

LOKMANYA MEDICAL RESEARCH CENTRE'S INSTITUTE OF HEALTHCARE TECHNOLOGY AND INFORMATION

Recognised as Scientific & Industrial Research Organisation, Govt.of India

Certified by International Accredited Organisation / ISO Certified Institute: ·ISO 9001: 2015 (QMS)/·ISO 18001:2007 (OHSAS) / ISO: 14001:2015 (Environmental Management System)

PROSPECTUS 2020-2021



Get skilled in job oriented paramedical health care technology Hand on Training in 250 bedded ultra-modern chain of Lokmanya Hospitals

Lokmanya Medical Research Centre's, Institute of Healthcare Technology & Information 314/B, Near Chinchwad Railway Station, Chinchwad, Pune. 411033. Maharashtra, India. Phone: 020- 46606800/01/2, 9370479379.

Email: contactlmrc@lmrc.in Visit us: www.lmrc.in

LOKMANYA MEDICAL RESEARCH CENTER'S INSTITUTE OF HEALTHCARE TECHNOLOGY AND INFORMATION

(Affiliated to: Institute Of Paramedical Technology, New Delhi.)

GET SKILLED IN HEALTH CARE TECHNOLOGY

FOR JOB ORIENTED PARAMEDICAL COURSE

UURSES UPPERED	SEATS
Diploma In Medical Laboratory Technology	30
• Diploma in Medical Assistant	10
• Diploma In MRI Technician	20
• Diploma In CT Scan Technician	20
• Diploma In X Ray Technician	20
• Diploma In Cath-Lab Technician	10
Diploma In Operation Theater Technician	10
• Diploma in Accident & Emergency Care Technology (One Year)	10
 Diploma In Physiotherapy Assistant 	20
 Diploma in Echocardiography Technology (One Year) 	10
 Diploma in Dialysis Technology (One Year) 	10
• Certificate course in Phlehotomist (Three months)	10

COURSE DURATION: 1 YEAR & 6 MTHS INTERNSHIP

FOR 12TH / Under Graduate \ Graduate from Science Stream

Hand on Training in 250 bedded ultra-modern chain of Lokmanya Hospitals

FOR MORE DETAILS CONTACT:

LOKMANYA MEDICAL RESEARCH CENTER 314/B, near Chinchwad railway station, Chinchwad, Pune. 411033 020 - 46606887 \ 9370479379 (Working Hours only 10 Am to 5 Pm)



LOKMANYA MEDICAL RESEARCH CENTRE'S

LOKMANYA INSTITUTE OF HEALTH CARE TECHNOLOGY AND INFORMATION



MASSAGE FROM:

Dr. V.G. Vaidya, Managing Trustee

Healthcare is one among India's largest sector in revenue generation and creation of employment opportunities and it has witnessed phenomenal growth thanks to heavy investments both by public and private players. The FDI also has played a crucial role in catapulting the healthcare sector.

Paramedics are the key players in the Health & Medical Industry. Without paramedics, the entire Health Industry is out of gear and is almost non-functionary.

India will require more than 2,50,000 medical lab. Technician / Para Medical staff / Multipurpose health worker will be required in hospitals / PHCs / Nursing homes. However, there is a great shortage of skilled Para-medical staff is essential to run such institutions. Thus the field of paramedical sciences is gaining ever increasing importance and demand, offering lucrative careers in the health sector.

A Paramedic is a Professional who helps the Doctors in specialized areas and facilities for better diagnosis, treatment and therapy. The increase in number of patients, variety of diseases and the demand for huge treatment have paved the way for paramedical professionals who are expert technicians or therapists providing better quality towards Human Health Care.

Lokmanya Medical Research Centre's Institute of Healthcare Technology and Information is immensely contributing to the health sector over more than three decades by offering health sector skill development education and research.

LMRC offers various paramedical courses in different streams which helped in raising the living standard of the poor students, to earn their bread in a respectable environment and to serve the human beings through their act and deed.

We also support and initiate the Pradan Mantri Kashual Vikas Yojana to equip the Indian youth with vocational skill based training education and research in healthcare industry.

We promote all round development of the students with special emphasis on Human, Moral, Psychological, Cultural, Intellectual and Spiritual aspect which is required to prepare modern professionals who are contributing citizens.

I remain with a quotation from Swami Vivekananda "We want that education by which character is formed, strength of mind is increased, the intellect is expanded and by which one can stand on one's own feet".

With Best Wishes

Dr. V. G. Vaidya Managing Trustee



LOKMANYA MEDICAL RESEARCH CENTRE'S

LOKMANYA INSTITUTE OF HEALTH CARE TECHNOLOGY AND INFORMATION



DIRECTORS MASSAGE

Dear Candidates

Lokmanya Medical Research Centre's. Lokmanya Institute of Paramedical Technology, under the aegis of Institute of Paramedical Technology, New Delhi is offering various Health Sector skill development Para medical courses in various disciplines and equipping with qualified Para medical personnel's to various hospitals and medical centers.

