MGM SCHOOL OF BIOMEDICAL SCIENCES
NAVI MUMBAI

PROSPECTUS
2019-20

All UG & PG Courses under CBCS Pattern

MGM INSTITUTE OF HEALTH SCIENCES
(Deemed University u/s 3 of UGC Act, 1956)
Grade 'A' Accredited by NAAC
Sector-01, Kamothe , Navi Mumbai - 410 209
Tel 022-27432471, 022-27432994, Fax 022 - 27431094
E-mail : registrar@mgmuhs.com ; Website : www.mgmuhs.com

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ABOUT THE INSTITUTE, NAVI MUMBAI

Based on the recommendation of Medical Council of India and Institute Grants Commission, Ministry of Human Resources Development, Government of India, approved and accorded "Deemed to be University' status to MGM Institute of Health Sciences, Navi Mumbai, vide Notification No. F 9-21/2005-U.3(A) dated 30.08.2006. Grant of the "Deemed to be University" status was a result of over two decades of hard work by the management and governing council of MGM Trust in the field of education. It further increased the responsibility of the trust, which continues its untiring efforts to develop its two constituent colleges at Navi Mumbai and Aurangabad as Centers of Excellence in Medical Science Education, both at Under Graduate and Post Graduate levels. These efforts will always continue, albeit with greater vigor.

At present MGM Institutes runs MGM School of Biomedical Sciences, at Navi Mumbai and another at Aurangabad location.

ABOUT MGMSBS, NAVI MUMBAI

Welcome to MGM School of Biomedical Sciences (MGMSBS,NM), offering Basic Allied Science and Medical courses for students who aspire to pursue their career in the Allied Health Sciences, teaching as well as medical research. 60% Allied health professionals constitute the healthcare systems in developed countries. Allied health professionals contribute to the delivery of various healthcare services which include evaluation, identification & prevention of disorders, rehabilitation and health systems management.

The demand for such technical professionals is appreciated and now there is a huge demand for such professionals for which strategies are being developed to scale up their numbers. MGMSBS initially started as a department under the Medical College when MGMIHS was been notified as a Deemed to be University i.e. “MGM Institute of Health Sciences” vide Notification No. F.9-21/2005-U.3 (A) dated 30.08.2006 issued by the Government of India, Ministry of Human Resource Development, Department of Higher Education, New Delhi to train allied health professionals.

Since its establishment in 2009, as a department it started with mere 100 students under Medical college and it has recorded exponential growth over the years. MGMSBS is now a full-fledged educational and research institution with student strength reaching approximately 538+ and is now acclaimed as a centre of excellence in Allied Health Sciences. The reason for this growth and progress is mainly because of its demand-driven health related programs and the excellent infrastructure, clinical facilities and dedicated, qualified faculty. The school currently offers over 7 UG programs and 12 PG programs

School of Biomedical Sciences foster competencies beyond academic education, including evoking of leadership qualities, encouraging students for participating in conferences, thought-

provoking seminars, workshops, taking up research projects and extracurricular and outreach activities. Our consistent theme throughout is to encourage students to become engaged, be active learners and to promote medical research. While doing so the students acquire knowledge,

skills needed to provide well qualified and trained professionals in allied health sciences profession. The majority of the alumni of the school are placed not only in reputed institute nationally but also overseas in universities, hospitals, healthcare teams and in private practice setups. We offer an intellectually stimulating environment coupled with rich cultural, social, sporting and harmonious life of the Institute campus.

Last but by no means least, School of Biomedical Sciences envisions to continuously grow and reform. Reformations are essential to any growing institution as it fulfils our bold aspirations of providing the best for the students, for us to serve long into the future and to get ourselves updated to changing and evolving trends in the health care systems.

Director's Message

Dr. Mansee Thakur

MGM School of Biomedical Sciences is one of the premium Institutes in Navi Mumbai offering graduation in allied sciences & post graduation courses. The college is determined to outshine the yardstick set, thus uplifting to higher trajectory in developing, designing and delivering of curriculum, training the budding allied health professions to acquire clinical acumen and skills while promoting research relevant to local, regional and national needs. The college nurtures competence and skills to prepare the best of allied health professionals across all fields to optimize health and health care needs of individuals and the community as a whole. The quality of medical care has improved tremendously in the last few decades due to the advances in technology, thus creating fresh challenges in the field of healthcare. It is now widely recognized that health service delivery is a team effort involving both clinicians and non-clinicians, and is not the sole duty of physicians and nurses. Professionals that can competently handle sophisticated machinery and advanced protocols are now in high demand. In fact, diagnosis is now so dependent on technology, that allied healthcare professionals (AHPs) are vital to successful treatment delivery. The Institute coordinates professional learning experiences and training for students in the field of Paramedical Sciences. The increasing demand of skilled paramedical professionals has opened up several career opportunities for young aspirants.

MGM School of Biomedical Sciences (MGMSBS) has seen considerable growth in the past few years, with the introduction of new programs of study, new disciplines, new initiatives and

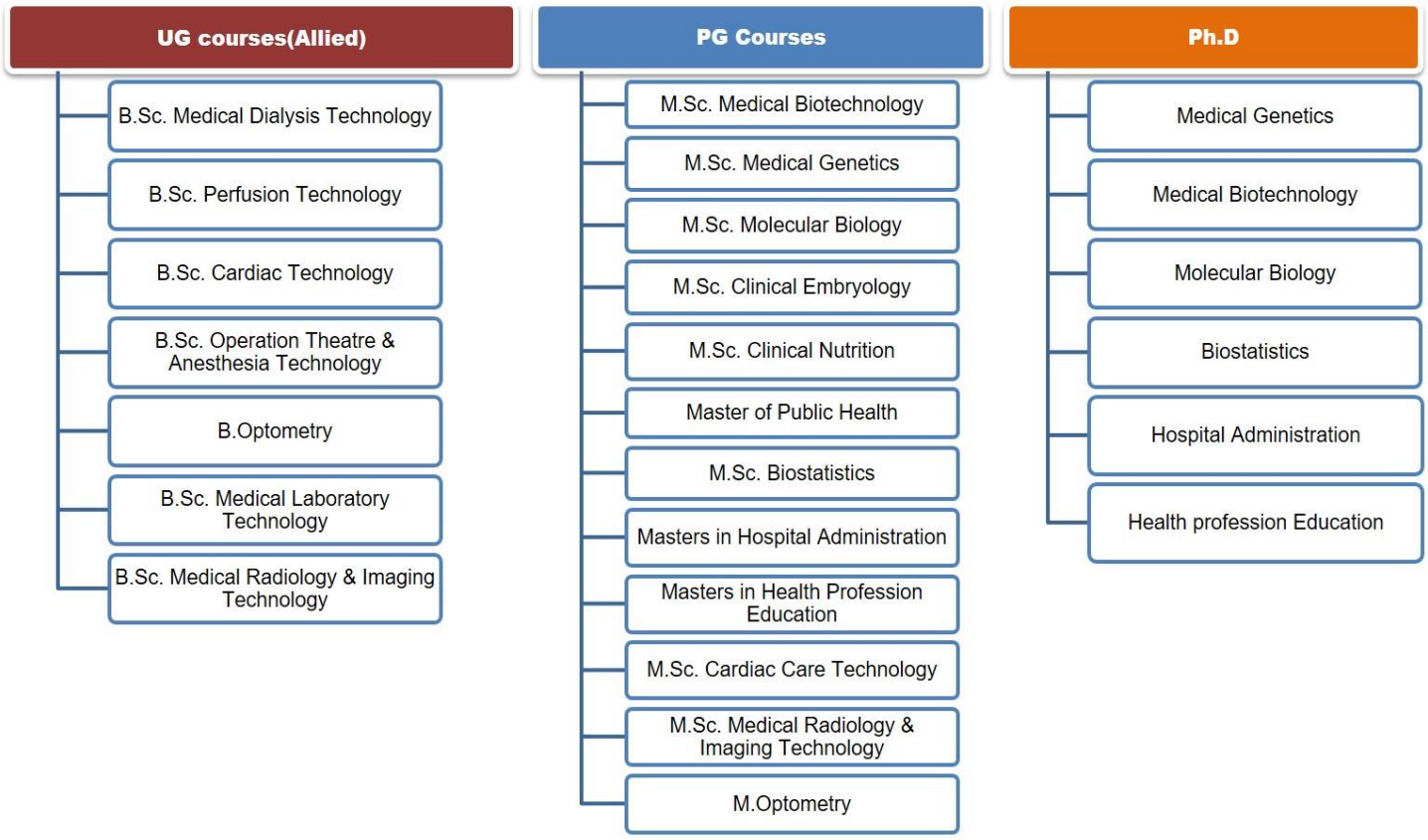
conviction to deliver excellence and nothing less. Within a short period of 10 years or so, MGMSBS under MGMIHS has established its academic repute across national border.

Presently there are very few institutions which impart proper training to the paramedical staff in a protocol based manner. MGMSBS is committed to providing quality training in the enormous field of paramedical sciences, through the devotion to the academic as well hands-on training of the program. Effective delivery of healthcare services depends largely on the nature of education, training and appropriate orientation towards community health of all categories of health personnel, and their capacity to function as an integrated team.

