | Skill Development Component | 4 |
| **Total Credits** | | | | 24 |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Semester-II** | | | | | | | | |
| **S. No.** | | **Course Code** | | **Course Title** | | **Course Type** | **Credits** | |
| 1 | | BVOMLT-201 | | Microbial Physiology -Metabolism | | General Academic Component | 4 | |
| 2 | | BVOMLT-202 | | Professional Communication | | General Academic Component | 4 | |
| 3 | | BVOMLT-203 | | Enzymology and Bioenergetics | | General Academic Component | 4 | |
| 4 | | BVOMLT-204 | | Ecology and Biodiversity-II | | Skill Development Component | 4 | |
| 5 | | BVOMLT-205 | | Special Laboratory Techniques-II | | Skill Development Component | 4 | |
| 6 | | BVOMLT-206 | | Routine Laboratory Techniques-II) | | Skill Development Component | 4 | |
| 7 | | BVOMLT-207 | | General & Human Anatomy , Physiology –II | | Skill Development Component | 4 | |
| **Total Credits** | | | | | | | 28 | |
| **Exit Option- Diploma in Medical Lab Technology** | | | | | | | | |
| **Semester-III** | | | | | | | | | | |
| **S. No.** | | **Course Code** | | **Course Title** | | **Course Type** | | | **Credits** | |
| 1 | | BVOMLT-301 | | Pathogenic Microbiology | | General Academic Component | | | 4 | |
| 2 | | BVOMLT-302 | | Environmental Studies | | General Academic Component | | | 4 | |
| 3 | | BVOMLT-303 | | Metabolism | | General Academic Component | | | 4 | |
| 4 | | BVOMLT-304 | | Clinical Pathology and Biochemistry | | Skill Development Component | | | 4 | |
| 5 | | BVOMLT-305 | | Microbiology and Serology | | Skill Development Component | | | 4 | |
| 6 | | BVOMLT-306 | | Hematology and Blood Banking-I) | | Skill Development Component | | | 6 | |
| **Total Credits** | | | | | | | | | 26 | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Semester-IV** | | | | |
| **S. No.** | **Course Code** | **Course Title** | **Course Type** | **Credits** |
| 1 | BVOMLT-401 | Immunology | General Academic Component | 4 |
| 2 | BVOMLT-402 | Biochemical Techniques | General Academic Component | 4 |
| 3 | BVOMLT-403 | Parasitology and Blood Cell Disirders-I | Skill Development Component | 4 |
| 4 | BVOMLT-404 | Histolohy-Cytology –I) | Skill Development Component | 6 |
| 5 | BVOMLT-405 | Clinical Biochemistry and Microbiology-I | Skill Development Component | 6 |
| **Total Credits** | | | | 24 |

**Exit Option-Advance Diploma in Medical Lab Technology**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **III – Year** | | | | |
| **Semester-V** | | | | |
| **S. No.** | **Course Code** | **Course Title** | **Course Type** | **Credits** |
| 1 | BVOMLT-501 | Pathogenic Microbiology | General Academic Component | 4 |
| 2 | BVOMLT-502 | Parasitology and Blood Cell Disorders-II | General Academic Component | 4 |
| 3 | BVOMLT-503 | Histology-Cytology –II | General Academic Component | 4 |
| 4 | BVOMLT-504 | Medical Genetics and Microbiology-II | General Academic Component | 6 |
| 5 | BVOMLT-505 | INTERNSHIP-I /Professional Training | Skill Development Component | 6 |
| **Total Credits** | | | | 24 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Semester-VI** | | | | |
| **S. No.** | **Course Code** | **Course Title** | **Course Type** | **Credits** |
| 1 | BVOMLT-501 | Food and Industrial Microbiology | General Academic Component | 6 |
| 2 | BVOMLT-502 | Clinical Laboratory Operations and Management | General Academic Component | 4 |
| 3 | BVOMLT-503 | INTERNSHIP-II /Professional Training | Skill Development Component | 6 |
| 4 | BVOMLT-504 | Project Work | Skill Development Component | 6 |
| **Total Credits** | | | | 22 |