Our endeavor and perseverance are guided by our vision to transform the lives of our students, through consummate education and training, in their journey of discovery, understanding, awareness and perfection of cutting edge knowledge, skills and competencies.

Our Institutes have state of the art infrastructure, facilities, ambience and organizational culture to nurture your thinking and understanding in your pursuits to perfect your professional knowledge and competence.

Our dedicated team of faculty is committed to the task of ensuring that our students are well trained to meet the demanding challenges of their chosen profession in the competitive world.

We look forward to welcoming you to Lokmanya Institute of Paramedical Technology.

With Best Wishes,

Director

Lokmanya Institute of Paramedical Technology

LOKMANYA MEDICAL RESEARCH CENTRE

Lokmanya Medical Research Centre is a non-governmental, not for profit organization established in the year 1985; engaged in socio-medical initiatives focusing in the area of Healthcare, Health Education, and Sustainable Development Goal Programme. LMRC are registered under Public Charitable trust (F/2871/Pune-12/07/1985), and registered under Society Act (Maharashtra /1984/85/Pune). LMRC is recognized as a Scientific and Industrial Research Organization (SIRO) by Department of Scientific and Industrial Research (DSIR), Govt. of India, LMRC is certified by International Accredited Organisation (IAO) and, ISO Certification body ISO 9001: 2015 (Quality Management System)/·ISO 18001:2007 (Occupational Health and Safety Assessment Series) and ISO: 14001:2015 (Environmental Management System). The National Safety Council, Mumbai has recognized Lokmanya Medical Research Centre as a "Centre for Occupational Health & Safety".

LMRC is a multidisciplinary Scientific Research & Education organization established with an objective of translating research into interventions that will extend quality health and lifespan. Our work is driven by a few guiding principles: Multi-disciplinary intervention approach, linking services with evidence based research, Inter-sectorial collaboration, engaging Participatory methods and scaling up programs.

The educational institutions of Lokmanya Medical Foundation & Research Centre providing value-based medical education where the highest human qualities of empathy, compassion, dedication and sincerity are instilled; which include the Lokmanya Institute of information and Paramedical technology offering Medical educational programmes both at under Graduate and Post Graduate levels.

LMRC is Recognize by Institute of Paramedical Technology, New Delhi to conduct cutting-edge Diploma courses in Paramedical Technology.

The organization has all the research and training infrastructure required for training & capacity building through conference, seminar, and workshop as well as experienced Medical staff and research staff which include Medical Experts, Occupational & Environmental safety experts, Sociologist, Economist, Clinical Psychologist, Counselors, Holistic Experts, Yoga therapists, Social workers & Outreach and also to implement projects in whole of Maharashtra & India.

Mission

 Our mission is to make health for all a reality by promoting, preventing and providing health care, by conducting basic, applied and extra mural research in health care; by advocating for the rights of all people at all stages of their lives, and by creating an environment conductive to wholesome living.

Our Vision

- Promotion of positive health, prevention of diseases, early diagnosis-treatment and follow up of disease and provision of healthful environment.
- Promote health in its holistic sense including its economic, social and spiritual dimensions.
- Identifying present and futures trends in health, new and emerging disease patterns and seeking joint actions with likeminded organizations to meet those needs
- Provide and create a platform to share information and experiences and enhance cooperation in health education and research
- Foster partnership between NGOs, Government agencies, International Agencies and other public and private organizations for undertaking action-oriented studies.

Our Values

Innovation : We continually look for opportunities to improve our organization
 Teamwork : We drive success by our commitment to effectively working together.

Excellence: We are committed to superior service and quality care.
Kindness: We honor and respect others with our words and actions.

• Ownership : We take personal responsibility for all aspects of organizational success.

Our Objectives

- To undertake Scientific Research in the area of Bio-Medical Sciences.
- To establish, operate, promote, maintain and conduct or assist research laboratories and institutions engaged in advancement of scientific research pertaining to Occupational Health, Industrial Safety, Environmental Health and Research in indigenous Medicinal Plants.
- To provide research facilities for carrying out basic and applied research, to conduct experiments and to undertake and carry on research in concerned systems and disciplines
- To conduct experiments and to undertake and carry on research, experiments and tests related to concerned research discipline.
- To promote, develop and improve scientific exchange of knowledge as well as technical cooperation between research institution with similar interests and objectives.
- To give advice on, publish and/or otherwise promote utilization of research results in the fields.
- To make available to other techniques and materials developed as a result of research
- To conduct conferences, refreshers courses, lectures, seminars, demonstrations and exhibitions relating to the research done, knowledge generated and results obtained.
- To print, publish, exhibit, subscribe and support periodicals, books, pamphlets or posters that may be considered desirable for the promotion of the objectives of the society.
- To acquire, build, hire, maintain, and research laboratory and related facilities and to equip those with amenities considered necessary for the proper discharge of the functions of the society.