MGMSBS presents an education system that goes beyond chalk and talk; it believes in imparting its students the basic and advanced knowledge of a subject as well as the technical details. We, therefore, take every care for the student's bright future and help them to translate their dreams into reality.

I take this opportunity to welcome you to our School of Biomedical Sciences and look forward to being a part of your successful professional career.

PROGRAMME OFFERED



ALL COURSE DETAILS

The MGM School of Biomedical Sciences has its inception since 2007; it is under the ambit of MGMIHS, (Deemed University u/s 3 of UGC Act, 1956). The pioneering Director of the School was Dr. Kesari followed by Dr. Chitra Pai, Dr. Padma Chavan, Dr. Z.G. Badade. Presently; MGM School of Biomedical Sciences is headed by Dr. Mansee Thakur as the I/C Director (Navi Mumbai) since 2017.

The courses conducted under the School of Biomedical Sciences are:

1. **B.Sc. Allied Courses**
2. **PG Courses**

B.Sc. Allied Courses	
Courses	**Intake Capacity**
B.Sc. Medical Laboratory Technology	30
B.Sc. Medical Radiology & Imaging Technology	30
B.Sc. Medical Dialysis Technology	20
B.Sc. Operation Theater and Anesthesia Technology	20
B.Sc. Cardiac Care Technology	5
B.Sc. Perfusion Technology	5
B. Optometry	20

PG Courses	
Courses	**Intake Capacity**
M.Sc. Medical Biotechnology	20
M.Sc. Medical Genetics	20
M.Sc. Molecular Biology	20
M.Sc. Clinical Embryology	05
M.Sc. Clinical Nutrition	10
Master of Public Health	05
M.Sc. Biostatistics	10
Masters in Hospital Administration	15
Masters in Health Profession Education	10
M.Sc. Cardiac Care Technology	5
M.Sc. Medical Radiology & Imaging Technology	5
M. Optometry	5

FACULTY

Sr. No.	Name	Designation	Qualification
1	Dr. Mansee Thakur	Director	Ph.D. (Biotechnology)
2	Dr. Raman P. Yadav	Professor	Ph.D. (Biotechnology)
3	Dr. Rita Dinesh Abbi	Professor	Ph.D. (Biostatistics)
4	Dr. Archana Mishra	Associate Professor	Ph.D. (MHA)
5	Dr. Mini Mol P	Assistant Professor	Ph.D. (Anatomy)
6	Dr. Himanshu Rajat Gupta	Assistant Professor	Ph.D. (Genetics)
7	Dr. Priyanka Pareek	Assistant Professor	Ph.D. (Clinical Nutrition)
8	Mrs. Vidula Prasad Patil	Lecturer	M. (Optometry)
9	Ms. Surya Panikar	Tutor	M.Sc. (Medical Genetics)
10	Mrs. Chandana Charudatta Kulkarni	Tutor	M.Sc. (Medical Biotechnology)
11	Mrs. Priyanka Rathod	Tutor	M.Sc. (Medical Biotechnology)
12	Mrs. Bhagit Amita Anant	Tutor	M.Sc. (Medical Biotechnology)
13	Mr. Yogesh Navalsing Patil	Tutor	M.Sc. (Medical Biotechnology)
14	Ms. Prema Vishwas Shewale	Tutor	M.Sc. (CCT)
15	Mr. Helvin Vincent Louis	Tutor	M.Sc. (Physics)
16	Ms. Smita Dinesh Babariya	Perfusionist	B.Sc. (PT)
17	Mr. Rohit Indrakumar Gupta	Tutor	B.Sc. (Optometry)

B.Sc. Allied Courses

Duration 4 Year (3Year + 1 Year Internship)

Courses	Intake Capacity
B.Sc. Medical Laboratory Technology	**30**
B.Sc. Medical Radiology & Imaging Technology	**30**
B.Sc. Medical Dialysis Technology	**20**
B.Sc. Operation Theater & Anesthesia Technology	**20**
B.Sc. Cardiac Care Technology	**5**
B.Sc. Perfusion Technology	**5**
B. Optometry	**20**

ADMISSION PROCESS FOR B.Sc. ALLIED COURSES

Online Application Form & Application Process is available on www.mgmuhs.com

FEE STRUCTURE FOR B.Sc. ALLIED COURSES

Tuition Fee for B.Sc. Allied Courses

Sr. No	Course	Annual Tuition Fees (₹) Merit	Annual Tuition Fees (₹) MGT*	Annual Tuition Fees (USD $) NRI
1	B.Sc. Operation Theatre & Anaesthesia Technology (OT&AT)	55000.00	110000.00	3100
2	B.Sc. Medical Radiology & Imaging Technology (MRIT)	55000.00	110000.00	3100
3	B.Sc. Medical Laboratory Technology (MLT)	55000.00	110000.00	3100
4	B.Sc. Medical Dialysis Technology (MDT)	55000.00	110000.00	3100
5	B.Sc. Cardiac Care Technology (CCT)	105000.00	210000.00	6000
6	B.Sc. Perfusion Technology (PT)	105000.00	210000.00	6000
7	B. Optometry (B.OPTOM)	105000.00	210000.00	6000

*** Fee structure Subject to Change**

In Addition To Tuition Fees, Additional Fees Are Mentioned Below

Particulars of Fees	1st Year	2nd Year	3rd Year
Other Fee (ID Cards, Library Card, Apron, Journal, Annual Day, Bonafide)	5000.00	-	-
Refundable Deposit	20000.00	-	-
Institute Enrollment & Eligibility Fees	6000.00	-	-
Exam Fee	4500.00	4500.00	4500.00

ADMISSION SCHEDULE

B.Sc. Allied Course

Important Dates:

Particular	1st Round	2nd Round	3rd Round
Start of Online Application Form	10th April 2019	16th June	26th June
Last Date for Online Submission of Application Form	15th June 2019	25th June	5th July
Date of Counseling/ Interaction	20th June 2019	30th June	10th July

Note:

- Admission will be confirmed on payment of annual tuition fee of first year & Authentication of original documents at the time of reporting for counseling.

- For further details & updates, Merit list, Date of counseling, students are requested to visit our website www.mgmsbsnm.edu.in or www.mgmuhs.com regularly.

COMMENCEMENT OF THE PROGRAMME

The programme commences on **1st August 2019.**

CANCELLATION OF ADMISSION

Admission Cancellation Charges for

B.Sc. Allied Courses

Sr. No.	Point of time when notice of Cancellation of admission is received	Cancellation Charges Applicable
1	Before 15th July 2019	5% of Tuition Fee Or ₹ 5000/- (Whichever is Less)
2	Within 16th July to 30th July 2019	10% of Tuition Fees
3	Within 1st August to 15th August 2019	20% of Tuition Fees
4	Within 16th August to 30th August 2019	50% of Tuition Fees
5	After 30th August	1. No refund of 1st year fee 2. Full fees of the entire course of three years to be paid by the student.

Note:

- Fees once paid towards are neither refundable nor transferable under any circumstances.
- For the cancellation of admission, a candidate has to write an application of cancellation duly signed by him/her and counter signed by his/her parent/guardian at respective Institute.
- The candidate has to enclose the original selection letter, fee receipt and with cancelled cheque along with the written application. (stated the relation of the cheque holder with the student)

DOCUMENTS TO BE SUBMITTED DURING ADMISSION

B.Sc. Allied Courses

The following documents in original, with two sets of photo copies , are required to be submitted at the time of Admission.

- SSC Mark sheet or Its Equivalent
- SSC Passing Certificate Or Its Equivalent
- HSC Mark Sheet OR Its Equivalent
- HSC Passing Certificate OR Its Equivalent
- School or College leaving Certificate / Transfer Certificate
- Migration Certificate
- Age , Nationality and Domicile Certificate
- Medical Fitness Certificate
- Proof of Date of Birth (Photo Copy)
- Parents Income Proof (Photo Copy)
- Gazette Copy (if there is a change in the name shown in the 12th mark sheet)
- Caste Certificate (if applicable) (Photo Copy)
- Parents ID Proof (Photo Copy)
- Adhaar Card (Photo Copy)
- Gap Certificate (if applicable)
- Four copies of Passport size photos

B.Sc. Operation Theatre & Anesthesia Technology

Duration of the Course- 4 years (3Academics + 1year Internship)

ELIGIBILITY CRITERIA

For 10+2:

- He/she has passed the Higher Secondary (10+2) with Science (PCB) or equivalent examination recognized by any Indian University or a duly constituted Board with pass marks in Physics, Chemistry, and Biology.
- Minimum percentage of marks: 50% aggregate(P.C.B.)

For Lateral Entry:

- Lateral entry is applicable for all the UG Degree courses of Allied Health Science Courses wherever corresponding Diploma courses is available in the concerned specialty.
- The corresponding Diploma Courses should be pursued from a recognized university only.
- They would be eligible to join in 2nd year of respective graduate course. Subject availability of seats.

SCOPE OF THE COURSE:

The Course helps to prepare the operating theatre technologist to work as a competent and reliable member of the health care team under the guidance and supervision of senior Doctors, Surgeons, Anesthetist and Nursing staff in their delivery of patient care. Training also focuses on the knowledge and skills of monitoring infection control policy and procedures in the operating theatre.

