

**EKLAVYA**

UNIVERSITY

ज्ञानप्राप्तये लक्ष्यसन्धानम्

Sagar Road, Damoh (M.P.), Bharat

**Eklavya University, Damoh (MP)**

**D.M.L.T.**

**Syllabus 2022-23**

**School of Nursing & Paramedical Science**



**EKLAVYA**  
UNIVERSITY

ज्ञान प्राप्तये लक्ष्यं संस्थानम्

Esttd. by Madhya Pradesh Nij Vishwavidyalaya (Sthapana Avam Sanchalana) Adhyadesh, 2020

School Of Nursing & Paramedical Science

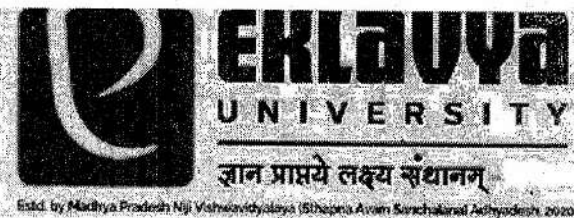
**Department of  
Paramedical Science**

**Syllabus**

**For**

**Diploma in Medical Laboratory Technician**

**DMLT**



School Of Nursing & Paramedical Science

Established by Madhya Pradesh Nij Vishwavidyalaya (Siksha auram Karachakam Adhyadesh 2020)

## Diploma in Medical Laboratory Technician

### VISION STATEMENT OF EKLAVYA UNIVERSITY

*Eklavya University, will transform lives and communities through learning.*

### MISSION STATEMENT OF EKLAVYA UNIVERSITY

- Nurture achievers in life and careers through a value based, industry relevant and future ready education.
- Emphasize research, interdisciplinary learning, and practical hands on education.
- Equip every student with the required social and technical skills to achieve employment generation.
- Provide a holistic education deeply rooted in the ways of the traditional Gurukul system.
- Bring quality education within the reach of every individual, by committing to the achievement and maintenance of excellence in education, research and innovation.
- Create and disseminate knowledge through research and creative inquiry.
- Serve students by teaching them problem solving, leadership and teamwork skills, lateral thinking, commitment to quality and ethical behaviour.
- Create a diverse community, open to the exchange of ideas, where discovery, creativity, and personal and professional development is encouraged and can flourish.
- Contribute to the social fabric and economic health of the Bundelkhand region, the state and the country at large, by enhancing and facilitating economic empowerment, providing equal opportunities and employment generation.

## VISION STATEMENT OF DEPARTMENT

To establish & develop world class self reliant institute for imparting Medical and other Health Science education at under-graduate, post-graduate & doctoral levels of the global competence.

To serve & educate the public, establish guidelines & treatment protocols to be followed by treating hospitals.

## MISSION STATEMENT OF DEPARTMENT

To practice medicine ethically in line with the global standard protocols.

To inculcate high moral, ethical and professional standards among students and to improve their overall personality as well as to inculcate compassionate behaviour.





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ज्ञानं प्राप्तये लक्ष्यं साधनम्

School Of Nursing & Paramedical Science

Established by Madhya Pradesh Raj Visheswavidyalaya (Shekara Awar) Sarachalana (Bhopal) Madhya Pradesh 2020

## Diploma in Medical Laboratory Technician

### PROGRAMME EDUCATIONAL OBJECTIVES (PEOs)

1. Students will have knowledge and research practices required for clinical testing laboratories.
2. Students will be able to function efficiently, confidently and safely in clinical laboratory settings including hospital environments.
3. Students will be able to follow ethical practice associated with medical lab technology.
4. Students will have updated knowledge of research trends in health care.
5. Students will be able to work and communicate effectively in inter-disciplinary environment, either independently or in a team, and demonstrate significant leadership qualities.
6. Students will engage in life-long learning and professional development through continuing education by graduate programs.