GENERAL INSTRUCTION

- 1. As per the policies of the institution the admission is provided to limited number of students to provide them good quality of education in their respective fields for which the admission is only provided to the selected candidate only after approval by the selection committee after conducting face to face viva/interview with the candidate.
- 2. Rights of ADMISSION Reserved with the Institute Management. Management reserves the right to reject any application for admission, cancel any confirmed admission or even rusticate the student in the middle of the session / academic year with the approval of the president / management of the institute, thereby without assigning any reason for the same.
- 3. **CERTIFICATE: The** certificates are awarded by the Institute of Para Medical Technology, New Delhi and Lokmanya Medical Research centre, Chinchwad.
- 4. The duration for all the Diploma Courses is One / Two academic Years excluding Six Months Internship (without stipend) at potential hospitals as per rules and regulations of the related hospital.
- 5. Each academic year starts from July and ends in May next year.
- 6. Candidates seeking admission to Paramedical courses should submit the application form (online \ Offline) with necessary enclosures which should reach:- The Director, Lokmanya Medical Research Centre, Chinchwad, Pune 411033. on or before 31 June up to 5.00 p.m.
- 7. Admission Procedure:
 - a. The candidates shall ensure that the completed application form with all particulars and enclosures reaches the Selection Committee within the date and time specified.
 - b. Collect the form from the counter/Reception-Free of cost.
 - c. Fill up the form in Neat Handwriting. Avoid over writing and spelling mistakes.
 - d. Enclose Self Attested Photocopies of the following documents
 - i. Xth Mark Sheet and Passing Certificate
 - ii. XIIth Mark sheet and Passing Certificate
 - iii. Address Proof: Aadhar Card \ Electricity Bill
 - iv. Contact Details: Email ID \ Mobile No. and In Case of Emergency Contact No
 - v. 10 Recent Colored Photographs-Front Face with Blue/White Background
 - e. Payment in Cash \ DD \ NEFT of minimum Rs.15, 000.00 at the time of admission.
- 8. The students who take the admission are required to sign the Declaration Form along with the Application Form
- 9. Applications received by Speed post / courier or any other means after the last date & time will not be accepted irrespective of the date of booking.
- 10. The Selection Committee shall not be responsible for any delay in the receipt or for the loss in transit of application form etc.,
- 11. Request for extension of time for submission of documents called for, after the specified date and time will not be entertained.
- 12. Any supporting documents received after the due date of application without required documents / particulars will not be entertained.
- 13. Email /Photocopy/ Fax copy of application will not be accepted.
- 14. Reallocation will be done on merit basis subject to availability of seats within one month of admission.

- 15. If candidate will leave the course after admission or failing to pay fee in time or remains unauthorized absent, admission of such student will be cancelled and **no refund of the fee already paid will be made**, however, caution money will be refunded, after deducting the dues of the college including fee. Candidate should apply within one month for refund of caution money after leaving the college.
- 16. **EDUCATIONAL QUALIFICATIONS:** i) Candidates should have passed in all the subjects of the qualifying Examination of the XIIth Standard (Higher Secondary School Examination) conducted by the Central Board \ State Board or any other equivalent Board in a single sitting.
- 17. **Age Limit:** There is No Age restriction for any of the courses.
- 18. **Sex**: Both sexes are eligible in any of the courses.
- 19. **Reservation:** In case of SC/ST/OBC candidates, 5% marks relaxation will be given for the admission. Kindly apply along with attested photocopy of documents from the appropriate authorities.
- 20. 10% seats are reserved for departmental in service candidate. Joining will be allowed after submission of relieving certificate from the employer.
- 21. 75% of attendance is compulsory to appear in the final examination and long leaves are only permitted if prior permission is taken from the office in charge / principal in written only.
- 22. All inclusive fees of Rs. 60000/- (Sixty Thousand only) for the complete academic year as specified according to course shall be paid in equal installments.
- 23. Two year Diploma Courses fees of Rs.50000/- (Rs Fifty Thousand per year) each year for the complete academic year. (excluding examination Fee)
- 24. Fee once paid is non-refundable in any circumstances.
- 25. Students will be charged Rs. 5000/- (Five Thousand only) as Examination Enrollment and Appearing Fee.
- 26. The fees can be deposited in Bank through NEFT/RTGS at Central Bank of India, Pimpri Branch, Pune. 411018, Cash / Money order/ Demand Draft or Cheques in favour of "Lokmanya Medical Research Centre" [Payable at Pune Only] and a receipt should be obtained for the same. The receipt obtained for the cheques deposited is only valid subject to realization of cheque in bank account. Any charges fixed/charged by the bank have to be paid extra.
- 27. Fee Payment options available:
 - Option 1: Full Fee of Rs 60000/- Payment One Time 100 % and Examination Fee of Rs. 5000/- (in the month of October), (Avail Rs. 5000/- Flat Discount)
 - Option 2: Payment made in Two equal Installments of Rs. 30000/- each (At the time of Admission and Second installment of Rs. 30000/- and Examination Fee of Rs. 5000/- (in the month of October)
 - **Option 3:** Payment made in Four equal Installments of Rs. 15000/- each in consecutive four months and Examination Fee of Rs. 5000/- (in the month of October)

Pl note failure to pay the Fees in time will attract Late fees of Rs. 5000/- extra to be paid.