Programme Specific Outcome:

After taking this course the student will be able to:

- Demonstrate ability to prepare and maintain Operation Theater.
- Demonstrate ability to maintain equipment support in an acute care environment.
- Identify and move to maintain a sterile field
- Follow infection control policies and procedures
- Manage and maintain theater equipment
- Demonstrate ability to prepare the patient for operative procedures.
- Provide intra-operative equipment and technical support
- Demonstrate skills and knowledge to assist anesthetist in handling emergencies outside of OT room
- Manage hazardous waste and follow biomedical waste disposal protocols.
- Ensure availability of medical and diagnostic supplies
- Monitor and assure quality

COURSE OF INSTRUCTION

B.Sc. Operation Theater & Anesthesia Technology

YEAR WISE SUBJECT DISTRIBUTION

First Year (Semester I & II)			
Theory			
Semester I		**Semester II**	
1	Human Anatomy Part I	1	Human Anatomy Part II
2	Human Physiology Part I	2	Human Physiology Part II
3	General Biochemistry& Nutrition	3	General Microbiology
4	Introduction to National Health Care System (Multidisciplinary/ Interdisciplinary)	4	Basic Pathology & Hematology
		5	Introduction to Quality and Patient safety (Multidisciplinary/Interdisciplinary)
Practical			
1	Human Anatomy Part I	1	Human Anatomy Part II
2	Human Physiology Part I	2	Human Physiology Part II
3	General Biochemistry& Nutrition	3	General Microbiology
4	Community Orientation & Clinical Visit (Including related practical to the parent course)	4	Basic Pathology & Hematology
		5	Community Orientation & Clinical Visit (Including related practical's to the parent course)
Ability Enhancement Elective Course		**Skill Enhancement Elective Course**	
1	English & Communication Skills	1	Medical Bioethics & IPR
2	Environmental Sciences	2	Human Rights & Professional Values

COURSE OF INSTRUCTION

B.Sc. Operation Theater & Anesthesia Technology

YEAR WISE SUBJECT DISTRIBUTION

Second Year (Semester III & IV)			
Theory			
Semester III		**Semester IV**	
1	Introduction To Operation Theatre Technology (OT)	1	Basic Techniques of Anesthesia
2	Introduction To Anesthesia Technology (AT)	2	Medical diseases influencing choice of Anesthesia
3	Principles of Anesthesia	3	Medicine relevant to OT Technology
4	ATOT Directed Clinical Education-I	4	ATOT Directed Clinical Education-II
Practical			
1	Introduction To Operation Theatre Technology (OT)	1	Basic Techniques of Anesthesia
2	Introduction To Anesthesia Technology (AT)		
Generic Elective Course		**Ability Enhancement Elective Course**	
1	Pursuit of Inner Self Excellence (POIS)	1	Computer and Applications
2	Organisational Behaviour	2	Biostatistics and Research Methodology

COURSE OF INSTRUCTION

B.Sc. Operation Theater & Anesthesia Technology

YEAR WISE SUBJECT DISTRIBUTION

<table>
<tr><th colspan="4">Third Year
(Semester V & VI)</th></tr>
<tr><td colspan="4">Theory</td></tr>
<tr><td colspan="2">Semester V</td><td colspan="2">Semester VI</td></tr>
<tr><td>1</td><td>Basics of Surgical Procedures</td><td>1</td><td>Basic Intensive Care</td></tr>
<tr><td>2</td><td>CSSD procedures</td><td>2</td><td>Specialized Surgery and Anesthesia</td></tr>
<tr><td>3</td><td>Advance Anesthetic Techniques</td><td>3</td><td>Electronics and Technology in Surgery and Anesthesia</td></tr>
<tr><td>4</td><td>ATOT Directed Clinical Education-III</td><td>4</td><td>ATOT Directed Clinical Education-IV</td></tr>
<tr><td colspan="4">Practical</td></tr>
<tr><td>1</td><td>Basics of Surgical Procedures</td><td colspan="2" rowspan="5">NIL</td></tr>
<tr><td>2</td><td>Advance Anesthetic Techniques</td></tr>
<tr><td colspan="2">Core Elective Course</td></tr>
<tr><td>1</td><td>Basics of Clinical Skills Learning</td></tr>
<tr><td>2</td><td>Hospital Operation Management</td></tr>
</table>

COURSE OF INSTRUCTION

B.Sc. Operation Theater & Anesthesia Technology

YEAR WISE SUBJECT DISTRIBUTION

Fourth Year (Semester VII & VIII)			
Semester VII		**Semester VIII**	
1	Internship	1	Internship

B.Sc. Cardiac Care Technology

Duration of the Course- 4 years (3Academics + 1year Internship)

ELIGIBILITY CRITERIA:

For 10+2:

- He/she has passed the Higher Secondary (10+2) with Science (PCB) or equivalent examination recognized by any Indian University or a duly constituted board with pass marks in Physics, Chemistry, and Biology.
- Minimum percentage of marks: 50% aggregate(P.C.B.)

For Lateral Entry:

- Lateral entry is applicable for all the UG Degree courses of Allied Health Science Courses wherever corresponding Diploma courses is available in the concerned specialty.
- The corresponding Diploma Courses should be pursued from a recognized university only.
- They would be eligible to join in 2nd year of respective graduate course. Subject availability of seats.

SCOPE OF THE COURSE:

The course aims at study of heart function, damage and repair. Heart failure, mostly resulting from heart attack, is the leading cause of hospital admissions in people over 60 years of age and has a large impact on quality of life, as well as productivity and healthcare costs.

The programme is designed to contribute to improvements in the area of Cardiac care. Graduates in this field have career prospects in the various Cardiac care hospitals as well s Institutions, located throughout the world.

PROGRAMME SPECIFIC OUTCOME:

- This programme is designed to cover all aspects of cardiovascular disease management and care.
- It involves learning of complex diagnostic and therapeutic procedures that involves use of various catheterization equipment, computer hardware, tools, machines and pharmacological agents.
- This program enables students to acquire skills for management of various cardiac disorders.

COURSE OF INSTRUCTION

B.Sc. Cardiac Care Technology

YEAR WISE SUBJECT DISTRIBUTION

First Year (Semester I & II)			
Theory			
Semester I		**Semester II**	
1	Human Anatomy Part I	1	Human Anatomy Part II
2	Human Physiology Part I	2	Human Physiology Part II
3	General Biochemistry & Nutrition	3	General Microbiology
4	Introduction to National Health Care System (Multidisciplinary/ Interdisciplinary)	4	Basic Pathology & Hematology
		5	Introduction to Quality and Patient safety (Multidisciplinary/Interdisciplinary)
Practical			
1	Human Anatomy Part I	1	Human Anatomy Part II
2	Human Physiology Part I	2	Human Physiology Part II
3	General Biochemistry& Nutrition	3	General Microbiology
4	Community Orientation & Clinical Visit (Including related practical to the parent course)	4	Basic Pathology & Hematology
		5	Community Orientation & Clinical Visit (Including related practical's to the parent course)
Ability Enhancement Elective Course		**Skill Enhancement Elective Course**	
1	English &Communication Skills	1	Medical Bioethics & IPR
2	Environmental Sciences	2	Human Rights & Professional Values

COURSE OF INSTRUCTION

B.Sc. Cardiac Care Technology

YEAR WISE SUBJECT DISTRIBUTION

Second Year (Semester III & IV)			
Theory			
Semester III		**Semester IV**	
1	Applied Anatomy, Physiology, Pharmacology in Cardiac Care	1	Development of Cardiovascular system: Fetal & Neonatal
2	Basic Electrocardiography	2	Cardiovascular Diseases Pertinent to Cardiac Care Technology
3	Basic Echocardiography	3	Medical Instrumentation Relevant to Cardiac Care
4	CCT Directed Clinical Education-I	4	CCT Directed Clinical Education-II
Practical			
1	Basic Electrocardiography	1	Medical Instrumentation Relevant to Cardiac Care
2	Basic Echocardiography		
Generic Elective Course		**Ability Enhancement Elective Course**	
1	Pursuit of Inner Self Excellence (POIS)	1	Computer and Applications
2	Organisational Behaviour	2	Biostatistics and Research Methodology

COURSE OF INSTRUCTION

B.Sc. Cardiac Care Technology

YEAR WISE SUBJECT DISTRIBUTION

Third Year (Semester V & VI)			
Theory			
Semester V		**Semester VI**	
1	Advanced Electrocardiography	1	Cardiac Catheterization
2	Advanced Echocardiography	2	Pediatric Interventions
3	Invasive Cardiology	3	CCT Directed Clinical Education-IV
4	CCT Directed Clinical Education-III		
Practical			
1	Advanced Electrocardiography	1	Cardiac Catheterization
2	Advanced Echocardiography	2	Pediatric Interventions
Core Elective Course		**NIL**	
1	Basics of Clinical Skills Learning		
2	Hospital Operation Management		

COURSE OF INSTRUCTION

B.Sc. Cardiac Care Technology

YEAR WISE SUBJECT DISTRIBUTION

Fourth Year (Semester VII & VIII)			
Semester VII		**Semester VIII**	
1	Internship	1	Internship

B.Sc. Medical Radiology & Imaging Technology

Duration of the Course- 4 years (3 Academics + 1 Year Internship)

ELIGIBILITY CRITERIA:

For 10+2:

- He/she has passed the Higher Secondary (10+2) with Science (PCB) or equivalent examination recognized by any Indian University or a duly constituted Board with pass marks in Physics, Chemistry, and Biology or 50% of marks in mathematics separately
- Minimum percentage of marks: 50% aggregate(P.C.B.)

