

SCHEME OF STUDIES AND EXAMINATION
DIPLOM IN MEDICAL LAB TECHNOLOGY

Ist YEAR

SL NO	SUBJECT	THEORY		PRACTICALS		TOTAL	
		Hours	Marks	Hours	Marks	Hours	Marks
	PART-A						
	1.Communication skill in English	245	75	65	25	245	100
	2. General Foundation Course(Computer applications)	150	50	130	50	245	100
	Vocational subjects PART-B						
	1. Health diseases & environmental health care delivery system &national health policy Hospital organization food & nutrition ,health education &first aid	80	100	120	100	200	200
	2.Anatomy,Physiology,Biochemisty Microbiology and Pathology	80	100	120	100	200	200
	3. clinical Biochemistry	80	100	120	100	200	200
	PART-C						
	On Job training (project work)	----	----	100	100	----	----
	TOTAL	635	425	460	400	1090	750

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SCHEME OF STUDIES AND SYALLABUS
DIPLOMA IN MEDICAL LAB TECHNOLOGY

Paper – I Health, Disease and Environment, Health Care Delivery System & National Health Policy, Hospital Organization, Food and Nutrition, Health Education & First – aid.

THEORY

Time – 80

Hrs.

Health, Disease and Environment:-

Concept of health, Definition of health Concept of Disease: infectious diseases, communicable diseases, non communicable and degenerative diseases, interaction between agent, host and environ ant resulting in health and disease, modes of transmission of communicable diseases-contact, airborne diseases, water born diseases, vector borne diseases, occupational diseases in industrial situation, in agricultural situation, In service and management situation. Environment in relation to health and diseases

Macro-Environment: - Physical-Housing, water, air, heat, radiation. Biological – Microbes, arthropods, animals, with special reference to zoon sis, Role of biological environment for maintenance of health. Social-Community, family, social stratification, socio-economic status and health, interrelationship between education & health leadership

Micro-Environment:- Immunity and immunization, training in personal hygiene, application of principles of diet and nutrition at the family level.

Prevention and Control: Intervention programmes at the individual, family and community level: intervention programmes centering around physical environment.

Macro environment:- Physical – Housing, improvement in water quality, control of pollution of stream and water sources, atmospheric pollution control, sanitary

disposal as recycling of community wastes, Biological Vector control. Social – Community organization for utilization of existing health devices.

Micro-environment: Intervention at the family level with special reference to food and nutrition practice, hygiene practice in the family, child feeding and clearing practice, house keeping and accident prevention. Intervention at the individual level: Personal hygiene, correction of postural defects, behavioral changes like smoking, food habits, dieting habits, alcoholism, drug addiction, sexual promiscuity.

Intervention at the working environment: Avoidance of organizational related, equipment related, process related and product related risks, safety measures, periodic medical examination first – aid.

Health Care Delivery System and National Health Policy

Health Care Delivery System: Primary health care, secondary health care, tertiary health care, primitive health care, preventive health care, curative health care, rehabilitative health care.

Concepts of: Social medicine, Socialized medicine, preventive medicine, community medicine, public health. Health policy in India Organization of health care delivery system:-

- (i) Village level – Trained birth attendants, village health guides, anganwadi workers.
- (ii) Sub-centre level-Female health workers, male health workers and their functions.
- (iii) Sectoral level – Male health supervisors, female health supervisors.
- (iv) Primary health center – Organization, staffing and functions.
- (v) Community health centre – Organization, staffing and functions.
- (vi) Sub-Divisional level – Sub-divisional hospital.
- (vii) District level – District health organization, staffing and its functions.
- (viii) State level – Health department, Directorates.
- (ix) National Level: (a) Ministry of Health – Govt. of India. (b) National Health programme (c) Referral and Apex health institutions and Laboratories.

Hospital Organization (Administration)

Management functions and its application; Hospital – definition (W.H.O.) Types of Hospital (Govt. Private, voluntary organization etc) Hospital services (O.P.D.) /Indoor/Emergency Intensive care unit) Returns, reports and records in hospital, (Indents books, registers, log books, etc.) Hospital and the community-hospital hazards

Food-and Nutrition

Elementary ideas of nutrition, Basic knowledge of vitamins, hormones and trace elements with deficiency diseases, Nutritional disorders

Health Education

Personal hygiene; Aim and objectives of health education, Communication media

First aid

Definition; Simple first aid and kit material etc; Shock, coma and its management; Control of bleeding Splinting a patient; Transportation of injured, Immediate first aid to drowning patient.