The fees can be deposited in Bank through Bank NEFT - RTGS \ Google pay \ Paytm at Central Bank of India, Pimpri Branch, Pune. 411018. Bank Details given below:

Bank Name: Central Bank of India

Branch: Pimpri, Pune, Maharashtra 411018

Branch Code: 00667 **Account No:** 1430476969 **IFSC Code:** CBIN0280667

- 28. Fees For any charges / Fees deposited in the office, the receipt should be obtained for the same and kept safely. Fees once deposited are neither adjustable nor refundable in any circumstances.
- 29. **Medium of instructions** used will be English / Hindi / Marathi [80% English and 20% Hindi/ Marathi communicative]. The final examination question papers will be in English script only.
- 30. **Dress:** The student should come in a proper dress to the institute and wearing of white coat (Apron) is compulsory during Classes & practicals. The student should have his/her valid Identity card with him/her during the classes and should be produced to the concerned staff on demand.
- 31. Candidate is not permitted to take admission simultaneously in any other course in any university/college/board without informing the Institute Management in writing during the admission.
- 32. Any damages made by trainee student will be recovered from the concern.
- 33. Hostel facility will not be provided the students have to make their own arrangements.
- 34. **Disease:** Any history of suffering from the disease of any nature should be clearly mentioned along with the prescription photocopy of the Physician / Clinician.
- 35. **Mobile Phones** The student should not use/carry mobile phones in the institute premises under any circumstances. In case if he / she found using the same, the mobile phone will be deposited and a fine of Rs.100/- will be imposed. The mobile phones should be switched off before entering into the institute premises.
- 36. Lost or Found Institute does not take any responsibility for loss/ damage/ missing of any personal property in the institute premises.
- 37. Consumption of alcohol or any Intoxicants or Narcotics or Smoking is strictly prohibited in the Institute premises and will be strictly dealt with.
- 38. There will be regular Theoretical and Practical training at the training centre of LMRC starting from 10.00 AM 4.00PM daily except Sunday and gazette holidays.
- 39. Examination Final examinations will be held each year at the centre or any other centre approved by the examination committee of the institute. The examinations will be conducted unit wise, half yearly and final examinations for the academic Year.
- 40. Examination Fees to be deposited by students along with the completed examination appearance form in the month of December.
- 41. There will be Theoretical and Practical examination for each course. In addition, there will be Viva Voice -I [Practical] and Viva Voice II [Oral].

- 42. **Passing Marks of Examination:** The passing marks of examination would be 40% for each subject and also in total marks obtained for all Diploma courses.
 - a. The candidate has to pass in theory and practical examination separately. For theory paper the internal assessment marks, viva-voce and theory examination marks will be counted.
 - b. The candidate should pass separately in two heads i.e In Theory (Theory plus Viva voce plus Internal Assessment) and also in Practical (with 50% marks).
 - c. The candidate has to pass separately in each subject in internal assessment examination (with 50% marks) in order to be eligible to appear in Final examination.
- 43. The student will not be permitted to appear in his / her final examinations unless and until he / she clears his / her all papers for the internal Half Year Papers and submit the Practical books and Journals.
- 44. Division Percentage of Marks
 - I 60% and Above
 - II 50% to 59.99%
 - III 40% to 49.99%
- 45. A failure in examination/ reappearance/ first appearance in compartment in one or more subjects will be treated as an attempt.
- 46. Students failing in any of the paper have to appear in the supplementary examination. In case the student is failing in more than two papers, he/she has to appear in all the papers.
- 47. Re-checking of any examination papers can be done within 15 days from the date of declaration of results only after submitting an application along with rechecking fees (As Applicable). The decision or the result prepared and declared by the Registrar / examining body of the institute will be final and binding on the student.
- 48. The original diploma and Mark sheet will be issued to the successful candidates on completion of his/her both year examinations only. In case if a candidate wish to undergo training through the institute than the Mark sheet and diploma will be issued after completion of the Internship period from the concerned hospital/ Nursing Home and producing the related documents to the office.
- 49. *Improvement:* The student is eligible to appear for the improvement examination in the next coming examination (if approved by the controller of examinations).
- 50. He /She has to deposit his /her diploma and Mark-sheet in original for cancellation and has to fill in the examination form along with the requisite fees for the same for improvement of his/her marks.
- 51. The result declared for the improvement examination will be binding and acceptable to the candidate. He / She will not be entitled for the previous result/ diploma/ mark sheet, if he/she gets less mark than the previous result.
- 52. **Library :** Library book issuing facility can be obtained by obtaining a book issuing card. The reference book from the library is issued for a period of 5 days, the same can be re-issued, in case no other student had reserved the same book. A late fee of Rs.10/- per day will be charged, in case book is returned after the date stamped on the book at the time of issuing the book. In case of loss of the book the student has to pay the cost of the book as per the purchase price as specified in the main register of the library.
- 53. **Damages:** Any damages done in the laboratories/department or to the institute property by the student, he/she will be liable for the charges borne on its replacement/ repairs of the same and has to be paid immediately by the individual involved.
- 54. All the students have to abide by all the rules and regulations formulated by the institute.

