#### Dr. D.Y. Patil School of Allied Health Sciences

Dr. D. Y. Patil Vidyapeeth, Pune (Deemed to be University)



## **Programme Framework**

Bachelor of Science in Medical Laboratory Technology (B.Sc. MLT)

# First Year First Semester

| Course      |   |        | Credit    |       | Hours  |           |       | Marks    |        |           |       |
|-------------|---|--------|-----------|-------|--------|-----------|-------|----------|--------|-----------|-------|
| code        | Course Title  | Theory | Practical | Total | Theory | Practical | Total | Internal | Theory | Practical | Total |
|             | Introduction to Healthcare<br>Delivery System in India              | 2      | 0         | 2     | 30     | 0         | 30    |          |        |           |       |
| BMLT<br>101 | Medical Terminology and record keeping (including anatomical terms) | 1      | 0         | 1     | 15     | 0         | 15    | 40       | 80     | 80        | 200   |
|             | Medical Law and Ethics  | 1      | 0         | 1     | 15     | 0         | 15    |          |        |           |       |
|             | Introduction to Quality and patient safety                          | 1      | 1         | 2     | 15     | 30        | 45    |          |        |           |       |
| BMLT        | Basic computers and information Science                             | 1      | 2         | 3     | 15     | 60        | 75    | 30       | 60     | 60        | 150   |
| 102         | Research Methodology and Biostatistics                              | 2      | 1         | 3     | 30     | 30        | 60    | 30       |        |           | 150   |
| BMLT        | Basic English and<br>Communication                                  | 2      | 0         | 2     | 30     | 0         | 30    |          |        |           |       |
| 103         | Professionalism and values  | 1      | 1         | 2     | 15     | 30        | 45    |          |        |           |       |
|             | Principles of Management  | 2      | 0         | 2     | 30     | 0         | 30    | 40       | 80     | 80        | 200   |
| BMLT<br>104 | Community orientation and clinical visit                            | 0      | 2         | 2     | 0      | 60        | 60    |          |        |           |       |
|             | Total   | 13     | 7         | 20    | 195    | 210       | 405   | 120      | 240    | 240       | 550   |

#### **Second Semester**

|                |   | Credit |           |       |        | Hours     |       | Marks    |        |           |       |  |
|----------------|---|--------|-----------|-------|--------|-----------|-------|----------|--------|-----------|-------|--|
| Course<br>code | Course Title  | Theory | Practical | Total | Theory | Practical | Total | Internal | Theory | Practical | Total |  |
| BMLT<br>201    | Human Anatomy<br>and Physiology                                   | 6      | 2         | 8     | 90     | 60        | 150   | 40       | 80     | 80        | 200   |  |
| BMLT<br>202    | Biochemistry  | 2      | 1         | 3     | 30     | 30        | 60    | 40       | 80     | 80        | 200   |  |
| BMLT<br>203    | Basics of Medical<br>Disorders                                    | 2      | 2         | 4     | 30     | 60        | 90    | 40       | 80     | 80        | 200   |  |
| BMLT<br>204    | BMLT Directed<br>Clinical Education<br>– part I<br>(studentship)* | 0      | 5         | 5     | 0      | 150       | 150   | 50       | 0      | 0         | 50    |  |
|                | Total   | 10     | 10        | 20    | 150    | 300       | 450   | 170      | 240    | 240       | 650   |  |

### Second Year Third Semester

|                |   | Credit |           |       | Hours  |           |       | Marks    |        |           |       |
|----------------|---|--------|-----------|-------|--------|-----------|-------|----------|--------|-----------|-------|
| Course<br>code | Course Title  | Theory | Practical | Total | Theory | Practical | Total | Internal | Theory | Practical | Total |
| BMLT<br>301    | Pathology   | 3      | 2         | 5     | 45     | 60        | 105   | 40       | 80     | 80        | 200   |
| BMLT<br>302    | Microbiology  | 3      | 2         | 5     | 45     | 60        | 105   | 40       | 80     | 80        | 200   |
| BMLT<br>303    | Pharmacology  | 3      | 2         | 5     | 45     | 60        | 105   | 40       | 80     | 80        | 200   |
| BMLT<br>304    | BMLT Directed<br>Clinical Education –<br>Part II (studentship)* | 0      | 5         | 5     | 0      | 150       | 150   | 50       | 0      | 0         | 50    |
|                | Total   | 9      | 11        | 20    | 135    | 330       | 465   | 170      | 240    | 240       | 650   |

