



BACHELOR OF MEDICAL LABORATORY SCIENCE (BMLS)

COURSE SCHEME

EFFECTIVE FROM

ACADEMIC SESSION: 2026 ONWARDS

DEPARTMENT OF ALLIED HEALTH
(सहबद्ध स्वास्थ्य विभाग)

Faculty of Health Sciences, Jharkhand Rai University, Ranchi

COURSE SCHEME

SEMESTER- I (FIRST)											
Teaching and Examination Scheme											
Course Name: Bachelor of Medical Laboratory Sciences (BMLS)											
Duration: Four Year							Pattern: Full Time (Regular)				
Level	COURSE NAME	Course Code	L	T	P	Credits (L+T+P)	Contact Hours	CIA	ESE	Passing Marks	Total
Level- 5	Human Anatomy	BMLS001	3	1	0	4	60	30	70	50	100
	Human Physiology	BMLS002	3	1	0	4	60	30	70	50	100
	Fundamentals of the Healthcare System and Medical Laboratory Science (MLS)	BMLS003	2	0	0	2	30	15	35	25	50
	Communication and Professionalism	BMLS004	2	0	0	2	30	15	35	25	50
	Basic Emergency care and First aid	BMLS005	1	1	0	2	30	30	70	50	100
	Basics of Computer Application	BMLS006	1	0	1	2	45	30	70	50	100
	Human Anatomy practical	BMLS007	0	0	4	2	60	30	70	50	100
	Human Physiology practical	BMLS008	0	0	4	2	60	30	70	50	100
Total			12	3	9	20	375	210	490	350	700

SEMESTER- II (SECOND)											
Teaching and Examination Scheme											
Course Name: Bachelor of Medical Laboratory Sciences (BMLS)											
Duration: Four Year							Pattern: Full Time (Regular)				
Level	COURSE NAME	Course Code	L	T	P	Credits (L+T+P)	Contact Hours	CIA	ESE	Passing Marks	Total
Level- 5	Fundamentals of Microbiology	BMLS009	4	0	0	4	60	30	70	50	100
	Basics of Biochemistry	BMLS010	4	0	0	4	60	30	70	50	100
	Fundamentals of Haematology	BMLS011	4	0	0	4	60	30	70	50	100
	Preventive and Social Medicine	BMLS012	2	0	0	2	30	30	70	50	100
	Fundamentals of Microbiology Practical	BMLS013	0	0	4	2	60	30	70	50	100
	Basics of Biochemistry Practical	BMLS014	0	0	4	2	60	30	70	50	100
	Fundamentals of Haematology Practical	BMLS015	0	0	4	2	60	30	70	50	100
Total			14	0	12	20	390	210	490	350	700

SEMESTER- III (THIRD)											
Teaching and Examination Scheme											
Course Name: Bachelor of Medical Laboratory Sciences (BMLS)											
Duration: Four Year							Pattern: Full Time (Regular)				
Level	COURSE NAME	Course Code	L	T	P	Credits (L+T+P)	Contact Hours	CIA	ESE	Passing Marks	Total
Level- 6	Bacteriology	BMLS016	4	0	0	4	60	30	70	50	100
	Intermediary Metabolism and Endocrinology	BMLS017	4	0	0	4	60	30	70	50	100
	Clinical Haematology	BMLS018	4	0	0	4	60	30	70	50	100
	Basics of Pharmacology	BMLS019	2	0	0	2	30	30	70	50	100
	Bacteriology Practical	BMLS020	0	0	4	2	60	30	70	50	100
	Intermediary Metabolism and Endocrinology Practical	BMLS021	0	0	4	2	60	30	70	50	100
	Clinical Haematology- Practical	BMLS022	0	0	4	2	60	30	70	50	100
Total			14	0	12	20	390	210	490	350	700