For Lateral Entry:

- Lateral entry is applicable for all the UG Degree courses of Allied Health Science Courses wherever corresponding Diploma courses is available in the concerned specialty.
- The corresponding Diploma Courses should be pursued from a recognized university only.
- They would be eligible to join in 2nd year of respective graduate course. Subject availability of seats.

SCOPE OF THE COURSE:

Imaging Technologists are Health Professionals who facilitate patient diagnosis and management through the creation of Medical images using X-rays, ultrasound and magnetic resonance. They play a pivotal role in selecting and implementing the most appropriate examination protocols which will answer the clinical questions. Medical Imaging Technologists work in collaboration with radiologists and other specialist Medical Practitioners to provide patients with a range of diagnostic examinations.

PROGRAMME SPECIFIC OUTCOME:

After taking this course...

- The student will learn principles of tomographic imaging with different modalities such as x-ray, PET and SPECT, NMR/MRI, ultra sound and optical with non-diffracting and diffracting energy sources.
- Learn principles of non-invasive medical imaging techniques and non-destructive techniques for industrial imaging.
- Understand projections and projection slice theorem
- Various types of data acquisition in tomography - parallel beam, fan-beam and cone-beam as well as circular and helical trajectories of the source and detectors. First to 4th generation of CT.
- Learn transform domain non-iterative 2D and 3D reconstruction techniques for non-diffracting radiation sources
- Learn the statistical nature of the radiation energy generation, propagation, and detection. The errors and artifacts due to the practical limitations of these processes.
- Exposed to a class of Algebraic Reconstruction Techniques (ART) and its variants.
- Some applications of Tomographic principles in signal processing and image processing.
- After completion of this curriculum, a Medical Radiology & Imaging Technologist gets opportunities to work at various health care institutes under designations as:
- Radiographer
- Radiological Technologist
- X-ray Technologist
- CT scan Technologist
- MRI Technologist
- Mammography Technologist
- Applications Specialist
- Quality control Technologist

COURSE OF INSTRUCTION

B.Sc. Medical Radiology & Imaging Technology

YEAR WISE SUBJECT DISTRIBUTION

First Year (Semester I & II)			
Theory			
Semester I		**Semester II**	
1	Human Anatomy Part I	1	Human Anatomy Part II
2	Human Physiology Part I	2	Human Physiology Part II
3	General Biochemistry& Nutrition	3	General Microbiology
4	Introduction to National Health Care System (Multidisciplinary/ Interdisciplinary)	4	Basic Pathology & Hematology
		5	Introduction to Quality and Patient safety (Multidisciplinary/Interdisciplinary)
Practical			
1	Human Anatomy Part I	1	Human Anatomy Part II
2	Human Physiology Part I	2	Human Physiology Part II
3	General Biochemistry& Nutrition	3	General Microbiology
4	Community Orientation & Clinical Visit (Including related practical to the parent course)	4	Basic Pathology & Hematology
		5	Community Orientation & Clinical Visit (Including related practical's to the parent course)
Ability Enhancement Elective Course		**Skill Enhancement Elective Course**	
1	English &Communication Skills	1	Medical Bioethics & IPR
2	Environmental Sciences	2	Human Rights & Professional Values

COURSE OF INSTRUCTION

B.Sc. Medical Radiology & Imaging Technology

YEAR WISE SUBJECT DISTRIBUTION

Second Year (Semester III & IV)			
Theory			
Semester III			**Semester IV**
1	Physics for Medical Imaging - 1	1	Physics for Medical Imaging - 2
2	Radiographic Techniques - 1	2	Radiographic Techniques - 2
3	Dark Room Techniques	3	Digital Imaging
4	MRIT Directed Clinical Education - 1	4	MRIT Directed Clinical Education - 2
Practical			
1	Physics for Medical Imaging – 1	1	Physics for Medical Imaging - 2
2	Radiographic Techniques - 1	2	Radiographic Techniques - 2
Generic Elective Course		**Ability Enhancement Elective Course**	
1	Pursuit of Inner Self Excellence (POIS)	1	Computer and Applications
2	Organisational Behaviour	2	Biostatistics and Research Methodology

COURSE OF INSTRUCTION

B.Sc. Medical Radiology & Imaging Technology

YEAR WISE SUBJECT DISTRIBUTION

Third Year (Semester V & VI)			
Theory			
Semester V		**Semester VI**	
1	Advanced Radiographic Techniques	1	Quality Assurance in Medical Imaging
2	Equipment for Medical Imaging	2	Modern Technologies in Imaging
3	Special Procedures in Medical Imaging	3	Radiation Physics and Radiation Protection
4	MRIT Directed Clinical Education - 3	4	MRIT Directed Clinical Education - 4
Practical			
1	Advanced Radiographic Techniques	1	Quality Assurance in Medical Imaging
2	Equipment for Medical Imaging	2	Modern Technologies in Imaging
Core Elective Course		**NIL**	
1	Basics of Clinical Skills Learning		
2	Hospital Operation Management		

COURSE OF INSTRUCTION

B.Sc. Medical Radiology & Imaging Technology

YEAR WISE SUBJECT DISTRIBUTION

Fourth Year (Semester VII & VIII)			
Semester VII		**Semester VIII**	
1	Internship	1	Internship

B.Sc. Medical Laboratory Technology

Duration of the Course- 4 years (3Academics + 1year Internship)

ELIGIBILITY CRITERIA:

For 10+2:

- He/she has passed the Higher Secondary (10+2) with Science (PCB) or equivalent examination recognized by any Indian University or a duly constituted board with pass marks in Physics, Chemistry, and Biology.
- Minimum percentage of marks: 50% aggregate(P.C.B.)

For Lateral Entry:

- Lateral entry is applicable for all the UG Degree courses of Allied Health Science Courses wherever corresponding Diploma courses is available in the concerned specialty.
- The corresponding Diploma Courses should be pursued from a recognized university only.
- They would be eligible to join in 2nd year of respective graduate course. Subject availability of seats.

SCOPE OF THE COURSE:

- Course is concerned with the analysis of biological specimens to support diagnosis, treatment & prevention of disease.
- Programme introduces students to Pathology, Biochemistry, Microbiology, Histopathology, Immunology and Molecular Biology. Which remains mainstay in diagnosis?
- Students after successful completion of the course are designated as Clinical lab
- Technologists and work in collaboration with Pathologist & other specialized medical practitioners.
- Increasing modernization has definitely fuelled the demand for trained professionals to meet the era of automation, accreditation & skilled clinical management.

PROGRAMME SPECIFIC OUTCOME:

- The course will promulgate the students into Medical Lab technologist, academic researchers, microscopic machinist, which could fabricate the Medical Lab specialists.

COURSE OF INSTRUCTION

B.Sc. Medical Laboratory Technology

YEAR WISE SUBJECT DISTRIBUTION

First Year (Semester I & II)			
Theory			
Semester I		**Semester II**	
1	Human Anatomy Part I	1	Human Anatomy Part II
2	Human Physiology Part I	2	Human Physiology Part II
3	General Biochemistry & Nutrition	3	General Microbiology
4	Introduction to National Health Care System (Multidisciplinary/ Interdisciplinary)	4	Basic Pathology & Hematology
		5	Introduction to Quality and Patient safety (Multidisciplinary/Interdisciplinary)
Practical			
1	Human Anatomy Part I	1	Human Anatomy Part II
2	Human Physiology Part I	2	Human Physiology Part II
3	General Biochemistry & Nutrition	3	General Microbiology
4	Community Orientation & Clinical Visit (Including related practical to the parent course)	4	Basic Pathology & Hematology
		5	Community Orientation & Clinical Visit (Including related practical's to the parent course)
Ability Enhancement Elective Course		**Skill Enhancement Elective Course**	
1	English &Communication Skills	1	Medical Bioethics & IPR
2	Environmental Sciences	2	Human Rights & Professional Values

COURSE OF INSTRUCTION

B.Sc. Medical Laboratory Technology

YEAR WISE SUBJECT DISTRIBUTION

Second Year (Semester III & IV)			
Theory			
Semester III		**Semester IV**	
1	Fundamental of Biochemistry - I	1	Fundamental of Biochemistry - II
2	Fundamentals of Microbiology - I	2	Fundamentals of Microbiology - II
3	Hematology and Clinical Pathology - I	3	Hematology and Clinical Pathology - II
4	MLT Directed Clinical Education - I	4	MLT Directed Clinical Education - II
Practical			
1	Fundamental of Biochemistry - I	1	Fundamental of Biochemistry - II
2	Fundamentals of Microbiology - I	2	Fundamental of Microbiology-II
3	Hematology and Clinical Pathology - I	3	Hematology and Clinical Pathology - II
Generic Elective Course		**Ability Enhancement Elective Course**	
1	Pursuit of Inner Self Excellence (POIS)	1	Computer and Applications
2	Organisational Behaviour	2	Biostatistics and Research Methodology

