

**Curriculum Scheme**  
**for**  
**B.Voc in**  
**Medical Laboratory and Molecular Diagnostic Technology**  
**2021 Onwards**  
**Under**  
**Choice Based Credit System (CBCS)**



**CENTRE FOR VOCATIONAL STUDIES**  
**ISLAMIC UNIVERSITY OF SCIENCE AND TECHNOLOGY,**  
**AWANTIPORA, PULWAMA 192122**

**Scheme for Semester-wise distribution of Courses and Credits for B.Voc. (ML&MDT).**

**Course Structure: For each semester**

<b>S. No.</b>	<b>Course Category</b>			<b>Credits/Semester</b>	<b>Total Credits</b>
<b>1</b>	General Education Component	English Communication	Paper1	4	<b>12</b>
<b>2</b>		Soft Skill Development	Paper2	4	
<b>3</b>		Aptitude Development	Paper 3	4	
<b>4</b>	Skill Development Component	Core Course	Paper 4	4	<b>18</b>
<b>5.</b>		Core Course	Paper 4 Practical	4	
<b>6.</b>		Core Course	Paper 5	4	
<b>7.</b>		Core Course	Paper 5 Practical	4	
<b>8.</b>		Core Course	Field Work	2	
<b>TOTAL CREDITS</b>					<b>30</b>

**Definition of Credit:** The Credit computation in the programme shall be given as under:

- i. For theory and labs, one credit would mean equivalent to 15 periods of 60 minutes each.
- ii. For internship/Field work, the credit weightage for equivalent hours shall be 50% of that for lectures.

## SEMESTER I

S. No.	Course Type	Subject Title	Code	Credits		Evaluation Scheme	
				L	P	Internal	External
1	General Education Component	Soft Skill (S)	English Communication Skills-I MLT101 S	4	0	30	70
2		Foundation Course (F)	Ecology & Environment MLT102F	4	0	30	70
3		Aptitude Development (A)	Fundamentals of Biomolecules MLT103 A	4	0	30	70
4	Skill Development Component	Core Course (C)	The Fundamentals of Anatomy & Physiology MLT104 C	4	0	30	70
5		Core Course (C)	The Fundamentals of Anatomy & Physiology- Practical MLT105 C	4	0	30	70
6		Core Course (C)	General Pathology & General Microbiology MLT106 C	0	4	30	70
7		Core Course (C)	General Pathology & General Microbiology - Practical MLT107 C	0	4	30	70
8		Core Course (C)	Field Work [Private Lab /Industry] MLT108 C	0	2	25	25
<b>Total Credits</b>				<b>30</b>		<b>235</b>	<b>515</b>

## SEMESTER II

S. No.	Course Type	Subject Title	Code	Credits		Evaluation Scheme		
				L	P	Internal	External	
1	General Education Component	Foundation Course (F)	General Chemistry	MLT150F	4	0	30	70
2		Open Elective Course (E)	To be chosen from the list of Open Elective Courses offered by other departments within the University		2			
3		Aptitude Development (Discipline Centric Elective) (A)	Lab management and Ethics	MLT151A	2	0	20	30
4		Aptitude Development (Discipline Centric Elective) (A)	Basic Medical Care	MLT152A	2	0	20	30
5		Aptitude Development (A)	Medical Genetics	MLT153A	4	0	30	70
6	Skill Development Component	Core Course (C)	Clinical Biochemistry & Bioinstrumentation	MLT154C	4	0	30	70
7		Core Course (C)	Clinical Biochemistry & Bioinstrumentation Practical	MLT155C	0	4	30	70
8		Core Course (C)	Clinical Hematology	MLT156C	4	0	30	70
9		Core Course (C)	Clinical Hematology Practicals	MLT157C	0	4	30	70
10		Core Course (C)	Field Work (Private Lab /Industry)	MLT158C	0	2	25	25
<b>Total Credits</b>					<b>30</b>		<b>245</b>	<b>505</b>