FACILITIES PROVIDED AT TRAINING CENTRE OF INSTITUTE AND AT LOKMANYA HOSPITALS:

Department of Anatomy & Physiology It is having various Original & Fibre Models, Charts of various human body organs and systems.

Department of Radio diagnosis It is fully equipped with MRI \ CT Scan \ Ultra- sonography, Diagnostic X-ray with latest Digital Control and Dental X-Ray unit alongwith fully equipped Dark Room.

Department of Pathology It is fully equipped with Research Microscopes for Clinical Pathology, Hematology for testing of various blood related disorders.

Department of Biochemistry Fully equipped with Semi- Auto Analyzers, Research Microscopes and Calorimeters etc. for biochemical tests.

Department of Histotechnology Fully equipped with Microtomes, Wax Baths, Research Microscopes etc. for preparation of various tissue fixations, section cutting etc.

Department of Microbiology fully equipped. Department of Ophthalmology Fully equipped with YAG Laser, Perimeter, Appascan-A (Biometry), Synoptophore, Retinoscope, Slit Lamps, Keratometers, lensometer, Opthalmoscope, Tonometer, Inami head Operating Microscopes, PhacoEmulsifier added for Microsurgery purposes. Lens grinding, Fixing, Cutting and Framing including Eye Testing facilities.

Operation Theatre An Operation Theatre fully equipped with state of the art equipments and infrastructure for performing advance intricate and technology induced surgeries. Like Total Joint Replacement Surgery, Spine Surgeries, Trauma, General and Advance Laparoscopic Surgery, Onco Surgery and Gync and Obst Surgeries.

Department of Physiotherapy It is fully equipped with short Wave diathermy, Wax Bath, Hot pack, Shoulder Wheel, Ultrasound, TENS, Cervical and Lumbar, Traction Unit, Ankle Exerciser, Parallel Walking Bars, Peg Boards and various other exercises machines.

Department of Computers It equipped with latest Pentium IV computers for teaching its usage in related programmes with all associated CD's and softwares. It is equipped with CD's related to Ophthalmic Surgeries, X-Ray Procedures and Medical Laboratory blood slides and software of laboratory test reporting.

Library It is having a large collection of reference books on different subjects relating to the course syllabus and other general books / magazines to update the knowledge of the students. The books are issued to the students for their home reading for a period of fortnight.

ECG Centre Fully equipped with latest modern machines. Physics Laboratory Equipped with instruments to explain various scientific applications and procedures.

Wards Comprising of latest fitted beds for indoor patients having all facalities. The charges for the same are as per the charity done by the society. Latest furnished Lecture Halls with individual sitting facilities.

OFFERED PARAMEDICAL COURSES

DIPLOMA IN MEDICAL LABORATORY TECHNOLOGY (DMLT)

Medical Laboratory Technology helps diagnose, treat and prevent disease through clinical laboratory tests. It is complementary to medical science. It involves analysis of body matter such as fluid, tissue, and blood. It also covers microorganism screening, chemical analyses, and cell count. professionals, medical These technicians and technologists, play an important role in collecting information, sampling, testing, reporting and documenting investigations. Read on to know how to develop a



career in medical lab technology. Medical Technologist work covers areas such as Blood banking, Clinical Chemistry (chemical analysis of body fluids), Hematology (blood related),Immunology (study of immune system),Microbiology (study of bacteria and other disease organisms) .Cytotechnologist (study of human tissue)

The course entails training of students in both Theoretical and practical aspects of laboratory Medicine. The student would be trained in all the various aspects of phlebotomy, clinical chemistry, hematology, clinical pathology, microbiology, serology and blood banking. On completion of the course, the student would be able to perform as a laboratory technician in all branches of laboratory medicine.

Eligibility: XII Science, BSc, MSc and equivalent form recognised Board of Exam & University.