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Estd. by Madhya Pradesh Niji Vishwavidyalaya (Bhopal) Act, Bhopal, Madhya Pradesh, 2020

School Of Nursing & Paramedical Science

7

## Diploma in Medical Laboratory Technician

### PROGRAMME OUTCOMES (POs)

Upon the completion of the course student will be able to:

- Apply knowledge and technical skills associated with medical lab technology.
- Perform routine clinical laboratory procedures within acceptable quality control parameters in haematology, chemistry, immunohematology, and microbiology.
- Demonstrate technical skills, social behavior, and professional awareness imperative upon a laboratory technician.
- Apply problem solving techniques in identification and correction of procedural errors, instrument malfunctions and verifying the accuracy of laboratory results.
- Demonstrate ability to plan and implement professional activities.
- Understand professional and ethical responsibility in medical lab technology practices.
- Efficiently execute well-designed research experiments, and contribute to organization, analysis and interpretation of clinical data.
- Understand the impact of laboratory tests in a global and environmental context.
- Work as a leader in the diverse professional and industrial research areas.
- Communicate effectively by oral, written, and graphical means.
- Recognize the need to engage in lifelong learning through continuing education and research.



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School Of Nursing & Paramedical Science


Estd. by Madhya Pradesh Nig. Vishwavidyalaya (Siksha) Anam, Bhopal, Madhya Pradesh, 2020

## Diploma in Medical Laboratory Technician

### PROGRAMME SPECIFIC OUTCOMES (PSOs)

- PSO1- On successful completion the students shall gain knowledge in basic medical laboratory sciences and laboratory procedures.
- PSO2- To develop responsible citizenship in imparting the responsibility and leadership qualities among each and every student along with advanced professional skills
- PSO3- As a health professional the students shall have an value added responsibility towards the community health issues.
- PSO4- To understand and manage the prevailing health problems and apply suitable remedial measure.



**EKLAVYA** School Of Nursing & Paramedical Science  
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Established by Madhya Pradesh Nigam Vishwavidyalaya (Siksha Pro Aam Sancharana) Adhyaadesh, 2020

**DETAILED CURRICULUM**





**EKLAVYA**  
**UNIVERSITY**  
ज्ञानं प्राप्तये लक्ष्यं संस्थानम्

School Of Nursing & Paramedical Science

Est'd. by Madhya Pradesh Nij. Vaidya Vidyalaya (Uttara) Acm. Sansthalani, Aghyadish, 2020

**EKLAVA UNIVERSITY DAMOH**

**DIPLOMA IN MEDICAL LAB TECHNOLOGY (DMLT)**

**SCHEME Of EXAMINATION:DMLT- 1<sup>st</sup> Year**

S.No	SUBJECT CODE	SUBJECT	MAX. MARKS	MIN. PASSING MARKS
1	DMLTE20Y101	Basic Histology (Anatomy & Physiology)	100	50
2	DMLTE20Y102	Biochemistry	100	50
3	DMLTE20Y103	Pathology -I : Haematology & Blood Banking, Clinical Pathology & Parasitology	100	50
4	DMLTE20Y104	Pathology-II : Microbiology & Serology Histology & Cytology	100	50
<b>Total Max. Marks</b>			<b>400</b>	<b>200</b>

N.B.- There shall be Institutional /College level theory examination as per university notification, marks to be send to University for internal assessment purposes of university examination.

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# DIPLOMA IN MEDICAL LAB TECHNOLOGY (DMLT)

## SCHEME OF EXAMINATION: DMLT-2<sup>nd</sup> Year

S.No	PAPER	SUBJECT	THEORY	INTERNAL	PRACTICAL	TOTAL
1	DMLTE20Y101	Basic Histology (Anatomy & Physiology)	100	100	100	300
2	DMLTE20Y102	Biochemistry	100	100	100	300
3	DMLTE20Y103	Pathology -I : Haematology & Blood Banking, Clinical Pathology & Parasitology	100	100	100	300
4	DMLTE20Y104	Pathology-II : Microbiology & Serology Histology & Cytology	100	100	100	300
<b>TOTAL</b>			<b>400</b>	<b>400</b>	<b>400</b>	<b>1200</b>

Note -

1. First year institutional /college level theory examinations awarded marks would be consider as Internal assessment marks and candidate have to get min. 50% marks in university theory examination in addition to Internal assessment marks i.e. 100 marks collectively for passing the examination.
2. University Practical examination of 100 max. marks is inclusive of viva and candidate should get separate 50% marks i.e. 50 marks to get pass.

