

DMLT I YEAR COURSE OUTCOME
SUBJECT–APPLIED ANATOMY AND PHYSIOLOGY

PAPER I

S. NO.	TOPIC	COURSE OUTCOME
1.	Definition Of Anatomy And Physiology	Students shall be understand the definition of anatomy and physiology and their different terms.
2.	Study Of The Structure Of A Cell In General, Cellular Activities And Reproduction	Students shall be understand the structure of the cell and their constituents..
3.	Normal Anatomical Structure, Histology & Functions	Students shall be understand the normal anatomical and their parts and their functions.
4.	Anatomical And Physiological Of The Systems	Students shall be understand the systems of anatomical and physiological characters.

SUBJECT– BIOCHEMISTRY

PAPER II

S. NO.	TOPIC	COURSE OUTCOME
1.	Biochemical Structure Of The Carbohydrates, Proteins, Lipids, Vitamins & Minerals Etc.)	After the completion of this topic students shall be able to understand the various biochemical test & their relation to biochemical variation of pathological conditions. Also know the basic structure, functions & properties. Students shall be understand the classification, functions of human enzymes & normal and abnormal values.
2.	Clinical Biochemistry Of Blood Sugar	At the end of this topic students shall be able to know determination & investigation of sugar in serum. And also know the normal value of sugar in blood.
3.	Clinical Biochemistry Of Liver Function Test	After the completion of this topic students shall be able to know estimation of Bilirubin (Direct & Indirect), SGOT and ALT in serum. And also understand the normal and abnormal values in serum.
4.	Clinical Biochemistry Of Kidney Function Test	After the completion of this topic students should be able to know determination of urea, creatinine, sodium & potassium in serum.
5.	Clinical Biochemistry Of Lipid Profile	Students shall be able to understand the process of determination of cholesterol, triglyceride, HDL and VLDL in serum.
6.	Clinical Biochemistry Of Cardiac Profile	Students should able to know about CPK and the process of determination of CPK.
7.	Clinical Biochemistry Of Different Serum Enzymes	Students shall be understands about determination of serum enzyme including AST, ACP, ALP. Amylase and Lipase in serum.

CLINICAL PATHOLOGY

S. NO.	TOPIC	COURSE OUTCOME
1.	Urine Examination	At the end of this topic students shall be able to determine urine specimen and also understand the normal and abnormal urine properties. Understand the urine specific gravity, normal colour and urine related infections.
2.	Estimation Of Total Albumin, Use Of Dipsticks, Specific Gravity, Litmus Paper Etc.	Students should be able to know total albumin examination for clinical estimation and various type of testing procedure and also know use of litmus paper for estimation of PH in different body fluid and reagents.
3.	Stool Examination	Students shall be able to understand stool examination like their normal colour, thickness and consistency. And also know its examination procedure like microscopy, staining of smear and smear preparation.
4.	Body Fluid Examination	Students shall be understand the different body fluid examination and their morphology, properties and normal value. Also understand the examination procedure.
5.	Differences Between Transude And Exudates	Students shall be understands the definition and function of plasma protein and also know differences between transude and exudates.
6.	Cerebrospinal Fluid	Students should be able to understand definition of CSF, basic properties and laboratory examination procedure of CSF. Also know related diseases.
7.	Semen	Students should be able to understand definition of semen, basic properties and laboratory examination procedure of semen.

DMLT II YEAR COURSE OUTCOME
SUBJECT- HAEMATOLOGY & BLOOD BANKING + CLINICAL
PATHOLOGY & PARASITOLOGY

PAPER I

S.	TOPIC	COURSE OUTCOME
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NO.		
HAEMATOLOGY		
1.	Blood- Composition Of Blood & Anticoagulant, Preparation Of Thick, Thin & Wet Smears And Staining	Students shall be understand the composition of blood and type of anticoagulant and identify the blood smear
2.	Development Of WBC & RBC	Students shall be understand the types of WBCs and its smear, RBCs and identify RBCs in blood smear
3.	Anaemia	Students shall be understand the decreasing condition of blood and Hb and identify the cell in blood smear.
4.	Estimation Of Hb, Trbc Counts, Twbc Count Differential Leukocytes Count, Absolute Eosinophil Count, Platelet Count Etc.	<p>Students shall be understand the various types hemoglobin</p> <p>Understand its introduction.</p> <p>To understand various Hb method like sahils, syanmet,copper sulphar.</p> <p>Understand its principal, procedure.</p> <p>Understand normal range Hb and errors in Hb procedure.</p>
5.	Le Cell Preparation	<p>At the end of this topic students shall be able to understand its introduction.</p> <p>To understand discovery of Le cell.</p> <p>To understand identification Le cell</p>
6.	Bone Marrow- Needles Preparation Of Smears And Staining	<p>Understand its introduction.</p> <p>To understand aspiration and biopsy.</p> <p>To understand smear and blood film</p>
Blood Banking		
1.	Introduction Of Blood Groups And Rh	Understand its introduction