Course Duration: One Year and Six Months Internship

Course Syllabus

Paper / Subject	Theory Practical		Total	Hrs		
	Max. Marks	Hours / Wk.	Max. Marks	Hours /Wk.	Max. Marks	Hours in a Yr.
I - Anatomy & Physiology	100	4	Incl.	2	100	180
II - Microbiology - Para., Bac., Serology	100	4	Incl.	2	100	180
III-Biochemistry	100	2	Incl.	2	100	120
IV-Hematology	100	2	Incl.	4	100	240
V-Histotechnology	100	2	Incl.	2	100	120
VI-Laboratory Management	100	2	Incl.	-	100	60
Viva-Voice (Practical)*					150	200
Internal Assesment					50	
Total Number Marks and Class	es in Hours	/ Yr.			800	1100

^{*} Viva-Voice: Practical and Face to Face Examination by the members of the board of Examiners/Experts including Performance, Practical Note Book, and confidential report of the lectures and Head/M.S/M.O. Incharge of the hospital / Nursing Home during the field practical training etc.

DIPLOMA IN CATHLAB TECHNICIANS' COURSE (DCLT):

A catheterization laboratory or cath lab technician is a professional who works in the field of cardiovascular technology. Cath Lab technicians are responsible for ensuring the EKG equipment is in working order, and during the procedure, the technologist will monitor the EKG readouts and keep the doctor apprised of anything considered abnormal. The technologist will also prepare the patient for the procedure by cleaning, shaving and, in the case of cardiac



catheterization for angioplasty, anesthetizing the area of insertion. In some hospitals, the cardiovascular technologist will assist doctors during open heart surgery, and with the insertion of pacemakers or stents. Again, the technologist will be the one responsible for preparing and monitoring the patient in these instances.

Daily Non-surgical duties include reading and interpreting test procedures and explaining the procedures to patients. The course entails training of students in both theoretical and practical aspects of Cathlab technology.

Eligibility: XII Science, BSc, MSc and equivalent form recognised Board of Exam & University.

Course Duration: One Year and Six Months Internship

Course Subject:

Paper / Subject	Theo	ory	Practical		Total Hrs	
	Max. Marks	Hours / Wk.	Max. Marks	Hours /Wk.	Max. Marks	Hours in a Yr.
 I - Cardiovascular & General Anatomy 	100	4	Incl.	2	100	180
II - Microbiology & Pathology	100	4	Incl.	2	100	180
III- Techniques & Procedures in Cath. Lab.	100	4	Incl.	2	100	180
IV-Administration & Management						
in Cath. Lab.	100	4	Incl.	2	100	180
V - Electrocardiography	100	4	Incl.	2	100	180
Viva-Voice (Practical)*					150	200
Internal Assesment					50	
Total Number Marks and Classes	in Hours	/ Yr.		W.	700	1100

^{*}Viva-Voice: Practical and Face to Face Examination by the members of the board of Examiners/Experts including Performance, Practical Note Book, and confidential report of the lectures and Head/M.S/M.O. Incharge of the hospital / Nursing Home during the field practical training etc.

DIPLOMA IN OPERATION THEATRE TECHNOLOGY:

Operation Theater Technicians are part of the healthcare system and work mainly in the operating theaters, working for maintenance of equipment, assisting surgeries and even transfer of patients from wards to theaters. The job of OT technician is highly specialized in the operation theater, with doctors and surgeons relying on them heavily for technical and other assistance. This course is intended to help students in finding careers as OT technicians.



The course entails training of students in both

Theoretical and practical aspects of operating room technology. The student would be trained in the various aspects of patient care, pre-operative preparation, instrumentation, sterilization, operating room concepts, anesthesia, operating techniques and assistance to surgeons. On completion of the course, the student would be able to perform as an operating theatre nurse,/ technologist in all aspects of surgical intervention in patient care.

Eligibility: XII Science, BSc, MSc and equivalent form recognised Board of Exam & University.

Course Duration: One Year and Six Months Internship

Course Subject

Paper / Subject	Theo	Theory Practical		Total	Hrs		
	Max. Marks	Hours / Wk.	Max. Marks	Hours /Wk.	Max. Marks	Hours in a Yr.	
I - Anatomy & Physiology	100	4	Incl.	2	100	180	
II - Surgical Instruments & Monitoring	100	4	Incl.	2	100	180	
III-Operation Theatre Ethics & Discipline	100	2	Incl.	2	100	120	
IV-Surgical Procedures	100	2	Incl.	4	100	240	
V - Sterilisation & Disinfection	100	2	Incl.	2	100	120	
VI-Anaesthesia	100	2	Incl.	-	100	60	
Viva-Voice (Practical)*					150	200	
Internal Assesment					50		
Total Number Marks and Classe	Total Number Marks and Classes in Hours / Yr.						