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*N.T.N*

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**EKLAVYA**  
**UNIVERSITY**

School Of Nursing & Paramedical Science

ज्ञानं प्राप्तये लक्ष्यं संस्थानम्

Est'd. by Madhya Pradesh Nij. Vishwavidyalaya (Sthapana Awaraj Sansthanam) Achh Pradesh, 2020

# Department of Paramedical

## SYLLABUS

### DMLT

### 2 YEAR DIPLOMA COURSE

<b>Year</b>	<b>DMLT 1st Year</b>
<b>Subject</b>	<b>HUMAN ANATOMY &amp; PHYSIOLOGY</b>
<b>Time</b>	<b>75 Hours (Theory + Demonstration)</b>

<b>Course code</b>	<b>HUMAN ANATOMY &amp; PHYSIOLOGY</b>	
<b>DMLTE20Y101</b>		
<b>Pre-requisite</b>	Nil	<b>Syllabus version</b>
<b>Course Objectives:</b>		
<ol style="list-style-type: none"> <li>1. To understand the definition of anatomy and physiology and their different terms</li> <li>2. To understand the structure of the cell and their constituents..</li> <li>3. To understand the systems of anatomical and physiological characters</li> <li>4. To understand the normal anatomical and their parts and their functions.</li> </ol>		
<b>Course Outcome:</b>		
<ol style="list-style-type: none"> <li>1. To student should be able to identify &amp; describe Anatomical aspects of muscle bones &amp; joints, &amp; to understand &amp; analyze movements.</li> <li>2. To understand the Anatomical basis of various clinical conditions e.g. trauma, deformities, pertaining to limbs &amp; spine.</li> <li>3. To understand &amp; describe the mechanism of posture &amp; gait the Anatomical basis of abnormal gait.</li> <li>4. To describe various parts of CNS, brain, midbrain, Hind-brain, brain stem, courses of cranial nerves; functional components course distribution. Anatomical basis of clinical lesions.</li> <li>5. To be able to identify &amp; describe the source &amp; course of circulatory system.</li> </ol>		
<b>Student Learning Outcomes (SLO):</b>		
<ol style="list-style-type: none"> <li>1. Students will be able to understand the definition of anatomy and physiology and their different terms</li> <li>2. Students will be able to understand the structure of the cell and their constituents..</li> <li>3. Students will be able understand the systems of anatomical and physiological characters.</li> <li>4. Students will be able to understand the normal anatomical and their parts and their functions.</li> </ol>		
<b>Unit – 1</b>		<b>15</b>
Study of the structure of a cell. Normal anatomical structure, Histology & Functions (Physiology) of the following.		
<b>Unit – 2</b>		<b>15</b>
The circulatory system (Heart & Blood Vessels). The Respiratory system.		
<b>Unit – 3</b>		<b>15</b>
The Digestive system. Liver & Pancreas.		
<b>Unit – 4</b>		<b>15</b>
Lymphatic system, Urinary system.		
<b>Unit – 5</b>		<b>15</b>
Reproductive system – Male & Female, Endocrine system, Central nervous system (Brain & Spinal cord)		

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# Mode: Flipped Class Room, Case Discussion, Lectures.

**Suggested Reading:**

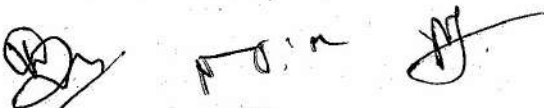
1. Solon on E.A. (2008) Introduction to Human Anatomy and Physiology 3rd Ed. Saunders: St Louis.
2. Chaurasia, B.D. & Garg, K., (2012) Human Anatomy Regional and Applied CBS Publications: New Delhi
3. T.S. Ranganathan – A text book of Human Anatomy
4. Fattana, Human anatomy (Description and applied) Saunder's & C. P. Prism Publishers, Bangalore – 1991
5. W. F. Ganong - Review of Medical Physiology.