**NOTE-** Students have an open choice to choose either MLT151A or MLT152A

**SEMESTER III**

S. No.	Course Type	Subject Title	Code	Credits		Evaluation Scheme		
				L	P	Internal	External	
1	General Education Component	Soft Skill Development (S)	English Communication Skills	MLT201S	4	0	30	70
2		Soft Skill Development (S)	Computer Applications	MLT202S	4	0	30	70
3		Aptitude Development (Discipline Centric Electives) (A)	Cell Biology	MLT203A	4	0	30	70
4		Aptitude Development (Discipline Centric Elective) (A)	Clinical Pharmacology	MLT204A	4	0	30	70
5	Skill Development Component	Core Course (C)	Systemic Bacteriology, Virology & Mycology	MLT205C	4	0	30	70
6		Core Course (C)	Systemic Bacteriology, Virology & Mycology Practical	MLT206C	0	4	30	70
7		Core Course (C)	Immunology, Serology & Diagnosis of Immune Disorders	MLT207C	4	0	30	70
8		Core Course (C)	Immunology, Serology & Diagnosis of Immune Disorders Practicals	MLT208C	0	4	30	70
9		Core Course (C)	Field Work (Private Lab / Industry)	MLT209C	0	2	25	25
<b>Total Credits</b>					<b>30</b>		<b>235</b>	<b>515</b>

**NOTE-** Students have an open choice to choose either MLT203A or MLT204A

### SEMESTER IV

S. No.	Course Type	Subject Title	Code	Credits		Evaluation Scheme		
				L	P	Internal	External	
1	General Education Component	Soft Skill Development (S)	Leadership and Personality Development	MLT250S	2	0	20	30
2		Open Elective Course (E)	To be chosen from the list of Open Elective Courses offered by other departments within the University					
3		Aptitude Development (A)	Parasitology & Vector Borne Diseases	MLT251A	4	0	30	70
4		Aptitude Development (A)	Molecular Biology	MLT252A	4	0	30	70
5	Skill Development Component	Core Course (C)	Endocrinology & Cancer Markers	MLT253C	4	0	30	70
6		Core Course (C)	Endocrinology & Cancer Markers Practicals	MLT254C	0	4	30	70
7		Core Course (C)	Blood Banking	MLT255C	4	0	30	70
8		Core Course (C)	Blood Banking Practicals	MLT256C	0	4	30	70
9		Core Course (C)	Field Work (Private Lab /Industry)	MLT257C	0	2	25	25
<b>Total Credits</b>					<b>30</b>		<b>245</b>	<b>505</b>

**SEMESTER V**

S. No.	Course Type	Subject Title	Code	Credits		Evaluation Scheme		
				L	P	Internal	External	
1	General Education Component	Soft Skill development (S)	English Communication & Presentation Skills	MLT301S	4	0	30	70
2		Aptitude Development (A)	Entrepreneurship Development & Biostatistics	MLT302A	4	0	30	70
3		Aptitude Development (A)	Quantitative Aptitude and Numerical Ability	MLT303A	4	0	30	70
4		Aptitude Development (Discipline Centric Electives) (A)	Advanced Medical Diagnostics	MLT304A	4	0	30	70
5		Aptitude Development (Discipline Centric Electives) (A)	Diet & Nutrition	MLT305A	4	0	30	70
6	Skill Development Component	Core Course (C)	Molecular Diagnostic Techniques	MLT306C	4	0	30	70
7		Core Course (C)	Molecular Diagnostic Techniques Practicals	MLT307C	0	4	30	70
8		Core Course (C)	Histopathology	MLT308C	4	0	30	70
9		Core Course (C)	Histopathology Practicals	MLT309C	0	4	30	70
10		Core Course (C)	Field Work (Private Lab /Industry)	MLT310C	0	2	25	25
<b>Total Credits</b>					<b>34</b>		<b>265</b>	<b>585</b>

**NOTE-** Students have an open choice to choose either MLT304A or MLT305A

## SEMESTER VI

S. No.	Course Type		Subject Title	Course Code	Credits		Evaluation Scheme	
					T	P	Internal	External
1	General Education Component	Aptitude Development (A)	Reasoning and Critical Thinking	MLT350A	4	0	30	70
2		MOOCs Course (M)	Any MOOC's Course of Student's Choice	MLT351M	4	0	30	70
3	Skill Development Component	Core Course (C)	Project Work	MLT352C	0	10	100	200
4		Core Course (C)	Seminar on Project Work	MLT353C	0	8	50	100
<b>Total Credits</b>					<b>26</b>		<b>210</b>	<b>440</b>