* Viva-Voice: Practical and Face to Face Examination by the members of the board of Examiners/Experts including Performance, Practical Note Book, and confidential Incharge of the hospital / Nursing Home during the field practic

DIPLOMA IN X RAY TECHNICIANS' COURSE

X-ray technicians are an important part of healthcare team. They receive instructions from doctors regarding the X-rays which patients require. They are responsible for getting clear imaging results, which requires proper use of the equipment and keeping patients calm and informed throughout the X-ray procedure. Other duties include keeping equipment in good working order, maintaining patient records and processing the exposed radiographs.

The course entails training of students in both Theoretical and practical aspects of Radiology technology. The students are trained in the various aspects of radio physics, components of X ray machine, Radiology imaging techniques and darkroom procedures. On completion of the course, the student would be able to perform as an X Ray Technician in all aspects of radiological investigation in patient care.

Objectives After completion of this course, the student will be able to Assist patients to prepare for X-ray and operate associate machinery, Monitor equipment and ensure that they are clean to perform appropriate diagnosis, Evaluate all X-ray films and coordinate with physicians on same.

• Provide highest quality of patient care, Ensure and maintain records of X-ray films and associate cassettes, Evaluate angle and range of equipment and assist in appropriate results.

Eligibility: XII Science \ BSc \ MSc and equivalent form recognised Board of Exam & University. **Course Duration:** One Year and Six Months Internship

Course Subject:

Paper / Subject	Theory		Practical		Total Hrs	
	Max. Marks	Hours /Wk.	Max. Marks	Hours /Wk.	Max. Marks	Hours in a Yr.
I - Anatomy & Physiology	100	4	Incl.	2	100	180
II - General Physics	100	4	Incl.	1-	100	60
III- Radiation Physics	100	2	Incl.	2	100	120
IV-Dark Room Procedures	100	4	Incl.	2	100	180
V - Radiographic Positioning	100	4	Incl.	4	100	240
VI-Special Investigation Pro.	100	2	Incl.	2	100	120
Viva-Voice (Practical)*					150	200
Internal Assesment					50	
Total Number Marks and Class	es in Hours	/ Yr.			800	1100

^{*} Viva-Voice: Practical and Face to Face Examination by the members of the board of Examiners/Experts including Performance, Practical Note Book, and confidential report of the lectures and Head/M.S/M.O. Incharge of the hospital / Nursing Home during the field practical training etc.

DIPLOMA IN CT SCAN TECHNICIANS COURSE

Radiology Technicians are trained to use advanced radiographic equipment such as CT Scan (Computed Tomography along with basic CT Scan equipment for creating images of a patient's internal anatomy. These images are used by doctors and specialists to aid in diagnosis of illnesses and injuries. Radiology Technicians are trained to a proficiency level wherein they are able to comply with safety regulations involved in the use of radiography equipment while on the job.



The course entails training of students in both Theoretical and practical aspects of Radiology technology. The students are trained in the various aspects of components of CT scan machine, radio physics, Radiation physics, Radiology imaging techniques and procedures. On completion of the course, the student would be able to perform as a CT Scan Technician in all aspects of radiological investigation in patient care.

Eligibility: XII Science \ BSc \ MSc and equivalent form recognised Board of Exam & University.

Course Duration: One Year and Six Months Internship

Course Subject

Paper	Subject	TotalMark	Hrs/Yr.
1	Anatomy & Physiology	100	120
Ш	Basic Fundamentals of CT Scan	100	120
Ш	General & Radiation Physics	100	120
IV	Applied Physics for CT Scan	100	120
V	Dark Room Techniques	100	120
VI	Techniques for CT Scan	100	180
	Viva-Voice (Practical)*	150	120
	Internal Assesment	50	
Total	Number Marks and Classes in Hours / Yr.	800	900

*Viva-Voice: Oral viva by the members of the board of Examiners/Experts including Performance, Practical and confidential report of Head/M.S/M.O. Incharge of hospital / Nursing Home during field practical training etc.

DIPLOMA IN MRI TECHNICIANS' COURSE

Radiology Technicians are trained to use advanced radiographic equipment such as MRI (Magnetic Resonance Imaging) along with basic MRI equipment for creating images of a patient's internal anatomy. These images are used by doctors and specialists to aid in diagnosis of illnesses and injuries. Radiology Technicians are trained to a proficiency level wherein they are able to comply with safety regulations involved in the use of radiography equipment while on the job.



The course entails training of students in both Theoretical and practical aspects of Radiology technology. The students are trained in the various aspects of components of MRI machine, radio physics, Radiation Physics, Radiology imaging techniques and procedures. On completion of the course, the student would be able to perform as an MRI technologist in all aspects of radiological investigation in patient care.

Eligibility: XII Science \ BSc \ MSc and equivalent form recognised Board of Exam & University.