**PRACTICAL**

1. Demonstration of parts of body and land marks on the surface.
  - a) The skeletal system, Head & Neck. Thorax And Abdomen.
  - b) Demonstration of various organs within thorax & abdomen.
  - c) Respiratory systems, pleurae, heart, liver, gall bladder, peritoneum stomach & intestine.
  - d) Spleen, pancreas & parts of urinary system.
2. GENERAL NERVOUS SYSTEM:
  - a) (i) Spinal level and site of lumbar puncture.
  - b) (ii) Surface anatomy of important organs & blood vessels.
  - c) (iii) Identification of models like those of Brain, Heart, embryology, Kidney.

**DEMONSTRATION: -**

1. Fixing, labeling & storage of specimens. - Drawing diagrams & labeling. - Demonstration of models, specimens & skeleton.
2. The microscope, its usage, cleaning & maintenance.
3. Identification of blood cells under Microscope. RBC, various types of WBC, platelets, Reticulocytes.
4. Preparation of anti coagulants.
5. Collection of blood samples to obtain plasma & serum samples.
6. Ruling area of Neubaur chamber.
7. Usage of RBC & WBC pipettes & wintergreen Pipette & Win robe tube.
8. Estimation of Hb, preparation of blood smears, staining.
9. Demonstration of blood pressure recording and pulse.
10. Determination of bleeding, clotting & prothrombin Time.





School of Nursing and Paramedical  
Sciences

DIPLOMA IN MEDICAL LAB TECHNOLOGY (DMLT)  
SCHEME OF EXAMINATION: DMLT-2nd Year

S.No	PAPER	SUBJECT	THEORY	INTERNAL	PRACTICAL	TOTAL
1	DMLTE20Y201	Basic Histology (Anatomy & Physiology)	100	100	100	300
2	DMLTE20Y202	Biochemistry	100	100	100	300
3	DMLTE20Y203	Pathology -I : Haematology & Blood Banking, Clinical Pathology & Parasitology	100	100	100	300
4	DMLTE20Y204	Pathology-II : Microbiology & Serology Histology & Cytology	100	100	100	300
<b>TOTAL</b>			<b>400</b>	<b>400</b>	<b>400</b>	<b>1200</b>

Note -

1. First year institutional /college level theory examinations awarded marks would be consider as Internal assessment marks and candidate have to get min. 50% marks in university theory examination in addition to Internal assessment marks i.e. 100 marks collectively for passing the examination.
2. University Practical examination of 100 max. marks is inclusive of viva and candidate should get separate 50% marks i.e. 50 marks to get pass.



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Established by Madhya Pradesh Nij Vishwavidyalaya (Shiksha Auram Sanchalana) Jharkhand, 2018

School Of Nursing & Paramedical Science

17

# Department of Paramedical

SYLLABUS

DMLT

2 YEAR DIPLOMA COURSE

Year	DMLT 1st Year
Subject	BIOCHEMISTRY
Time	60 Hours (Theory + Demonstration)

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<b>Course code</b>	<b>BIOCHEMISTRY</b>	
<b>DMLTE20Y102</b>		
<b>Pre-requisite</b>	Nil	<b>Syllabus version</b>
<b>Course Objectives:</b>		
<ol style="list-style-type: none"> <li>1. To define biochemistry and explain the major complex biomolecules of the cell.</li> <li>2. To enumerate the chemical structure, classification and functions of proteins, lipids and carbohydrates.</li> <li>3. To comprehend the classification &amp; function of nucleic acids and enzymes.</li> <li>4. To explain the biochemical structure of vitamins, its classification and the functions of vitamins and minerals.</li> <li>5. To list the various hormones, its action and function</li> <li>6. To describe acids and bases, the mechanism of homeostasis and acid base balance.</li> </ol>		
<b>Course Outcome:</b>		
<ol style="list-style-type: none"> <li>1. Students will be able to connect science and technology with society.</li> <li>2. Students will learn to prepare for Group Discussions and thus, be able to perform well in discussions, debates and interviews.</li> <li>3. Examine and analyze the complex nature and seriousness of the patient's condition or extent of injuries to assess the need for advanced emergency medical care, and perform complex medical care based on assessment findings of the patient's condition and/or situation.</li> <li>4. Demonstrate an increased depth and breadth of patient care in the prehospital setting by applying principles from evidence-based research in emergency medicine.</li> </ol>		
<b>Student Learning Outcomes (SLO):</b>		
<ol style="list-style-type: none"> <li>1. Student will be able to demonstrate professional conduct and interpersonal communication skills with patients, laboratory personnel, other health care professionals, and the public.</li> <li>2. Student will be able to utilize computer technology in clinical laboratory data processing, data reporting, and information retrieval.</li> <li>3. Student will be able to integrate patient data to evaluate validity of laboratory test results.</li> <li>4. Student will be able apply basic scientific principles in learning new techniques and procedures.</li> <li>5. Student will be able maintain professional ethics.</li> </ol>		