Paper – I

Health, disease and environment

Assessment of sanitary quality of water Chlorine demand of water Disinfection of water (well) by use of bleaching powder Use of chlorine tablet for disinfection of water in small container Demonstration of Dry and wet bulb thermometer, katab thermometer, maximum-minimum thermometer for comfort condition.

Field work: - Survey of a village with respect to the following social and environmental aspects: - Population (Grouping of Age, Sex, Occupation) Prevalence of disease, Food and nutrition practice, Awareness of cause of the diseases: Diarrhea, Measles, Night-blindness, Angular stomatitis Fever, Scabies. Awareness of health services available: Village level workers, sub-centers, primary health centers, other local practitioners Immunization status. Waste disposal practice including human excreta. Sources of water, their collection, storage and use (A Performa to be designed by the teacher and given to groups of student for collection of data and subsequent analysis)

Health Care Delivery System and Hospital Organization:-

Field visits to: A subcentre, Primary health centre, Community health centre, District hospital/medical College. Hospital OPD and dispensing section, Indoor ward, Casualty, Intensive care unit, blood bank, Clinical laboratory, Immunization centre, Kitchen, Hospital refuse, Disposal, Rehabilitation centre, Central sterilization, Record section.

Medical Collage: Anatomy museum, Physiology laboratory, Pathology museum.

Food and Nutrition:-

Identification of the following food items and their nutritive value: Cereals, pulses, egg, milk, fruits, green and leafy vegetables, nuts, fish, meat, fats & oils, Demonstration of different physiological states, such as adult (hard work and sedentary work) pregnant mother, pre-school child and children.

First Aid:-

Identification of first-aid kit and its contents, Different types of bandaging and splinting

Paper – II Anatomy, Physiology, Biochemistry, Microbiology and Pathology

THEORY

Time 801 Hrs.

Anatomy

General introduction to human anatomy Definition of anatomy, definition of topographic term/terms used to describe the body. Cells and tissues of body Anatomical description of – Skin, Osteology (bone, structure, individual bones), Joints structure, joints of upper and lower limbs. Ligaments, fascia and bursae, Musculoskeletal (upper and lower extremities), Cardiovascular system, Lymphatic system (structure, function, Endocrine glands), Respiratory system (respiratory passages and organs), Digestive system (elementary canal structure) Urogenital system (male and female organs, kidney structure) Endocrine system

(names, location and function) Sensory organs (eye nose and ear), Central nervous system.

Physiology

Functions and mechanism of Digestion, Respiration, Circulation, Nervous system, Role of endocrine glands, physiology of Time regulation Physiology of blood, Reproduction (Urogenital system), Vision, hearing and speech.

Biochemistry

Definition of Biochemistry – Elementary ideas/overview of general metabolism of Carbohydrates Lipids, proteins, different types of enzymes and their functions

Microbiology

Microscope and Microscopy – Introduction, micro organism, classification, epidemiology, sample collection transportation and preservation,

Pathology

Introduction to pathology, definition, etiology and classification of Inflammatory Neoplastic, Metabolic, congenital

Paper – II

PRACTICAL

Time – 120 Hrs

Anatomy

Demonstration of surface marking of organs:- Heart, Lungs, Spleen, stomach, important bony Landmarks, arteries, veins, nerves, joints, Arteries – carotid, brachial, medial, anterior, tibial Veins – jugular, cubital femoral, safenous Nerves – posterior, auricular, ulnar, lateral populatio and sciatic. Bony Prominences - clavicle, anterior iliac crest posterior iliac crest, suprasternal notch sternum ribs, vertebral column, anterior & superior iliac spine, pubic – symphysis, medial and lateral malleolres, patella tibial tubercle, Joints and their movement ball & socket joints, shoulder and hip joint hing joint elbow and knee joint Study of microscope: Simple & Compound – Their different parts and functions. Identification of cells and basic tissues Cell (examination of buccal mucous scraping) skin connective bone, cartilage nervous tissue, Muscle-skeletal (striated & non striated) and cardiac muscles. Identification of long bones, hip bones, vertebra, ribs, scapula, mandible, clavicle, skull, Demonstration of the interior of thorax with organs in situ (In model) such as lungs trachea heart aorta and venacava, esophagus diaphragm Demonstration

of CRO technology for investigation of interior of abdomen with organs in situ such as stomach Live spleen pancreas, gall bladder, intestine, colon and kidneys, ureter and pelvic organs such as urinary bladder, rectum, In females-ovaries, fallopian tubes, uterus & vagina, In males-tests, vass deference, seminal vesicles, prostate, urethra, penis. Demonstration of brain spinal cord and spinal nerves, (Demonstration of organs should be done in models supplemented by visit to anatomy museum of medical College. However it must be supplemented by dissecting frog/rabbit/guinea pig