Course Duration: One Year and Six Months Internship

Course Subject:

Paper / Subject	Theo	Theory		Practical		Hrs
	Max. Marks	Hours / Wk.	Max. Marks	Hours /Wk.	Max. Marks	Hours in a Yr.
I - MRI- Anatomy	100	4	Incl.	2	100	180
II - Basic Fundamentals and Components of MRI	100	4	Incl.	2	100	180
III- Role of Technologist and Care of Patient	100	4	Incl.	2	100	180
IV-MRI Techniques & Protocols	100	4	Incl.	2	100	180
V- MRI Imaging Hardware and	**			14.0	- "	
Presentation	100	2	Incl.	2	100	120
VI- Advanced Imaging Tech.	100	2	Incl.	2	100	120
Viva-Voice (Practical)*					150	140
Internal Assesment			8	8	50	2
Total Number Marks and Classes	in Hours	/ Yr.			800	1100

^{*}Viva-Voice: Practical and Face to Face Examination by the members of the board of Examiners/Experts including Performance, Practical Note Book, and confidential report of the lectures and Head/M.S/M.O. Incharge of the hospital / Nursing Home during the field practical training etc.

Diploma in Ophthalmic Assistant

Ophthalmic assistants aid ophthalmologists by obtaining medical records, performing preliminary eye function testing and explaining to patients about medication or procedures. Ophthalmic assistants generally work closely with an ophthalmologist, gathering patient information necessary to complete a diagnosis. Assistants often see the patient before the ophthalmologist, and are often responsible for preparing the patient for the exam and



beginning the examination with standard tests and measurements. This course entails training of ophthalmic assistants students in both Theoretical and practical aspects of Ophthalmology and ophthalmic procedures.

Eligibility: XII Science \ BSc \ MSc and equivalent form recognised Board of Exam & University.

Course Duration: One Year and Six Months Internship

Course Subject

Paper / Subject	Theo	Theory		Practical		Hrs	
	Max. Marks	Hours / Wk.	Max. Marks	Hours /Wk.	Max. Marks	Hours in a Yr.	
I - Anatomy & Physiology	100	4	Incl.	2	100	180	
II -Optical Physics	100	4	Incl.	2	100	180	
III-Refraction	100	2	Incl.	2	100	120	
IV-Visual Optics & Eye Disease	100	2	Incl.	4	100	240	
V -Ophthalmic Optics & Dispen.	100	2	Incl.	2	100	120	
VI-Ocular Pharmacology	100	2	Incl.	_	100	60	
Viva-Voice (Practical)*					150	200	
Internal Assesment					50		
Total Number Marks and Classes	in Hours	/ Yr.			800	1100	

^{*} Viva-Voice: Practical and Face to Face Examination by the members of the board of Examiners/Experts including Performance, Practical Note Book, and confidential report of the lectures and Head/M.S/M.O. Incharge of the hospital / Nursing Home during the field practical training etc.

DIPLOMA IN DIALYSIS TECHNICIAN

Diploma in dialysis technician is a one / Two year diploma program designed to build a well-informed and duly trained dialysis technicians for working efficiently in hospitals, medical clinics, dialysis centers, paramedical teaching and training institutions. An innovative curriculum of this programme will enable students to get requisite skills for carrying out dialysis in critical conditions such as renal dialysis, hem-dialysis. Students of this programme will be exposed to a rich avenue of opportunities as dialysis technician in multispecialty hospitals, nursing homes and dialysis centers.

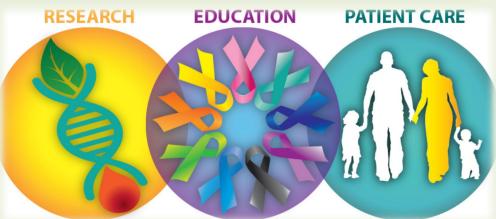
After completing this programme, participants will be able to: Demonstrate knowledge about Renal Failure (ARF & CRF) and its management. Demonstrate pre dialysis patient assessment. Demonstrate dialyzer extracorporeal blood circuit priming and setting up the machine for dialysis procedure. Demonstrate aseptic cannulation of AVF/AVG and dialysis initiation. Demonstrate aseptic acute vascular access catheter care and dialysis initiation. Demonstrate alarm processing ,continuous monitoring of patient and machine during procedure. Demonstrate aseptic decannulation and catheter care after termination of dialysis. Demonstrate meticulous infection control measures. Operate and maintain R.O Water treatment plant. Demonstrate machine disinfection methods. Demonstrate dialysis machine maintenance methods. Demonstrate dialyzer reprocessing, both manual and automated (Operating RENATRON,INTERF ACE Module & RENALOG-RM software.) Demonstrate polite and strategic communication skills, grooming skills, professional etiquettes and leadership qualities.

TWO YEARS DIPLOMA IN ACCIDENT AND EMERGENCY CARE TECHNOLOGY
TWO YEARS DIPLOMA IN MEDICAL ASSISTANT

LOKMANYA MEDICAL RESEARCH CENTRE

Transformational healthcare through Research & Innovative solutions





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