COURSE OF INSTRUCTION

B.Sc. Medical Laboratory Technology

YEAR WISE SUBJECT DISTRIBUTION

Third Year (Semester V & VI)			
Theory			
Semester V		**Semester VI**	
1	Clinical Biochemistry - I	1	Clinical Biochemistry - II
2	Medical Microbiology-I	2	Medical Microbiology-II
3	Blood Bank and General Pathology - I	3	Blood Bank and General Pathology - II
4	MLT Directed Clinical Education - III	4	MLT Directed Clinical Education -IV
Practical			
1	Clinical Biochemistry - I	1	Clinical Biochemistry - II
2	Medical Microbiology- I	2	Medical Microbiology-II
3	Blood Bank and General Pathology - I	3	Blood Bank and General Pathology - II
Core Elective Course		**NIL**	
1	Basics of Clinical Skills Learning		
2	Hospital Operation Management		

COURSE OF INSTRUCTION

B.Sc. Medical Laboratory Technology

YEAR WISE SUBJECT DISTRIBUTION

Fourth Year (Semester VII & VIII)			
Semester VII		**Semester VIII**	
1	Internship	1	Internship

B. Optometry

Duration of the Course- 4 years (3 Academics + 1 year Internship)

ELIGIBILITY CRITERIA:

For 10+2:

- He/she has passed the Higher Secondary (10+2) with Science (PCB) or equivalent examination recognized by any Indian University or a duly constituted Board with pass marks in Physics, Chemistry, and Biology.
- Minimum percentage of marks: 50% aggregate(P.C.B.)

For Lateral Entry:

- Lateral entry is applicable for all the UG Degree courses of Allied Health Science Courses wherever corresponding Diploma courses is available in the concerned specialty.
- The corresponding Diploma Courses should be pursued from a recognized university only.
- They would be eligible to join in 2nd year of respective graduate course. Subject availability of seats.

SCOPE OF THE COURSE:

- An optometrist dispenses spectacle, contact lenses, low vision aids and ocular prosthesis.
- The programme is designed to provide the student with a comprehensive knowledge about eye. This course will provide training on selecting and prescribing spectacles correction, dispensing of contact lenses and low-vision aids. The candidate will be provided with hands-on experience on various ophthalmic equipments. The student will also be exposed to ophthalmology operation theatre so as to learn assisting in eye surgeries, handling of microsurgical instruments and maintenance of operating microscopes and other equipments.
- The optometrist can set up his own shop for dispensing spectacles and contact lenses. He can also be working with the branded optometric stores. An optometrist is essential in an eye hospital and eye clinics.

PROGRAMME SPECIFIC OUTCOME:

The graduates will be knowledgeable in ophthalmic and systemic care to practice as an optometrist.

- The graduates will interpret results of common ophthalmic procedures, develop differential and definitive diagnoses, including the skillful use of vision care instruments and material.
- The graduates will be skillful in techniques and current technologies, skillful in problem solving, and will possess professional, ethical and compassionate behavior and standards.
- The graduates will provide quality eye and vision care through comprehensive and appropriate examination, measurement, assessment, diagnosis, treatment and management of eye and vision conditions.
- The graduates will be cognizant and responsive to the health care needs of the community and possess a commitment to continuously improve knowledge and abilities.
- The graduates will work and communicate effectively in an inter-disciplinary environment, either independently or in a team, and demonstrate significant leadership qualities.
- The graduates will possess the initiative and critical acumen required to continuously improve their knowledge through self-study, continuing education programme or higher studies.

COURSE OF INSTRUCTION

B. Optometry

YEAR WISE SUBJECT DISTRIBUTION

First Year (Semester I & II)			
Theory			
Semester I			**Semester II**
1	Human Anatomy Part I	1	Human Anatomy Part II
2	Human Physiology Part I	2	Human Physiology Part II
3	General Biochemistry & Nutrition	3	General Microbiology
4	Introduction to National Health Care System (Multidisciplinary/ Interdisciplinary)	4	Basic Pathology & Hematology
		5	Introduction to Quality and Patient safety (Multidisciplinary/Interdisciplinary)
Practical			
1	Human Anatomy Part I	1	Human Anatomy Part II
2	Human Physiology Part I	2	Human Physiology Part II
3	General Biochemistry& Nutrition	3	General Microbiology
4	Community Orientation & Clinical Visit (Including related practical to the parent course)	4	Basic Pathology & Hematology
		5	Community Orientation & Clinical Visit (Including related practical's to the parent course)
Ability Enhancement Elective Course		**Skill Enhancement Elective Course**	
1	English &Communication Skills	1	Medical Bioethics & IPR
2	Environmental Sciences	2	Human Rights & Professional Values

COURSE OF INSTRUCTION

B. Optometry

YEAR WISE SUBJECT DISTRIBUTION

Second Year (Semester III & IV)			
Theory			
Semester III		**Semester IV**	
1	Physical Optics	1	Optometric Optics I & II
2	Geometrical Optics	2	Ocular Diseases II & Glaucoma
3	Visual Optics I/II	3	Dispensing Optics
4	Ocular Diseases I	4	Optometric Instrumentation
5	Clinical Examinations and Visual Systems	5	Basic & Occular Pharmacology
		6	BOPTOM Directed Clinical Education-1
Practical			
1	Physical Optics	1	Optometric Optics I & II
2	Geometrical Optics	2	Dispensing Optics
3	Visual Optics I/II	3	Optometric Instrumentation
4	Clinical Examinations and Visual systems		
Generic Elective Course		**Ability Enhancement Elective Course**	
1	Pursuit of Inner Self Excellence (POIS)	1	Computer and Applications
2	Organisational Behaviour	2	Biostatistics and Research Methodology

COURSE OF INSTRUCTION

B. Optometry

YEAR WISE SUBJECT DISTRIBUTION

Third Year (Semester V & VI)			
Theory			
Semester V		**Semester VI**	
1	Contact Lenses I	1	Contact Lenses II
2	Binocular Vision I &II	2	Sports Vision
3	Low Vision Aids	3	Pediatric and Geriatric Optometry
4	Systemic Disease	4	Occupational Optometry
5	BOPTOM Directed Clinical Education-II	5	BOPTOM Directed Clinical Education-III
Practical			
1	Contact Lenses I	1	Contact Lenses II
2	Binocular Vision I & II	2	Pediatric and Geriatric Optometry
Core Elective Course		**NIL**	
1	Basics of Clinical Skills Learning		
2	Hospital Operation Management		

COURSE OF INSTRUCTION

B. Optometry

YEAR WISE SUBJECT DISTRIBUTION

Fourth Year (Semester VII & VIII)			
Semester VII		**Semester VIII**	
1	Internship	1	Internship

B.Sc. Perfusion Technology

Duration of the Course- 4 years (3Academics + 1year Internship)

ELIGIBILITY CRITERIA:

For 10+2:

- He/she has passed the Higher Secondary (10+2) with Science (PCB) or equivalent examination recognized by any Indian University or a duly constituted Board with pass marks in Physics, Chemistry, and Biology.
- Minimum percentage of marks: 50% aggregate(P.C.B.)

For Lateral Entry:

- Lateral entry is applicable for all the UG Degree courses of Allied Health Science Courses wherever corresponding Diploma courses is available in the concerned specialty.
- The corresponding Diploma Courses should be pursued from a recognized university only.
- They would be eligible to join in 2nd year of respective graduate course. Subject availability of seats.

SCOPE OF THE COURSE:

The Respiratory Care Technologist is a key member of the medical team, specializing in diagnostics, treatments, and procedures in the care of patients with respiratory problems. They evaluate, treat, and care for patients with breathing disorders.

The prime responsibility of the Perfusionist is to maintain adequate circulatory and respiratory support during open heart surgery, this support includes: set-up and operation of the extra-corporeal circuit, set-up and calibration of physiological monitoring, auto transfusion and maintaining proper perfusion records.

The Perfusionist is also responsible for the set-up and operation of advanced life support systems. Classroom instructions include medical gas therapy, clinical applications & therapeutics, clinical medicine, pulmonary functions and cardiopulmonary patho-physiology, and continuous mechanical ventilation.