Physiology

Study of microscope (already covered in anatomy) Preparation of blood smear, Leishman's staining, identification of R.B.C. different types of W.B.C. and differential count of W.B.C. Pulse recording temperature recording respiration recording and maintenance of T.P.R. chart, effect of exercise on T.P.C. (this may be done amongst the class students themselves). Demonstration of blood pressure instrument (mercurial type) and recording of blood pressure

Pathology

Visit to Pathological Museum.

Biochemistry

Familiarity with laboratory glassware's, basic techniques like methods of measuring liquids methods of weighing cleaning of glassware's separation of solids from liquids.

Paper – III

Clinical Biochemistry

THEORY

Time – 80 Mrs

Analytical Biochemistry and Instrumentation

Aim and scope of biochemistry analytical biochemistry, definition of solutions, methods of expressing concentration dilution problems specific gravity

Instrumentation

Analytical balance centrifuges colorimeter and spectrophotometer flame photometer chromatography, electrophoreses, blood gas analyzer lophilyser photometry_{T₃}._{T₄} TSH estimation apparatus.

Metabolism

Carbohydrate metabolism-Glycols is and TCA cycle Glycogen metabolism Glucogenesis Blood glucose homeostasis, measurement of blood glucose Glucose tolerance test Deabetes mellitus, Renal glycosuria. Lipid metabolism-Steroids-

cholesterol, triglycerides, lipoproteins Protein metabolism – Formation of urea, creatinine proteinuria edema transaminase precipitation of protein

Water and mineral metabolism
Bad water, bicarbonate and ph, calcium phosphorus, sodium, chlorine, iron, iodine, Hormones-functions of some important hormones, Inborn cases of metabolism some examples.

Organ function tests
Renal function tests Urine – normal constituents' abnormal constituents, 24 hour collection, preservation, physical characteristics, clearance tests, live function tests gastric function tests biochemical tests on CSF pancreatic function tests.

Clinical enzymology and organization
Clinical enzymology-Enzymes and co-enzyme, principles of enzyme activity determinations principles of important serum enzymology (Phosphatases, Transeferases Glycosylated enzymes Lactic dehydrogenase, creatinine kinase), Clinical application of serum enzymes Organization Collection and transportation of specimen quality assurance in clinical biochemistry automation use of kits and cost control.

Paper III

PRACTICAL

Time – 120 Hrs

Diagnostic test on urine Normal constituents:-

- (a) Qualitative test for Urea, Uric acid, Creatinine, Calcium, Phosphorous, Sodium, Potassium and Chloride.
- (b) Titrable acidity and ammonia.
- (c) Urea clearance and Creatinine Clearance.

Diagnostic test on Blood

- (a) Collection and preservation of blood serum and plasma.
- (b) Determination of blood glucose.
- (c) Glucosetolerance test.

Non-protein nitrogenous compounds Determination of serum urea, uric and creatinine.

Determination of serum proteins and A.G.ratio serum electrophoreses and zinc sulfate turbidity test.

Serum electrolytes

Determination of Na⁺,K⁺,and Cl.

- (a) Determination of Inorganic Phosphorous.
- (b) Determination of calcium.

Serum Enzymes:-

- (a)Determination of transaminases (GOT and GPT)
- (b)Determination of Phosphates (Alkaline phosphates and Acid Phosphatase)
- (c) Determination of amylase.

Serum Bilirubin: Determination of total and direct bilirubin

Serum Lipids: Determination of serum Cholesterol

Liver function tests Kidney function tests.

Diagnostic test on other body fluids

Class – XI

Microbiology and Parasitology

THEORY

Time – 80 Mrs.