<b>Unit - 1</b>	<b>15</b>
Biochemistrical structure of the following: Carbohydrates, Proteins , Lipids ,Enzymes.	
<b>Unit - 2</b>	<b>15</b>
Clinical Biochemistry ,Kidney function tests (Renal profile) , Liver functions tests (Hepatic profile)	
<b>Unit - 3</b>	<b>15</b>
Cardiac profile, Lipid profile.	
<b>Unit - 4</b>	<b>15</b>
Estimation of: Blood sugar, Blood Urea, S. Cholesterol.	
<b>Unit - 5</b>	<b>15</b>
S. Uric Acid, S. Creatinine, Diff. S. Enzymes.	
<b># Mode: Flipped Class Room, Case Discussion, Lectures.</b>	
<b>Suggested Reading:</b>	
1. Review of Physiological Chemistry, Harold Harper A, 2. Biochemistry- U satyanarayana 3. Text book of biochemistry- By Vasudevan. 4. Biochemistry – by Lippincott.	
<b>PRACTICAL</b>	
1. Demonstration of Kidney function test. Gastric function test & liver function test. 2. Demonstration of Enzyme Analysis - Acid and Alkaline phosphates, SGOT/SGPT. Lactic dehydrogenase, CPK. 3. Lipid profile. 4. Estimation of Blood/ serum- Glucose, G.T.T. Urea, creatinine, uric Acid, Cholesterol. Bill Rubin. protin & A/G Ratio, Glycosylated Hb. 5. demostration of semi automated, Fully automated Biochemical Analyzers. 6. Demonstration/ Exposure to Radioimmuno assay laboratory. 7. Visit to Laboratory of National Importance.	

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School Of Nursing & Paramedical Science

ज्ञान प्राप्तये लक्ष्यं संधानम्

Established by Madhya Pradesh Nij Veshwavidyalaya (Shejrapur) Avanti, Bhopal under Act No. 20 of 1973

# Department of Paramedical

## SYLLABUS

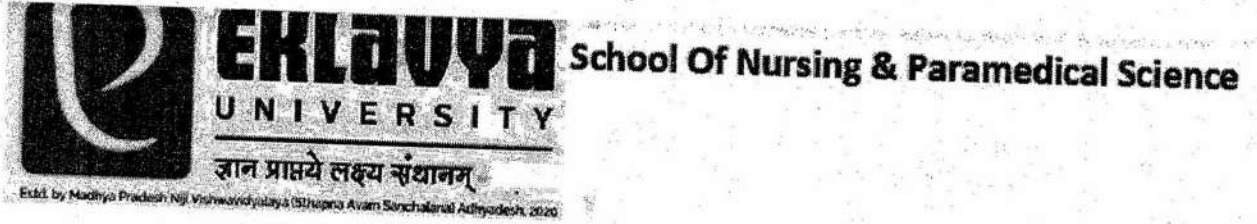
### DMLT

### 2 YEAR DEGREE COURSE

<b>Year</b>	<b>DMLT 1st Year</b>
<b>Subject</b>	<b>PATHOLOGY-I HAEMATOLOGY &amp; BLOOD BANKING CLINICAL PATHOLOGY &amp; PARASITOLOGY</b>
<b>Time</b>	<b>75 Hours (Theory + Demonstration)</b>