PROGRAMME SPECIFIC OUTCOME:

At the completion of course, students will be able to:

- Demonstrate clinical skills in cardiopulmonary bypass and mechanical circulatory devices.
- Demonstrate clinical skills in auto transfusion, blood conservation, and blood product management.
- Demonstrate clinical skills in laboratory analysis of blood gases, hematocrit, and coagulation.
- Integrate perfusion theory to clinical applications.
- Demonstrate acquired knowledge of various perfusion equipment and supplies used in the healthcare setting

COURSE OF INSTRUCTION

B.Sc. Perfusion Technology

YEAR WISE SUBJECT DISTRIBUTION

First Year (Semester I & II)			
Theory			
Semester I		**Semester II**	
1	Human Anatomy Part I	1	Human Anatomy Part II
2	Human Physiology Part I	2	Human Physiology Part II
3	General Biochemistry& Nutrition	3	General Microbiology
4	Introduction to National Healthcare System (Multidisciplinary/ Interdisciplinary)	4	Basic Pathology & Hematology
		5	Introduction to Quality and Patient safety (Multidisciplinary/Interdisciplinary)
Practical			
1	Human Anatomy Part I	1	Human Anatomy Part II
2	Human Physiology Part I	2	Human Physiology Part II
3	General Biochemistry& Nutrition	3	General Microbiology
4	Community Orientation & Clinical Visit (Including related practical to the parent course)	4	Basic Pathology & Hematology
		5	Community Orientation & Clinical Visit (Including related practical's to the parent course)
Ability Enhancement Elective Course		**Skill Enhancement Elective Course**	
1	English &Communication Skills	1	Medical Bioethics & IPR
2	Environmental Sciences	2	Human Rights & Professional Values

COURSE OF INSTRUCTION

B.Sc. Perfusion Technology

YEAR WISE SUBJECT DISTRIBUTION

Second Year (Semester III & IV)			
Theory			
Semester III		**Semester IV**	
1	Applied Pharmacology	1	Applied Physiology & Biochemistry
2	Applied Anatomy and Physiology of Cardiovascular system related to PT	2	Introduction of Perfusion Techniques
3	Basics of Perfusion Technology	3	PT Directed Clinical Education –IV
4	PT Directed Clinical Education-III		
Practical			
1	Applied Anatomy and Physiology of Cardiovascular system related to PT	1	Applied Physiology & Biochemistry
2	Basics of Perfusion Technology	2	Introduction of Perfusion Techniques
Generic Elective Course		**Ability Enhancement Elective Course**	
1	Pursuit of Inner Self Excellence (POIS)	1	Computer and Applications
2	Organisational Behaviour	2	Biostatistics and Research Methodology

COURSE OF INSTRUCTION

B.Sc. Perfusion Technology

YEAR WISE SUBJECT DISTRIBUTION

<table>
<tr><th colspan="4">Third Year
(Semester V & VI)</th></tr>
<tr><td colspan="4">Theory</td></tr>
<tr><td colspan="2">Semester V</td><td colspan="2">Semester VI</td></tr>
<tr><td>1</td><td>Perfusion Technology-Clinical</td><td>1</td><td>Perfusion Technology-Advanced</td></tr>
<tr><td>2</td><td>Perfusion Technology-Applied</td><td>2</td><td>Recent advance in Cardiopulmonary bypass & Perfusion</td></tr>
<tr><td>3</td><td>PT Directed Clinical Education -V</td><td>3</td><td>PT Directed Clinical Education-VI</td></tr>
<tr><td colspan="4">Practical</td></tr>
<tr><td>1</td><td>Perfusion Technology-Clinical</td><td>1</td><td>Perfusion Technology-Advanced</td></tr>
<tr><td>2</td><td>Perfusion Technology-Applied</td><td colspan="2" rowspan="3">NIL</td></tr>
<tr><td colspan="2">Core Elective Course</td></tr>
<tr><td>1</td><td>Basics of Clinical Skills Learning</td></tr>
<tr><td>2</td><td>Hospital Operation Management</td><td colspan="2"></td></tr>
</table>

COURSE OF INSTRUCTION

B.Sc. Perfusion Technology

YEAR WISE SUBJECT DISTRIBUTION

Fourth Year (Semester VII & VIII)			
Semester VII		**Semester VIII**	
1	Internship	1	Internship

B.Sc. Medical Dialysis Technology

Duration of the Course- 4 years (3Academics + 1year Internship)

ELIGIBILITY CRITERIA:

For 10+2:

- He/she has passed the Higher Secondary (10+2) with Science (PCB) or equivalent examination recognized by any Indian University or a duly constituted Board with pass marks in Physics, Chemistry, and Biology.
- Minimum percentage of marks: 50% aggregate(P.C.B.)

For Lateral Entry:

- Lateral entry is applicable for all the UG Degree courses of Allied Health Science Courses wherever corresponding Diploma courses is available in the concerned specialty.
- The corresponding Diploma Courses should be pursued from a recognized university only.
- They would be eligible to join in 2nd year of respective graduate course. Subject availability of seats.

SCOPE OF THE COURSE:

- Dialysis Technologists operate machines that remove waste and excess fluids from the blood of patients whose kidneys can no longer carry out those functions.
- The programme is designed to provide the Student with a comprehensive introduction to the field of dialysis and the skills required for entry level employment as a dialysis technologist. Classroom instruction includes principles of dialysis, anatomy and physiology of the kidney, fluid and electrolyte balance, hematological aspects, infectious diseases, dialysis systems and equipment, vascular access to circulation, dietary regulation, blood chemistries, complications of renal failure, psychosocial aspects, and an overview of peritoneal dialysis and renal transplantation.

PROGRAMME SPECIFIC OUTCOME:

This programme is designed to cover all aspects of cardiovascular disease management and care.

• It involves learning of complex diagnostic and therapeutic procedures that involve use of various catheterization equipment, computer hardware, tools, machines and pharmacological agents.

• This program enables students to acquire skills for management of various cardiac disorders.

COURSE OF INSTRUCTION

B.Sc. Medical Dialysis Technology

YEAR WISE SUBJECT DISTRIBUTION

First Year (Semester I & II)			
Theory			
Semester I		**Semester II**	
1	Human Anatomy Part I	1	Human Anatomy Part II
2	Human Physiology Part I	2	Human Physiology Part II
3	General Biochemistry& Nutrition	3	General Microbiology
4	Introduction to National Healthcare System (Multidisciplinary/ Interdisciplinary)	4	Basic Pathology & Hematology
		5	Introduction to Quality and Patient safety (Multidisciplinary/Interdisciplinary)
Practical			
1	Human Anatomy Part I	1	Human Anatomy Part II
2	Human Physiology Part I	2	Human Physiology Part II
3	General Biochemistry& Nutrition	3	General Microbiology
4	Community Orientation & Clinical Visit (Including related practical to the parent course)	4	Basic Pathology & Hematology
		5	Community Orientation & Clinical Visit (Including related practical's to the parent course)
Ability Enhancement Elective Course		**Skill Enhancement Elective Course**	
1	English &Communication Skills	1	Medical Bioethics & IPR
2	Environmental Sciences	2	Human Rights & Professional Values

COURSE OF INSTRUCTION

B.Sc. Medical Dialysis Technology

YEAR WISE SUBJECT DISTRIBUTION

Second Year (Semester III & IV)			
Theory			
Semester III		**Semester IV**	
1	Introduction to Dialysis	1	Concept of Renal Disease & Disorders
2	Fundamental of Dialysis	2	Nutrition in Dialysis
3	Pharmacology in Dialysis	3	MDT Directed Clinical Education-II
4	MDT Directed Clinical Education-I		
Practical			
1	Introduction to Dialysis	1	Concept of Renal Disease & Disorders
2	Fundamental of Dialysis	2	Seminar
Generic Elective Course		**Ability Enhancement Elective Course**	
1	Pursuit of Inner Self Excellence (POIS)	1	Computer and Applications
2	Organisational Behaviour	2	Biostatistics and Research Methodology

COURSE OF INSTRUCTION

B.Sc. Medical Dialysis Technology

YEAR WISE SUBJECT DISTRIBUTION

Third Year (Semester V & VI)			
Theory			
Semester V		**Semester VI**	
1	Applied Dialysis Technology Part – I	1	Applied Dialysis Technology Part – II
2	Advanced Dialysis Technology Part – I	2	Advanced Dialysis Technology Part – II
3	MDT Directed Clinical Education-III	3	MDT Directed Clinical Education-IV
Practical			
1	Applied Dialysis Technology Part – I	1	Applied Dialysis Technology Part – II
2	Advanced Dialysis Technology Part – I	2	Advanced Dialysis Technology Part – II
Core Elective Course		**NIL**	
1	Basics of Clinical Skills Learning		
2	Hospital Operation Management		

COURSE OF INSTRUCTION

B.Sc. Medical Dialysis Technology

YEAR WISE SUBJECT DISTRIBUTION

Fourth Year (Semester VII & VIII)			
Semester VII		**Semester VIII**	
1	Internship	1	Internship

LABORATORY FACILITY FOR B.Sc. ALLIED COURSES

M.Sc. COURSES

Duration: 2 Years

Courses	Intake Capacity
M.Sc. Medical Biotechnology	20
M.Sc. Medical Genetics	20
M.Sc. Molecular Biology	20
M.Sc. Clinical Embryology	5
M.Sc. Clinical Nutrition	10
Master of Public Health	5
M.Sc. Biostatistics	10
Masters in Hospital Administration	15
Masters in Health Profession Education	10
M.Sc. Cardiac Care Technology	5
M.Sc. Medical Radiology & Imaging Technology	5
M.Optometry	5

ADMISSION PROCESS FOR M.Sc. COURSES

Online Application Form & Application Process is available on www.mgmuhs.com

FEE STRUCTURE FOR M.Sc. COURSES

Sr. No	Course	Annual Tution Fees (₹) Merit	Annual Tution Fees (₹) MGT*	Annual Tution Fees (USD $) NRI
1	M.Sc. Medical Biotechnology	60000.00	120000.00	3400
2	M.Sc. Medical Genetics	60000.00	120000.00	3400
3	M.Sc. Molecular Biology	60000.00	120000.00	3400
4	M.Sc. Clinical Embryology	60000.00	120000.00	3400
5	M.Sc. Clinical Nutrition	60000.00	120000.00	3400
6	Master of Public Health	60000.00	120000.00	3400
7	M.Sc. Biostatistics	105000.00	210000.00	6000
8	Master In Health Profession Education	105000.00	210000.00	6000
9	Master In Hospital Administration	105000.00	210000.00	6000
10	M.Sc. Medical Radiology and Imaging Technology (MRIT)	105000.00	210000.00	6000
11	M.Optometry	105000.00	210000.00	6000
12	M.Sc. Cardiac Care Technology	105000.00	210000.00	6000

*** Fee structure Subject to Change**

*In addition to tuition fees, additional fees are mentioned below

Particulars of Fees	1st Year	2nd Year	3rd Year
Other Fee (ID Cards, Library Card Apron, Journal, Fest, Bonafide)	5000.00	-	-
University Enrollment & Eligibility Fees	12000.00	-	-
Exam Fee	10000.00	10000.00	10000.00

ADMISSION SCHEDULE

M.Sc. Course

Important Dates:

Start of Online Application Form: 10th April 2019

Note:

- Admission will be confirmed on payment of tuition fee & authentication of original document at the time of reporting for counseling

- For further details & updates, merit list, date of counseling, students are requested to visit our website www.mgmsbsnm.edu.in or www.mgmuhs.com regularly.