#### **Fourth Semester**

|                |  |        | Credit    |       |        | Hours     |       |          | Marks  |           |       |  |
|----------------|--|--------|-----------|-------|--------|-----------|-------|----------|--------|-----------|-------|--|
| Course<br>code | Course Title   | Theory | Practical | Total | Theory | Practical | Total | Internal | Theory | Practical | Total |  |
| BMLT<br>401    | Applied Biochemistry   | 2      | 2         | 4     | 30     | 60        | 90    | 40       | 80     | 80        | 200   |  |
| BMLT<br>402    | Histopathology   | 2      | 3         | 5     | 30     | 90        | 120   | 40       | 80     | 80        | 200   |  |
| BMLT<br>403    | Immunology and<br>Mycology                                       | 3      | 3         | 6     | 45     | 90        | 135   | 40       | 80     | 80        | 200   |  |
| BMLT<br>404    | BMLT Directed Clinical<br>Education – part III<br>(studentship)* | 0      | 5         | 5     | 0      | 150       | 150   | 50       | 0      | 0         | 50    |  |
|                | Total  | 7      | 13        | 20    | 105    | 390       | 495   | 170      | 240    | 240       | 650   |  |

# Third Year Fifth Semester

|                |   | Credit |           |       | Hours  |           |       | Marks    |        |           |       |
|----------------|---|--------|-----------|-------|--------|-----------|-------|----------|--------|-----------|-------|
| Course<br>code | Course Title  | Theory | Practical | Total | Theory | Practical | Total | Internal | Theory | Practical | Total |
| BMLT<br>501    | Biochemical<br>Metabolism-I                                     | 2      | 3         | 5     | 30     | 90        | 120   | 40       | 80     | 80        | 200   |
| BMLT<br>502    | Hematology  | 2      | 3         | 5     | 30     | 90        | 120   | 40       | 80     | 80        | 200   |
| BMLT<br>503    | Parasitology and<br>Virology                                    | 2      | 3         | 5     | 30     | 90        | 120   | 40       | 80     | 80        | 200   |
| BMLT<br>504    | BMLT Directed Clinical<br>Education – part IV<br>(studentship)* | 0      | 5         | 5     | 0      | 150       | 150   | 50       | 0      | 0         | 50    |
|                | Total   | 6      | 14        | 20    | 90     | 420       | 510   | 170      | 240    | 240       | 650   |

#### **Sixth Semester**

|                |   | Credit |           |       |        | Hours     |       | Marks    |        |           |       |
|----------------|---|--------|-----------|-------|--------|-----------|-------|----------|--------|-----------|-------|
| Course<br>code | Course Title  | Theory | Practical | Total | Theory | Practical | Total | Internal | Theory | Practical | Total |
| BMLT<br>601    | Biochemical<br>Metabolism-II                                      | 2      | 3         | 5     | 30     | 90        | 120   | 40       | 80     | 80        | 200   |
| BMLT<br>602    | Cytology  | 2      | 3         | 5     | 30     | 90        | 120   | 40       | 80     | 80        | 200   |
| BMLT<br>603    | Systemic<br>Bacteriology  | 2      | 3         | 5     | 30     | 90        | 120   | 40       | 80     | 80        | 200   |
| BMLT<br>604    | BMLT Directed<br>Clinical<br>Education – part<br>V (studentship)* | 0      | 5         | 5     | 0      | 150       | 150   | 50       | 0      | 0         | 50    |
|                | Total   | 6      | 14        | 20    | 90     | 420       | 510   | 170      | 240    | 240       | 650   |

# Fourth Year Seventh and Eighth Semester

|                                |        | Hours     |       |  |  |  |  |  |  |  |
|--------------------------------|--------|-----------|-------|--|--|--|--|--|--|--|
| Course Title                   | Theory | Practical | Total |  |  |  |  |  |  |  |
| Internship and<br>Project Work | 0      | 1200      | 1200  |  |  |  |  |  |  |  |
| Credits                        |        | 40        |       |  |  |  |  |  |  |  |