Introduction to Microbiology and Basic Laboratory Requirements

Introduction to Microbiology: Definition and Scope, Microbes and their classification Bacteria – structure nutrition and growth requirements bacterial toxins and enzymes, bacterial infection bacterial studies, Laboratory Requirements: Requirements and uses of common laboratory equipments- Incubator, Hot air oven, water bath, Anaerobic jar, Autoclave Vacuum pump Media pouring chamber, Refrigerator, Inspirator, Centrifuge, Microscopy principle-operation care and use of microscope, sterilization and disinfection: Physical chemical and mechanical methods, disposal of contaminated media, sterilization of media syringes, glassware, apparatus, Culture media, their preparation and use, Collection of clinical materials for microbiological investigations: Do's and Don't for the technician.

Laboratory Investigation in Bacteriology

Methods for laboratory investigation Hanging drop preparation Stained preparation Simple Gram, Silt Neelsen, Albert Spore stain, Negative stain, Making a sterile transfer, Different techniques of inoculation and isolation of bacteria, Culture of various clinical specimens in the laboratory, Anaerobic cultivation Identification of bacteria cultural characters, biochemical reactions and serotyping, Antibiotic sensitivity tests, Bacteriological examination of water, Bacteriological examination of milk.

Identification procedure of different bacteria

Gram positive Cocci: Staphylococcus, Streptococci, Pneumococci.
Gram negative Cocci : Corynebacterium diphtheriae, Mycobacterium tuberculosis, Mycobacterium Leprae, Clostridium (the anaerobic spore-bearing bacilli)
Gram negative Bacilli : (a) Aerobic and facultative anaerobic : Enterobacteriaceae, Escherichia Coli, Salmonella, Shigella, Klebsiella, Enterobacter, Proteus group, Other-Brucella, Bordetella, Haemophilus (b) Oxidase positive glucose fermenters : Vibrio cholerae (c) Glucose oxidizers; Pseudomonas; Spirochetes-Treponema, Leptospira, Borrelia.

Virology and Serology:-

Classification, General Properties, Cultivation and Pathogenicity of viruses
Immunity, antigens, antibodies and antigen-antibody reactions and their application in the diagnosis of diseases
Principles procedure, diagnostic significance of agglutination, precipitation, neutralization and complement fixation reactions, principles and classification of hypersensitivity reactions; Vaccines – Classification and uses of vaccines.

Parasitology and Mycology

Morphology, life cycle, pathogenicity and laboratory diagnosis of E. histolytica , E. coli, Giardia, Trichomonas, Plasmodia, Leishmania, Hook worm Round worm,

Whip worm, Tape worm, Thread worm, Echinococcus granulosus, Dracunculus, Wacheria bancrofti; Preservation of stool culture-Principles and Procedures, Morphology and Cultivation of Pathogenic fungi-Candida, Aspergillus, Dermatophytes.

Paper – IV

PRACTICAL

Time 120 Hrs

Personal safety precautions, Emergency treatment for accidents

Care and cleaning of glass wares, syringes, apparatus, preparation of Pasteur pipettes and sealing of ampoules, Operation of autoclave, incubator, water bath, Ph meter, seitz filter, lovibond Ph comparator, vacuum pump, Operation of anaerobic systems; Sterilization packing, loading of materials in autoclave, hot air oven, inspissator, Handling and care of microscope, handling feeding breeding of laboratory animals, Cleaning of cages, postmortem and disposal. Preparation of various media-pouring and storage, Hanging drop method, Collection of clinical materials-blood urine stool swabs etc, Receipt and recording of specimens in the laboratory and dispatch of specimen to reference laboratory, Z.N. Stain, Grams stain, Albert stain, Spore stains, Capsule staining, Leishman and Geimsa stain, Inoculation of clinical materials into media, Isolation of organisms in pure culture, morphology, cultural characters, identification and biochemical reactions of common microorganisms and slide agglutination tests, Bacteriological examination of water milk and air, Antibiotic sensitivity tests, Disposal of contaminated materials, Preservation of stock culture, Fungal examination by wet smear and culture, Virology: Incubation of fertile eggs and inoculation by various routes, Serology: Widal, VDRL, Brucella Agglutination test, RIA test, CRP test, ASO test, Poul Bunnell test, Gel diffusion, Immunoelectrophoresis, Weil Felix test, Preparation of Salmonella for widal test, Collection, preservation and transportation of faecal materials for examination of parasites, Preparation of stained and unstained faecal material for parasites. Concentration techniques of stool Preservation of parasites Identification of ova and cyst in stool

Paper – V

**Clinical Pathology, Hematology, Immunohaematology
And Blood Banking Technology**

THEORY

Time – 80 Mrs.