<b>Course code</b>	<b>PATHOLOGY-I HAEMATOLOGY &amp; BLOOD BANKING, CLINICAL PATHOLOGY &amp; PARASITOLOGY</b>	
<b>DMLTE20Y103</b>		
<b>Pre-requisite</b>	Nil	<b>Syllabus version</b>
<b>Course Objectives:</b>		
<ol style="list-style-type: none"> <li>1. Students will have knowledge of various investigations required for diagnosis of anemia and leukemia.</li> <li>2. To make students able to perform investigations required for assessment of bleeding disorders.</li> <li>3. To be proficient with applications of cytogenetic studies</li> <li>4. To understand cross-matching and compatibility tests required before blood transfusion.</li> <li>5. To understand Laboratory investigations of haemolytic anemia including classification and causes, Leukemia</li> </ol>		
<b>Course Outcome:</b>		
<ol style="list-style-type: none"> <li>1. Student will be able to understand ABO Grouping and Rh typing.</li> <li>2. Student will be able to understand preparation of reagent cells – A,B,O, IgG coated cells &amp; Papanised cells.</li> <li>3. Student will be able to understand Subgroups of ABO system, MNS grouping.</li> <li>4. Student will be able to develop knowledge of basic pathologic processes and skills needed to interpret laboratory data as well as make clinic pathologic correlations</li> <li>5. Student will be able to promote the development of investigative skills to better understand pathologic processes as they apply to both individual patients and the general patient population.</li> </ol>		
<b>Student Learning Outcomes (SLO):</b>		
<ol style="list-style-type: none"> <li>1. Student will be able to Demonstrate conceptual knowledge in hematology, coagulation, clinical chemistry, immunology, immunohematology, pathogenic microbiology and phlebotomy.</li> <li>2. Perform basic laboratory techniques on biological specimens.</li> <li>3. Student will be able to recognize factors that affect laboratory procedures and results.</li> <li>4. Student will be able to take appropriate action, within predetermined limits, when indicated for resolution.</li> <li>5. Student will be able to comply with safety regulations and universal precautions.</li> </ol>		
<b>Unit – 1</b>		<b>15</b>
HAEMATOLOGY: Composition of blood, Collection of blood & anticoagulants, Hb estimation, TRBC count – ANAEMIAS, Preparation & staining ,blood films, Development of WBCS (Leucopoiesis) Composition of blood.		
<b>Unit – 2</b>		<b>15</b>
TWBC & DWBC count – LEUKAEMIAS, Absolute values, ESR, PCV, Reticulocyte count, Platelet count BT & CT, LE cell preparation, sickling test, osmotic fragility, Bone marrow examination.		

<b>Unit – 3</b>	<b>15</b>
BLOOD BANKING: Blood group – ABO system, Rh typing, Cross matching, Coomb's test, Donor screening, Blood transfusion & transfusion reactions, Blood components.	
<b>Unit – 4</b>	<b>15</b>
CLINICAL PATHOLOGY: Physical, chemical & microscopic examination of urine, Stool examination, Semen examination, CSF exam. & other body fluids.	
<b>Unit – 5</b>	<b>15</b>
PARASITOLOGY: Introduction, Parasites in Blood, stool & Urine.	
<b>Practical</b>	
<ol style="list-style-type: none"> <li>1. Estimation of hemoglobin</li> <li>2. Determination of hemoglobin by colometric method.</li> <li>3. Determination of ESR.</li> <li>4. To study centrifuge machine.</li> <li>5. To study hot air oven.</li> </ol>	
<b># Mode: Flipped Class Room, Case Discussion, Lectures.</b>	
<b>Suggested Reading:</b>	
<ol style="list-style-type: none"> <li>1. Text book of pathology by Mohan Harsh</li> <li>2. Concepts in pathology by Devesh Mishra.</li> <li>3. Rapid review pathology by Edward F. Goljan.</li> <li>4. Pathophysiology by Lippincott</li> </ol>	



## Department of Paramedical

### SYLLABUS

### DMLT

### 2 YEAR DEGREE COURSE

Year	DMLT 1st Year
Subject	PATHOLOGY-II MICROBIOLOGY & SEROLOGY HISTOLOGY & CYTOLOGY
Time	75 Hours (Theory + Demonstration)