COMMENCEMENT OF THE PROGRAMME

Tentative date of programme commencement is **1st September 2019.**

CANCELLATION OF ADMISSION

Admission Cancellation Charges for

M.Sc. Courses

Sr. No.	Point of time when notice of Cancellation of admission is received	Cancellation Charges Applicable
1	Before 15th August 2019	5% of Tuition Fees Or ₹ 5000/- (Whichever is Less)
2	Within 16tht August to 30th August 2019	10% of Tuition Fees
3	Within 1st September to 15th September 2019	20% of Tuition Fees
4	Within 16th September to 30th September 2019	50% of Tuition Fees
5	After 30th September	1. No refund of 1st year fee 2. Full fees of the entire course of three years or two years as the case may be will be liable to be paid by the student.

Note:

- Fees once paid towards are neither refundable nor transferable under any circumstances.
- For the cancellation of admission, a candidate has to write an application of cancellation duly signed by him/her and counter signed by his/her parent/guardian at respective Institute.
- The candidate has to enclose the original selection letter, fee receipt and with cancelled cheque along with the written application. (state the relation of the cheque holder with the student)

DOCUMENTS TO BE SUBMITTED DURING ADMISSION

M.Sc. Courses

The following documents in original, with two set of photo copies thereof, are required to be submitted at the time of Admission.

- SSC Mark sheet or Its Equivalent
- SSC Passing Certificate Or Its Equivalent
- HSC Mark Sheet OR Its Equivalent
- HSC Passing Certificate OR Its Equivalent
- B.Sc. Degree Mark sheet OR Its Equivalent (all years)
- Leaving Certificate/Transfer Certificate
- Passing Certificate of B.Sc. Or Degree or Its Equivalent
- Migration Certificate
- Age, Nationality and Domicile Certificate
- Medical Fitness Certificate
- Proof of Date of Birth (Photo Copy)
- Parents Income Proof (Photo Copy)
- Gazette Copy (if there is a change in the name shown in the last mark sheet)
- Caste Certificate (if applicable)
- Parents ID Proof
- Adhaar Card (Photo Copy)
- Gap Certificate (if applicable)
- Four copies of Passport size photos

M.Sc. Medical Biotechnology

Duration of the Course- 2 Year

ELIGIBILITY CRITERIA:

As a minimum criterion of eligibility, aspiring candidates are needed to have attained a B.Sc. in any discipline of Life Sciences, Biosciences, Bachelor's degree in any of Physics, Biological Sciences, M.B.B.S, BDS, BAMS, BHMS, B.Pharm., B.Tech (Biotechnology), Bachelor's Degree in Agricultural, Veterinary and Fishery Sciences, or equivalent examination with a minimum aggregate score of 50%.

SCOPE OF THE COURSE:

Innovative biotechnologist are in great demand in India and abroad. This program is designed to train students to deal in technological applications involving biological application systems, living organisms, or derivatives thereof, to make or modify products to processes for specific use to bridge the gap between industry requirements and the growing demand for skilled manpower in the Biotechnology sector.

Postgraduate qualification in Biotechnology can earn placements in research laboratories run by the government and the corporate sector. Private sector placements are in both technical and managerial positions. The biotech business is growing at an accelerated rate, with a number of companies launching innovative biotech applications. Entry of corporates in biotechnology makes career prospects in this field, bright.

In academics, one can go for higher qualifications like Ph.D. in various field of life sciences. There is a great demand of this course abroad as most of the foreign countries are looking for expert in this field.

After completion of the course, one can work in Research industries like Pharma companies, Hospitals, pathology labs, as Marketing manager, Bio-informist, Business development Manager etc.

PROGRAMME SPECIFIC OUTCOME:

- Biotechnology is the basic science that has as its goal an explanation of life processes at the sub cellular and molecular level.

- Recent years have seen explosive advances in the study of DNA biotechnology, including gene cloning, sequencing and mapping.

- Developments in biotechnology have opened new areas of study and provided powerful techniques that are revolutionizing the pharmaceutical, health, and agricultural industries

- They have spawned new industries in biotechnology, and opened avenues for answering basic and applied questions in all of the life sciences.

- Biotechnology students complete a comprehensive curriculum in the fundamentals of science and are prepared to address problems in the biochemical, biological and agricultural sciences.

- The requirements of the molecular biology major assure competence in the broad scientific theory and application of biotechnology, while allowing flexibility for students to develop strength in their biochemical, biological or agricultural discipline.

COURSE OF INSTRUCTION

M.Sc. Medical Biotechnology

YEAR WISE SUBJECT DISTRIBUTION

First Year (Semester I & II)			
Theory			
Semester I			**Semester II**
1	Cell Biology	1	Molecular Biology & Genomics
2	Immunology & Immunotechnology	2	Recombinant DNA Technology
3	Analytical Instrumentation	3	Bioinformatics
4	Basic Biochemistry & Biomolecules (Multidisciplinary/Interdisciplinary)	4	Biostatistics , Research Methodology & Computer application (Multidisciplinary/Interdisciplinary)
Practical			
1	Cell Biology	1	Molecular Biology & Genomics
2	Immunology & Immunotechnology	2	Recombinant DNA Technology
3	Analytical Instrumentation	3	Bioinformatics
4	Basic Biochemistry & Biomolecules (Multidisciplinary/Interdisciplinary)	4	Biostatistics , Research Methodology & Computer application (Multidisciplinary/Interdisciplinary)

COURSE OF INSTRUCTION
M.Sc. Medical Biotechnology

YEAR WISE SUBJECT DISTRIBUTION

<table>
<tr><th colspan="4">Second Year
(Semester III & IV)</th></tr>
<tr><td colspan="4">Theory</td></tr>
<tr><td colspan="2">Semester III</td><td colspan="2">Semester IV</td></tr>
<tr><td>1</td><td>Plant Biotechnology</td><td>1</td><td>Dissertation / Project*</td></tr>
<tr><td>2</td><td>Animal Biotechnology</td><td rowspan="2">2</td><td rowspan="2">General Elective Course
I Pursuit of Inner Self Excellence (POISE)
II Bioethics, Biosafety, IPR & Technology Transfer
III Disaster Management and Mitigation Resources
IV Human Rights</td></tr>
<tr><td>3</td><td>Core Elective Course
I. Medical Microbiology
II Human Genetics
III Nanobiotechnology</td></tr>
<tr><td>4</td><td>Dissertation/Project Proposal</td><td colspan="2"></td></tr>
<tr><td colspan="4">Practical</td></tr>
<tr><td>1</td><td>Plant Biotechnology</td><td>1</td><td>Educational Tour / Field Work/Industrial Visit/ Hospital Visit</td></tr>
<tr><td>2</td><td>Animal Biotechnology</td><td colspan="2"></td></tr>
<tr><td>3</td><td>Core Elective Course
I. Medical Microbiology
II Human Genetics
III Nanobiotechnology</td><td colspan="2" rowspan="2"></td></tr>
<tr><td>4</td><td>Seminar</td></tr>
</table>

M.Sc. Medical Genetics
Duration of the Course - 2 Years

ELIGIBILITY CRITERIA:

As a minimum criterion of eligibility, aspiring candidates are needed to have attained a B.Sc. in any discipline of Life Sciences, Biosciences, Bachelor's degree in any of Physics, Biological Sciences, M.B.B.S, BDS, BAMS, BHMS, B.Pharm, B.Tech (Biotechnology), Bachelor's Degree in Agricultural, Veterinary and Fishery Sciences, or equivalent examination with a minimum aggregate score of 50%.

SCOPE OF THE COURSE:

M.Sc. Medical Genetics provides outstanding educational opportunities for students who wish to pursue a career in research, education, and service in this field.

Students in the programme obtain rigorous training in modern biology with a special emphasis on genetics.

They also receive training in cutting edge technology for diagnosis of genetic diseases.

The unique environment of a medical college provides students with an opportunity to obtain education and practical experience in both basic and applied research in human genetics.

In order to encourage our students to fulfill their potential and to excel in their work, we provide state of art laboratories, hands on experience and opportunity to expose them to faculty of international repute.

This institute is one of the very few institutes to offer this course.

PROGRAMME SPECIFIC OUTCOME:

- GENETICS is the basic science that has as its goal an explanation of life processes at the sub cellular and molecular level.

