



JHARKHAND
Rai University

**Bachelor of Science (Honours) in
Medical Laboratory Technology
(BMLT)**

EFFECTIVE FROM
ACADEMIC SESSION
2025-2026 onwards

COURSE SCHEME

COURSE SCHEME

BMLT 2025 - 2029

Choice Based Credit System

Semester - I							Evaluation Scheme		
NSQF/ NCrF	Code	Subject	L	T	P	Credit	CIA	External/ End Term	Total
Level – 5	Major Courses - Compulsory								
	42ABMT001	Human anatomy & Physiology - I	4	0	0	4	30	70	100
	42ABMT002	Laboratory Equipment & Glassware	3	0	0	3	30	70	100
	Minor Courses – Compulsory								
	42ABMT003	Chemistry for MLT	3	0	0	3	30	70	100
	Multidisciplinary Courses								
	42ABMT004	Remedial Biology	4	0	0	4	30	70	100
	Ability Enhancement Course- Compulsory								
	42ABMT005	Human anatomy & Physiology Lab. - I	0	0	2	1	30	20	50
	Skill Enhancement Course- Compulsory								
42ABMT006	Chemistry for MLT Lab	0	0	2	1	30	20	50	
Common Value-Added Courses									
42ABMT007	Communication Professional Skills	3	0	0	3	30	70	100	
42ABMT008	Sports & Yoga/ NSS/ NCC/CA	0	0	2	1	30	20	50	
						20	Total		650

Semester - II							Evaluation Scheme		
NSQF/ NCrF	Code	Subject	L	T	P	Credit	CIA	External/ End Term	Total
Level – 5	Major Courses - Compulsory								
	42ABMT009	Human Anatomy & Physiology - II	3	0	0	3	30	70	100
	42ABMT010	Clinical Biochemistry - I	3	0	0	3	30	70	100
	Minor Courses – Compulsory								
	42ABMT011	Hematology - I	3	0	0	3	30	70	100
	42ABMT012	Medical Histology	2	0	0	2	30	70	100
	Multidisciplinary Courses								
	42ABMT013	Human Physiology Lab. - II	0	0	2	1	30	20	50
	42ABMT014	Clinical Biochemistry Lab. - I	0	0	2	1	30	20	50
	42ABMT015	Haematology Lab. - I	0	0	2	1	30	20	50
	42ABMT016	IT Skills Lab	0	0	2	2	30	20	50
	Skill Enhancement Course- Compulsory								
	42ABMT017	Basics of Forensic Sciences	2	0	0	2	30	70	100
Common Value-Added Courses									
42AVAC- 001	Character Building & Holistic Development of Personality - I	2	0	0	2	50	50	100	
						20	Total		800

Semester - III							Evaluation Scheme		
NSQF/ NCrF	Code	Subject	L	T	P	Credit	CIA	External/ End Term	Total
Level – 6	Major Courses - Compulsory								
	42ABMT018	Introduction to Microbiology	3	0	0	3	30	70	100
	42ABMT019	Hematology - II	3	0	0	3	30	70	100
	Minor Courses – Compulsory								
	42ABMT020	Clinical Biochemistry-II	3	0	0	3	30	70	100
	Multidisciplinary Courses								
	42ABMT021	Environmental Science	3	0	0	3	30	70	100
	42ABMT022	Microbiology Lab.	0	0	2	1	30	20	50
	42ABMT023	Haematology Lab.- II	0	0	2	1	30	20	50
	42ABMT024	Clinical Biochemistry Lab. - II	0	0	2	1	30	20	50
	42ABMT025	Professional Skills-II	2	0	0	2	30	70	100
Ability Enhancement Course- Compulsory									
42ABMT026	Laboratory Instrument	3	0	0	3	30	70	100	
						20	Total		750