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<b>Course code</b>	<b>PATHOLOGY-II MICROBIOLOGY &amp; SEROLOGY, HISTOLOGY &amp; CYTOLOGY</b>	
<b>DMLTE20Y104</b>		
<b>Pre-requisite</b>	Nil	<b>Syllabus version</b>
<b>Course Objectives:</b>		
<ol style="list-style-type: none"> <li>To help students identify &amp; describe Anatomical aspects of muscle bones &amp; Joints.</li> <li>To understand the Anatomical and physiological basis of various clinical conditions e.g. trauma, deformities, pertaining to limbs &amp; spine etc.</li> <li>To understand &amp; describe the mechanism working of different organs.</li> <li>To understand the physiological process at cellular level, functional components and course distribution that help to survive.</li> <li>To enable students identify &amp; describe the source, course and physiology of circulatory system and other functional systems.</li> <li>To Acquired the knowledge of the relative contribution of each organ system in maintenance of the homeostasis.</li> </ol>		
<b>Course Outcome:</b>		
<ol style="list-style-type: none"> <li>Students will learn steps of process of diagnosis are receipt of specimen, grossing, tissue processing, embedding, section cutting, staining, labeling</li> <li>Students will learn all the specimens should be stored in 10% formalin container</li> <li>Students will learn how to receive and handle the surgical specimens.</li> <li>Students will understand the structure of the cell and their constituents.</li> </ol>		
<b>Student Learning Outcomes (SLO):</b>		
<ol style="list-style-type: none"> <li>Students will be able to apply basic scientific principles in learning new techniques and procedures.</li> <li>Students will be able to maintain professional ethics.</li> <li>Students will be able to meet continuing education requirements as a function of growth and Students will be able to maintenance of professional competence.</li> <li>Students will be able to participate in professional organizations to support the profession and constituents served.</li> </ol>		
<b>Unit - 1</b>		<b>15</b>
Microbiology: Classification ,Morphology of Bacteria, Culture & isolation of bacteria, Gram positive & gram negative cocci, Gram positive & Gram negative bacilli, Anaerobic spore bearing bacilli.		
<b>Unit - 2</b>		<b>15</b>
Serology: Antigen & Antibodies, Diagnosis of syphilis - VDRL test, RA test, Diagnosis of Typhoid - Widal test, Elisa test serology: Antigen & Antibodies.		
<b>Unit - 3</b>		<b>15</b>
HISTOLOGY: Fixatives, Tissue processing, impregnation, Block making, Section cutting .Blood components		

<b>Unit – 4</b>	<b>15</b>
Types of Microtome, Basic staining of sections, Collection of tissue for histology , Method of Decalcification.	
<b>Unit – 5</b>	<b>15</b>
CYTOLOGY: Techniques & equipments required, Fixatives & staining procedure, FNAC technique, Pap's staining	
<b># Mode: Flipped Class Room, Case Discussion, Lectures.</b>	
<b>Suggested Reading:</b>	
<ol style="list-style-type: none"> <li>1. Solon on E.A. (2008) Introduction to Human Anatomy and Physiology 3rd Ed. Saunders: St Louis.</li> <li>2. Chaurasia, B.D. &amp; Garg, K., (2012) Human Anatomy Regional and Applied CBS Publications: New Delhi</li> <li>3. T.S. Ranganathan – A text book of Human Anatomy</li> <li>4. Fattana, Human anatomy (Description and applied) Saunder's &amp; C. P. Prism Publishers, Bangalore – 1991</li> <li>5. W. F. Ganong - Review of Medical Physiology</li> <li>6. .Medical Microbiology by Patric R. Murray, Ken S. Rosentel, Michael A. Pfaller.</li> <li>7. Text Book of Microbiology by Chakraborty.</li> <li>8. Microbiology An introduction by Tortora Funk, Case 12ed.</li> <li>9. Mackie &amp; Mc Carthey - Medical Microbiology,</li> <li>10. Ananthansarayana, R., Jayaram Pumkar - Test Book of Microbiology,</li> </ol>	