SEMESTER- IV (FOURTH)											
Teaching and Examination Scheme											
Course Name: Bachelor of Medical Laboratory Sciences (BMLS)											
Duration: Four Year							Pattern: Full Time (Regular)				
Level	COURSE NAME	Course Code	L	T	P	Credits (L+T+P)	Contact Hours	CIA	ESE	Passing Marks	Total
Level- 6	Virology and Immunology	BMLS023	4	0	0	4	60	30	70	50	100
	Genetics and Molecular Biology	BMLS024	4	0	0	4	60	30	70	50	100
	Clinical Pathology	BMLS025	4	0	0	4	60	30	70	50	100
	Medical Laboratory Management and Quality Control	BMLS026	2	0	0	2	30	30	70	50	100
	Virology and Immunology Practical	BMLS027	0	0	4	2	60	30	70	50	100
	Genetics and Molecular Biology Practical	BMLS028	0	0	4	2	60	30	70	50	100
	Clinical Pathology Practical	BMLS029	0	0	4	2	60	30	70	50	100
Total			14	0	12	20	390	210	490	350	700

SEMESTER- V (FIFTH)											
Teaching and Examination Scheme											
Course Name: Bachelor of Medical Laboratory Sciences (BMLS)											
Duration: Four Year							Pattern: Full Time (Regular)				
Level	COURSE NAME	Course Code	L	T	P	Credits (L+T+P)	Contact Hours	CIA	ESE	Passing Marks	Total
Level- 6.5	Mycology & Parasitology	BMLS030	4	0	0	4	60	30	70	50	100
	Analytical Biochemistry	BMLS031	4	0	0	4	60	30	70	50	100
	Immunohematology and Transfusion Medicine	BMLS032	4	0	0	4	60	30	70	50	100
	Medical Law and Ethics	BMLS033	2	0	0	2	30	30	70	50	100
	Mycology & Parasitology Practical	BMLS034	0	0	4	2	60	30	70	50	100
	Analytical Biochemistry Practical	BMLS035	0	0	4	2	60	30	70	50	100
	Immunohematology and Transfusion Medicine Practical	BMLS036	0	0	4	2	60	30	70	50	100
Total			14	0	12	20	390	210	490	350	700

SEMESTER- VI (SIXTH)											
Teaching and Examination Scheme											
Course Name: Bachelor of Medical Laboratory Sciences (BMLS)											
Duration: Four Year							Pattern: Full Time (Regular)				
Level	COURSE NAME	Course Code	L	T	P	Credits (L+T+P)	Contact Hours	CIA	ESE	Passing Marks	Total
Level- 6.5	Applied Pathobiology	BMLS037	4	0	0	4	60	30	70	50	100
	Cytology and Histopathology	BMLS038	4	0	0	4	60	30	70	50	100
	Clinical Biochemistry	BMLS039	4	0	0	4	60	30	70	50	100
	Biostatistics and Research Methodology	BMLS040	2	0	0	2	30	30	70	50	100
	Cytology and Histopathology Practical	BMLS041	0	0	4	2	60	30	70	50	100
	Clinical Biochemistry Practical	BMLS042	0	0	4	2	60	30	70	50	100
	Applied Pathobiology Practical	BMLS043	2	0	0	2	60	30	70	50	100
Total			16	0	8	20	390	210	490	350	700

SEMESTER- VII (SEVENTH)											
Teaching and Examination Scheme											
Course Name: Bachelor of Medical Laboratory Sciences (BMLS)											
Duration: Four Year							Pattern: Full Time (Regular)				
Level	COURSE NAME	Course Code	L	T	P	Credits (L+T+P)	Contact Hours	CIA	ESE	Passing Marks	Total
Level- 7	Internship (Lab Posting/ Research Dissertation)/ Logbook and Viva	BMLS044	0	0	0	20	900	90	210	150	300
SEMESTER- VIII (EIGHTH)											
Teaching and Examination Scheme											
Course Name: Bachelor of Medical Laboratory Sciences (BMLS)											
Duration: Four Year							Pattern: Full Time (Regular)				
Level	COURSE NAME	Course Code	L	T	P	Credits (L+T+P)	Contact Hours	CIA	ESE	Passing Marks	Total
Level- 7	Internship (Lab Posting/ Research Dissertation)/ Logbook and Viva	BMLS045	0	0	0	20	900	90	210	150	300

Total credits = 160 credits
 Total Contact hours = 4125
 Contact hours of all semesters = (375+ 390+390+390+390+390) + (900+900)

Credit Details:

- Lecture / Tutorial: 1 credit = 15 hours
- Practical: 1 credit = 30 hours
- Clinical Lab postings: 1 credit = 45 hours

Credit Includes: L – Lectures, T - Tutorials, P - Practical.