Clinical Pathology

Urine analyses: Normal constituents, physical examination, Chemical examination, Microscopic examination.

Faecal analyses: Normal constituents, abnormal constituents.

Sputum analysis: Physical examination, Microscopic examination, Chemical examination.

Semen analyses: Physical properties, Motility, Morphology,

Hematology

Introduction to hematology; Collection of blood; Anticoagulants

Red cell count – Haemocytometer, Methods, Calculation

White cell count – Methods, Calculation

Differential white cell count – Morphology of white cells, Normal values, Romanosky stains, staining procedure, counting methods

Absolute eosinophil count – Erythrocyte sedimentation rate; Wintergreen's method; Wintrobe's method, factors affecting ESR, Importance and Limitations, Normal values

Packed cell volume (Haematocrit) – Macro and micro method, Normal values

Hemoglobin estimation – Colorimetric methods, Chemical method, Gasometric method, S.G. methods Clinical importance

Red cell indices – Calculation and importance

Reticulocyte count – Methods, Appearance, Normal values

Sickle cell preparation

Osmotic fragility test-Screening test, Quantitative test, Normal values, Factors affecting fragility, Interpretation Morphology of normal and abnormal red cells

Preparation of bone marrow smears.

Coagulation test-Process of coagulation, Factors of coagulation, Tests of coagulation, Bleeding time, Whole blood coagulation time, Clot retraction test, Prothrombin time, Tourniquet test, Platelet count.

Immunohaematology and Blood Banking Technology

Introduction and historical aspect, Human blood-group antigens-their inheritance, antibodies and secretors

ABO blood group system: sub groups, source of antigens, types of antibodies.

Rh blood group system: Nomenclature and types of antigen, mode of inheritance, types of antibodies

Other blood group system: Techniques of grouping and cross matching.

Coombs test: Direct and indirect test, titration of antibody

Blood transfusion procedure, Complications of blood transfusion: Types, investigation and prevention of transfusion reaction, Hemolytic disease of newborn and exchange transfusion

Blood collection: Selection and screening of donor, Collection of blood, various anticoagulants used, Storage of blood, Cell separator and transfusion of various components of blood, Organization, operation and administration of blood bank.

Paper – V

PRACTICAL

Time – 120 Hrs

Clinical pathology

Stool examination for ova, cysts, amoebae, exudates, fat globules, Routine urine analyses, Sputum analyses, Semen analyses.

Hematology

Microscope-use, care, maintenance, Hemoglobin estimation-Sahli's RBC count, WBC count, Differential count, Reticulocyte count, Platelet count, Total eosinophil count, Bleeding time and clotting time, Examination of blood smears for malarial parasites, Using of Haemogram analysis.

Immunohematology and Blood Banking Technology

ABO Grouping-Slide technique, Tube Technique, Cross matching- Methods of major and minor cross matching,

Rh typing – Rapid tube test, Saline Anti D, One stage albumin technique, Two stage albumin technique, Coombs antihuman globulin technique.

Coombs test – Direct comb < Indirect comb,

Donor screening and Selection – Identification, Hemoglobin estimation, Ruling out transfusion transmission diseases, grouping and typing of donors blood.

Drawing of blood: Aseptic, Reassurance, Vein puncture and collection Care of donor

Blood Storage – Anticoagulants preparation, Recording the details and storage of blood, Maintenance, cleaning of various equipments used in blood bank.

Paper – VI

Histotechnology, Laboratory Management and Ethics

THEORY

Time – 80 Hrs

Histotechnology

Introduction; Cell, Tissue and their function, Methods of examination of tissue and cells, Fixation of tissue: Classification of fixatives, Simple fixatives and their properties, Microanatomical fixative, Cytological fixatives, Histochemical fixatives, Tissue Processing: Collection of specimen, Labeling and fixation, Dehydration, Clearing, Impregnation, Embedding, section cutting, Microtome and microtome knives, Techniques of section cutting, Mounting of sections, Frozen section, Staining, Dyes and their properties, Theory of staining, Staining technique with haematoxylin and eosin Mounting of sections, Common special stains, Decalcification Fixation, Decalcification, Detection of end point, Neutralization and processing Exfoliative cytology: Types of specimens and preservation, Preparation and fixation of smears, Papanicolaou fixation, Preservation, Presentation, Autopsy technique: Assisting in autopsy, Preservation of organs and processing of the tissue, Waste disposal and safety in laboratory.

