PARAMEDICAL EDUCATION & TRAINING COUNCIL

DMLT: -

DMLT (Diploma in Medical Laboratory Technology), who are desirable to become a professional Laboratory Technician, Medical Technician & Medical Assistant etc. It educates the students about sampling, testing in a laboratory, maintaining the record of the patients.

- ➤ It deals with the chemical analysis of blood fluid like saliva, urine culture, blood cultures, and some culture of ions present in our body.
- ➤ It covers the analysis of invader microorganism in the body of organisms.
- ➤ The courses impart depth knowledge of the culture of the culture of fluids and ions of our body, and truly documentation helps the doctors find specific diseases of the patients.

Eligibility: -

DMLT also known as Diploma in Medical Laboratory Technology is a diploma course for the students. Its Eligibility criteria is-

➤ Passed out 10th & 12th with 50% marks in Physics, chemistry & biology.

Iob Profile: -

- Assistant Lab Technician
- ➤ Head Lab Technician

Skills: -

- ➤ Knowledge of Chemistry Including the safe use & disposal of Chemicals.
- Knowledge of biology & math.
- ➤ To be able to use a computer & main Software Packages Competently.

Course Details: -

DMLT	
1 st Year	2 nd year
Anatomy & Physiology	Biochemistry
Microbiology	Microbiology
Biochemistry	Pathology
Pathology	Social & preventive Medicine

1ST YEAR

Anatomy & Physiology: -

- 1. Introduction
- 2. The Cell
- 3. The Tissues
- 4. Organs And Systems
- 5. Skeletal System
- 6. Joints of The Skeleton
- 7. Blood
- 8. Lymphatic System
- 9. Cardiovascular System
- 10. Respiratory System
- 11. Urinary System
- 12. The Muscular System
- 13. The Physiology of Muscle
- 14. Central Nervous System
- 15. Autonomic Nervous System
- 16. Organs of Special Senses
- 17. Skin And Regulation of Body Temperature
- 18. Digestive System
- 19. Accessory Organs of Digestion
- 20. Metabolism, Diet And Vitamins
- 21. Endocrine System
- 22. Reproductive System
- 23. Process of Reproduction

Microbiology: -

- 1. Morphology And Classification of Bacteria
- 2. Common Staining Technique
- 3. Nutrition And Growth of Bacteria
- 4. Sterilisation And Disinfection
- 5. Bio Medical Waste Management
- 6. Laboratory Safety And Standards Precautions
- 7. Normal Flora of Human Body
- 8. Pathogenesis of Bacterial Infection
- 9. Bacterial Culture Media
- 10. Methods of Isolation of bacteria
- 11. Bacterial Identification Tests

- 12. Antibiotic Susceptibility Testing
- 13. Quality Control In Microbiology
- 14. Streptococcus
- 15. Streptococcus
- 16. Pneumococcus
- 17. Enterococcus
- 18. Nisseriae
- 19. Corynebacterium
- 20. Mycobacterium
- 21. Escherichia Coli And Klebsiella Escherichia Coli
- 22. Citrobacter, Edwardsiella, Enterobacter And Serratia
- 23. Salmonella
- 24. Shigella
- 25. Proteus And Providencia
- 26. Yersinia
- 27. Vibrio And Related Organism
- 28. Pseudomonas
- 29. Haemophilus
- 30. Bordetella

Biochemistry: -

- 1. General Biochemistry
- 2. Carbohydrates
- 3. Carbohydrate Metabolism
- 4. Proteins
- 5. Lipids
- 6. Nucleotides
- 7. Clinical Chemistry
- 8. Enzymes
- 9. Biological Oxidation, Electron Transfer Chain And Oxidative Phosphorylation
- 10. Vitamins
- 11. Minerals
- 12. Hormones

Pathology: -

> Haematology

- 1. Composition of Blood And Normal Erythropoiesis
- 2. Technique of Blood Collection
- 3. Estimation of Hemoglobin
- 4. Hematocrit
- 5. Selection And Registration of Donors

- 6. ABO Blood Grouping
- 7. Erythrocyte Sedimentation Rate (ESR)
- 8. Staining of PBF And Interpretation of Normal And Abnormal Red Cell Morphology
- 9. Maturation And Development of Leucocytes
- 10. Formation of Platelets of Leucocytes
- 11. Formation of Platelets and Thrombocytopenia
- 12. Rhesus Blood Group
- 13. Pretransfusion or Compatibility Testing

Histopathology

- 1. Introduction To Histopathology
- 2. Light Microscopy
- 3. Special Light Microscopy
- 4. Receiving of Surgical Specimens
- 5. Fixation of tissues
- 6. Decalcification
- 7. Tissue Processing
- 8. Embedding
- 9. Microtome
- 10. Hematoxylin And Eosin Staining
- 11. Staining Methods To Demonstrate Special/Specific tissues
- 12. Metachromatic Staining
- 13. Lipid Stain
- 14. Staining Techniques For Demonstration And Identification of Microorganisms
- 15. Cryostat And Frozen Section