	Types	To understand discovery of blood group system Understand types of blood group Understand to identify types of blood group
2.	Blood Components	At the end of this topic students shall be able to understands the type of blood components and also know the process of separation.
3.	Donor Screening	In this topic students shall be able to know donor screening procedure and also know the types of donor.
4.	Preparation Of Grouping Sera	Students should be able to know procedure of preparation of grouping sera and their various methods. Also understand the types of Sera.
5.	Sterilization Of Different Equipment For Blood Collection	At the end of this topic students should be able to know definition of sterilization, principle and types of sterilization.
6.	Disposable Of Laboratory Waste Material	Students shall be able to understand the various types of waste material, their handling and discarding procedure.

PARASITOLOGY

1.	Introduction And Classification	Students shall be able to understands the role of parasitic disease causing & their laboratory diagnosis as well as general morphology, culture characteristics and classification of parasites.
2.	Parasites In Blood, Stool And Urine	Students shall be able to understand sample handling, transportation & laboratory process of specimen for diagnosis of disease. Students also aware the how to collect different types of specimen in sterilize condition in various bottles and tubes.
3.	Life Cycle And Laboratory Diagnostic	Students shall be understand the different types

	Procedure	of parasite to cause diseases And their morphology, life cycle and laboratory diagnosis to diagnose the intestinal parasitic infections.
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PAPER II

MICROBIOLOGY & SEROLOGY + HISTOLOGY & CYTOLOGY

MICROBIOLOGY		
S. NO.	TOPIC	COURSE OUTCOME
1.	Classification And Morphology Of Bacteria	Students shall be able to classify the Microorganism on the basis of their morphology

		& Diseases.
2.	Culture And Isolation Of Bacteria	At the end of this topic students must should be able to define types of culture media and their preparation methods. Students also know the quality standard procedure to avoid contamination of culture media.
3.	Gram Positive And Gram-Negative Cocci	Students shall be able to know types of bacteria on the basis of gram stain and also know about related infections. Understand the differences between gram positive and gram negative cocci.
4.	Gram Positive And Gram Negative Bacilli	At the end of this topic students shall be able to know gram positive and negative bacilli morphology, basic characters and investigation of related diseases.
5.	Anaerobic Spore Bearing Bacilli	Students shall be differentiate between aerobic, anaerobic and spore bearing bacteria and also know their definition and morphology.

SEROLOGY

1.	Introduction Of Antigen And Antibodies And Reaction	Students shall be able to know basic characters of Ag-Ab reaction and their functions. And also understand the types of reactions. At the end of this topic students shall be able to know principal of Ag-Ab reaction and their interpretation of results.
2.	Diagnosis Of Syphilis	Students shall be able to know investigation of treponema pallidum. And also understand the standard procedure for diagnosis of Syphilis.
3.	R. A. Test	Students shall be able aware the method of investigation and related disease.

4.	Diagnosis Of Typhoid	At the end of this topic student shall be know the causative agent of typhoid and their laboratory diagnosis.
5.	ELISA	At the end of this topic students shall be understand the types of ELISA and their principle and procedure.

HISTOLOGY

1.	Fixative	Students shall be understand the term and importance of fixative. Understand the different types of fixatives.
2.	Tissue Processing, Impregnation, Block Making And Section Cutting	Students shall be understand the procedure and importance of tissue processing. Understand the impregnation technique and block making. Understand the section cutting manual.
3.	Types Of Microtome	Students shall be understand the term of microtome and different types of microtome. Understand the use of microtome in histology.
4.	Basic Staining Of Section	Students shall be understand the procedure of basic staining of section.
5.	Collection Of Tissue For Histology	Students shall be understand the understand the collection of tissue.
6.	Method Of Decalcification	Students shall be understand the term of decalcification and their different types of methods.

CYTOLOGY

1.	Techniques And Equipment's Required	Students shall be understand the techniques and different equipment's in histology.
2.	Fixative And Staining Procedure	Students shall be understand the fixative and staining procedure.

3.	FNAC	Students shall be understand the term of FNAC and technique of FNAC.
4.	PAP Stain	Students shall be understand the PAP stain technique and importance in Histology.