Laboratory Managements and Ethics

Role of Laboratory in health care delivery: General, Human health and diseases, Types of diseases, Process of diagnosis, laboratory at different level, Duties and responsibility of personnel

Laboratory services in the health care delivery system in India, Laboratory services in India, The health administration system in India, At the National level,

State level, District level, Village level, Voluntary health organizations in India, Health programmers in India.

Laboratory Planning: General principles, Laboratory goals, Operational data, Market potential, Hospital/Laboratory relations, Competitions, Laboratory trends, Planning at different levels, Guiding principles for planning hospital/laboratory services, Factors, Guiding principals for planning, Functional criteria, Operational demand, dictions of a hospital/laboratory, Common areas, Design aspect, Space requirement, Planning for a basic health laboratory.

Laboratory organization: General principles, Components and functions of a laboratory, Staffing the laboratory, Job descriptions, Job specifications, Work schedule, Personnel rearrangement and work load assessment, Care of laboratory glassware equipments and chemicals, General principles, Care and cleaning of glassware's, Making simple glassware's in the laboratory, Care of equipments and apparatus, Laboratory chemicals, their proper use and care, Proper storage and labeling.

Laboratory Safety: General principles, Laboratory hazards, Safety programme, First aid, Safety measures-mechanical, Electric Chemical, Biological, Radioactive

Communications: Personnel, Development and Relations: General Principals, Inter departmental communications, Public relations: Patients, Physicians, Nursing staff, Sales representatives, other personnel, request/Report forms, Continuing education-Method, evaluation and selection.

Quality Control: General principles: Non-analytical functions-Request specifications, specimen specifications. Distribution of tests, Analytical functions-Method, Equipment, Reagents and materials, Controls, Proficiency testing

Paper – VI

PRACTICAL

Time – 120 Hrs

Histotechnology

Fixation, processing, embedding and section cutting and preparation of slides, Sharpening of the knife, Preparation of fixatives and decalcifying fluid, Preparation of adhesives to fix the section to the slide, Preparation and fixation of cytology smears and papanicolaous staining techniques.

Laboratory Management and Ethics

Cleaning of glassware's (pipettes, Slides and Coverslips, Syringes and Needles, Blood cell counter, diluting pipettes, glassware used for bacteriological investigation). Making simple glass items in the laboratory (Pasteur pipette, stirrer, bending glass tube and preparing a wash bottle) Demonstration of use and care of instruments, precautions to be taken, Demonstration of safety measures during work in laboratory in various fields, Demonstration of safe handling of specimens of infectious agents including HBS (hepatitis – B) and AIDS

8.ON-THE-JOB TRAINING SITES

Sites:

1. Primary health centers
2. Dispensaries
3. Sub divisional hospitals (taluque)
4. Divisional H.Q. hospitals
5. Medical colleges/teaching hospitals
6. Private hospitals/ NGO's hospitals
7. Private Labs.
8. University Departments
9. Private training institute

Syllabus:

1. Primary Health centers and/ or Dispensaries
Here only elementary and essential minimum investigations like the following are done generally.
Urine for sugar & microscopic exam of ketone bodies, bile salt & pigments, Blood – haemogram Stools for ova cysts and parasites, Sputum for AFB. Gram staining hanging drop preparation etc
Training with demonstration of the above with emphasis on minimum essential investigation under very few hospitals in the peripheral hospitals Demonstration of peripheral health care facility
2. Sub-Div Hospitals:
All the above and the following should be done here
Urine: Chloride etc. Blood – blood sugar, GTT, blood urea, etc, Blood banking – there would be only one lab Training with demonstration of all the investigation and other lab activities, done at a middle level hospital.
3. Dist H.Q. hospital:
It would be almost the same as at sub-div. hospital, Emergence lab. Facilities would be available. Training will be given in provident emergence lab support.
4. Medical colleges, teaching hospitals & corporate hospitals under NGOs
Apart from all the tests, the rest, complete training with facilities to do all the modern and latest investigations as well as sophisticated ones.
5. University departments would be suitable for training in the relevant and in handling different sophisticated instruments & apparatuses.
6. Private Labs/Private Training Institutions etc. can provide facilities for all the relevant investigations for the training