Semester - IV							Evaluation Scheme		
NSQF/ NCrF	Code	Subject	L	T	P	Credit	CIA	External/ End Term	Total
Level – 6	Major Courses - Compulsory								
	42ABMT027	General Bacteriology	3	0	0	3	30	70	100
	42ABMT028	Clinical Pathology	2	0	0	2	30	70	100
	42ABMT029	Histopathology	2	0	0	2	30	70	100
	Minor Courses – Compulsory								
	42ABMT030	Medical Immunology	3	0	0	3	30	70	100
	42ABMT031	Molecular Techniques	2	0	0	2	30	70	100
	Multidisciplinary Courses								
	42ABMT032	General Bacteriology Lab	0	0	2	1	30	20	50
	42ABMT033	Histopathology Lab	0	0	2	1	30	20	50
	42ABMT034	Clinical Pathology Lab	0	0	2	1	30	20	50
	Ability Enhancement Course- Compulsory								
	42ABMT035	Hospital Infection Control	1	0	0	1	30	70	100
	Skill Enhancement Course- Compulsory								
	-	Summer Internship	0	0	0	2	30	20	50
Common Value-Added Courses									
42AVAC- 002	Character Building & Holistic Development of Personality - II	2	0	0	2	50	50	100	
						20	Total		900

Semester - V							Evaluation Scheme		
NSQF/ NCrF	Code	Subject	L	T	P	Credit	CIA	External/ End Term	Total
Level – 6.5	Major Courses - Compulsory								
	42ABMT036	General Virology	3	0	0	3	30	70	100
	Minor Courses – Compulsory								
	42ABMT037	Biomedical Instrumentation	2	0	0	2	30	70	100
	Major Courses								
	42ABMT038	Clinical Serology	2	0	0	2	30	70	100
	42ABMT039	Blood Banking	2	0	0	2	30	70	100
	Multidisciplinary Courses								
	42ABMT040	Forensics sciences & Ethics	2	0	0	2	30	70	100
	42ABMT041	Medical Parasitology	3	0	0	3	30	70	100
	42ABMT042	Cytopathological Techniques	2	0	0	2	30	70	100
	Minor Courses								
	42ABMT043	Clinical Serology Lab.	0	0	2	1	30	20	50
	42ABMT044	Medical Parasitology Lab.	0	0	2	1	30	20	50
Common Value-Added Courses									
42AVAC- 003	Character Building & Holistic Development of Personality - III	2	0	0	2	50	50	100	
						20	Total		900

Semester - VI							Evaluation Scheme		
NSQF/ NCrF	Code	Subject	L	T	P	Credit	CIA	External/ End Term	Total
Level – 6.5	Major Courses - Compulsory								
	42ABMT045	Internship/ Hospital Attachment/ Experiential learning/ Clinical Training/ Project	0	0	0	20	200	200	400
						20	Total		400

* **Note:** Students who wish to avail the Exit option must indicate this on the Re-Registration form at the beginning of the 5th Semester. Any requests made after this point will not be considered.

Semester – VI (04 Years course)							Evaluation Scheme		
NSQ/ NCrF	Code	Subject	L	T	P	Credit	CIA	External/ End Term	Total
Level – 6.5	Major Courses - Compulsory								
	42ABMT046	Medical Mycology	3	0	0	3	30	70	100
	42ABMT047	Research Methodology	3	0	0	3	30	70	100
	42ABMT048	Biophysical Techniques	3	0	0	3	30	70	100
	Minor Courses – Compulsory								
	42ABMT049	Clinical Molecular biology	3	0	0	3	30	70	100
	42ABMT050	Immunopathology	3	0	0	3	30	70	100
	42ABMT051	Preventative Medicine and Health care	3	0	0	3	30	70	100
	Multidisciplinary Courses								
	42ABMT052	Laboratory workshop Lab.	0	0	2	1	30	20	50
42ABMT053	Medical Mycology Lab.	0	0	2	1	30	20	50	
						20	Total		700

Semester – VII (Honours)							Evaluation Scheme		
NSQ/ NCrF	Code	Subject	L	T	P	Credit	CIA	External/ End Term	Total
Level – 7	Major Courses - Compulsory								
	42ABMT054	Internship	0	0	0	14	100	100	200
	Minor Courses – Compulsory								
42ABMT055	Synopsis/ Review Training Report/ Presentation/Publication	0	0	0	6	100	100	200	
						20	Total		400

Semester – VIII (Honours)							Evaluation Scheme		
NSQ/ NCrF	Code	Subject	L	T	P	Credit	CIA	External/ End Term	Total
Level – 7	Major Courses - Compulsory								
	42ABMT056	Internship	0	0	0	14	100	100	200
	Minor Courses – Compulsory								
42ABMT057	Synopsis/ Review Training Report/ Presentation/Publication	0	0	0	6	100	100	200	
						20	Total		400