- Recent years have seen explosive advances in the study of DNA, including gene cloning, sequencing and mapping.

- The candidates of Genetics generally study the genetic variation, genes, and heredity in living organisms

- Developments in genetics have opened new areas of study and provided powerful techniques that are revolutionizing the pharmaceutical, health, and agricultural industries

- They have spawned new industries in genetics, and opened avenues for answering basic and applied questions in all of the life sciences.

- Genetics students complete a comprehensive curriculum in the fundamentals of science and are prepared to address problems in the biochemical, biological and agricultural sciences.

- The requirements of the molecular biology major assure competence in the broad scientific theory and application of genetics, while allowing flexibility for students to develop strength in their biochemical, biological or agricultural discipline.

COURSE OF INSTRUCTION

M.Sc. Medical Genetics

YEAR WISE SUBJECT DISTRIBUTION

First Year (Semester I & II)			
Theory			
Semester I			**Semester II**
1	Cell Biology	1	Molecular Biology & Genomics
2	Immunology & Immunotechnology	2	Recombinant DNA Technology
3	Analytical Instrumentation	3	Bioinformatics
4	Basic Biochemistry & Inborn Errors of Metabolism) (Multidisciplinary/Interdisciplinary)	4	Research Methodology & Biostatistics (Core Course)
Practical			
1	Cell Biology	1	Molecular Biology & Genomics
2	Immunology & Immunotechnology	2	Recombinant DNA Technology
3	Analytical Instrumentation	3	Bioinformatics
4	Basic Biochemistry & Inborn Errors of Metabolism) (Multidisciplinary/Interdisciplinary)	4	Research Methodology & Biostatistics (Core Course))

COURSE OF INSTRUCTION

M.Sc. Medical Genetics

YEAR WISE SUBJECT DISTRIBUTION

<table>
<tr><th colspan="4">Second Year
(Semester III & IV)</th></tr>
<tr><td colspan="4">Theory</td></tr>
<tr><td colspan="2">Semester III</td><td colspan="2">Semester IV</td></tr>
<tr><td>1</td><td>Clinical Genetics & Genetic Counseling</td><td>1</td><td>Dissertation / Project*</td></tr>
<tr><td>2</td><td>Developmental Genetics & Environmental Genetics</td><td rowspan="2">2</td><td rowspan="2">General Elective Course
I Pursuit of Inner Self Excellence (POISE)
II Bioethics, Biosafety, IPR & Technology Transfer
III Disaster Management and Mitigation Resources
IV Human Rights</td></tr>
<tr><td>3</td><td>Core Elective Course
I.Cancer Genetics and Pharmacogenomics
II Principles of Genetics & Population Genetics
III Stem Cell</td></tr>
<tr><td>4</td><td>Dissertation/Project Proposal</td><td colspan="2"></td></tr>
<tr><td colspan="4">Practical</td></tr>
<tr><td>1</td><td>Clinical Genetics</td><td>1</td><td>Educational Tour / Field Work/Industrial Visit/ Hospital Visit</td></tr>
<tr><td>2</td><td>Developmental Genetics</td><td colspan="2" rowspan="3"></td></tr>
<tr><td>3</td><td>Core Elective Course
I.Cancer Genetics and Pharmacogenomics
II Principles of Genetics & Population Genetics
III Stem Cell</td></tr>
<tr><td>4</td><td>Seminar</td></tr>
</table>

M.Sc. Molecular Biology
Duration of the Course- 2 Year

ELIGIBILITY CRITERIA:

Candidates with 50% marks in B.Sc. Molecular Biology/ Biotechnology/ Microbiology/ / Biochemistry/Genetics /Botany/Zoology /B.Sc. Nursing/MBBS/BDS) or any equivalent degree in life sciences of any recognized university.

SCOPE OF THE COURSE:

The students of M.Sc. Molecular Biology course should be able to:

1. Read and analyze the primary research literature, critically assess scientific experiments and evaluate the impact of a scientific discovery.
2. Understand key implications of Proteomics and Genomics, Nanobiotechnology etc.
3. Be conversant with latest research developments in all the above areas.
4. Be primed and able to conduct quality research in latest molecular biology based research topics

PROGRAMME SPECIFIC OUTCOME:

- Understanding of molecular function in in biology.
- Fundamental understanding of genomics and proteomics and related applications.
- Importance of instrumentation in molecular biology.
- Advance understanding of genomics and proteomics
- Understanding and manipulation of metabolic network
- Importance of computation in molecular analysis and function.
- Detail understanding of recombinant DNA technology for production of recombinant products.
- Basic understanding of nano-biotechnology
- Basic understanding of techniques /process involved in molecular diagnostics.
- Fundamental understanding of importance of bioethics, bio-safety
- Basic understanding of various types of IPR including patent.
- Hands on experience of research in various aspects of molecular biology.

COURSE OF INSTRUCTION

M.Sc. Molecular Biology

YEAR WISE SUBJECT DISTRIBUTION

First Year (Semester I & II)			
Theory			
Semester I			**Semester II**
1	Cell Biology	1	Gene and Protein Science
2	Molecular Immunology	2	Bioinformatics & Computational Biology
3	Molecular Enzymology	3	DNA Recombinant Technology
4	Metabolic Engineering	4	Research Methodology & Biostatistics (Core Course)
Practical			
1	Cell Biology	1	Gene and Protein Science
2	Molecular Immunology	2	Bioinformatics & Computational biology
3	Molecular Enzymology	3	DNA Recombinant Technology
4	Metabolic Engineering	4	Research Methodology & Biostatistics (Core Course)

COURSE OF INSTRUCTION
M.Sc. Molecular Biology

YEAR WISE SUBJECT DISTRIBUTION

<table>
<tr><th colspan="4">Second Year
(Semester III & IV)</th></tr>
<tr><td colspan="4">Theory</td></tr>
<tr><td colspan="2">Semester III</td><td colspan="2">Semester IV</td></tr>
<tr><td>1</td><td>Genomics</td><td>1</td><td>Dissertation / Project</td></tr>
<tr><td>2</td><td>Proteomics</td><td rowspan="2">2</td><td rowspan="2">General Elective Course
I Analytical Instrumentation
II Bioethics, Biosafety , IPR & Technology transfer
III Quality Assurance & Quality Control</td></tr>
<tr><td>3</td><td>Core Elective Course
I. Nanobiotechnology
II. Molecular Diagnostics
III Drug discovery</td></tr>
<tr><td>4</td><td>Dissertation/Project Proposal</td><td colspan="2"></td></tr>
<tr><td colspan="4">Practical</td></tr>
<tr><td>1</td><td>Genomics</td><td>1</td><td>Educational Tour / Field Work/Industrial Visit</td></tr>
<tr><td>2</td><td>Proteomics</td><td colspan="2" rowspan="3"></td></tr>
<tr><td>3</td><td>Core Elective Course
I.Nanobiotechnology
II. Molecular Diagnostics
III Drug Discovery</td></tr>
<tr><td>4</td><td>Seminar</td></tr>
</table>

M.Sc. Clinical Embryology
Duration of the Course - 2 Years

ELIGIBILITY CRITERIA:

As a minimum criterion of eligibility, aspiring candidates are needed to have attained a B.Sc. in any discipline of Life Sciences, Biosciences, Bachelor's degree in any of Physics, Biological Sciences, M.B.B.S, BDS, BAMS, BHMS, B.Pharm., B.Tech (Biotechnology), Bachelor's Degree in Agricultural, Veterinary and Fishery Sciences, or equivalent examination with a minimum aggregate score of 50%.

SCOPE OF THE COURSE:

The students of M.sc. Molecular Biology course (2 years) should be able to

1. Develop/ produce trained manpower with strong knowledge base in clinical embryology.
2. To impart knowledge of embryology.
3. To teach the basics of an ART centre where they can work as clinical embryologists.
4. To impart knowledge on cryopreservation & practice of embryo freezing so that they can work in cryopreservation centers.
5. To give themthe basic knowledge of genetics so that they can work in genetics lab.
6. To train students in micromanipulation of sperm and oocytes for carrying out ICSI and single- cell biopsies of embryos for preimpiantation genetic diagnosis.

PROGRAMME SPECIFIC OUTCOME:

Clinical embryology graduate students will be able to:

• Understand complete knowledge about the structures, development of human embryo at different stages including gametogenesis, fertilization and implantation. Also, the students will have the ability to correlate between the embryological structure and its clinical significance. This course trains the student to solve and understand any related clinical problems by simple and short way.

• Demonstrate the ability to assimilate and integrate information from lectures, practical, tutorial and independent activities on the gametogenesis, fertilization, implantation, embryonic period, fetal period and development of the pharyngeal arches and their derivatives.

• Experience through small group teaching and group discussion to analyze any related clinical problem or congenital anomaly and to communicate with other students and teaching staff.

COURSE OF INSTRUCTION

M.Sc. Clinical Embryology

YEAR WISE SUBJECT DISTRIBUTION

First Year (Semester I & II)			
Theory			
Semester I			**Semester II**
1	Relevant Gross Anatomy	1	Infertility & Ovulation Induction Methods
2	Histology	2	Quality assessment, statistics, handling data, ethics, legislation
3	Genetics and Reproductive Hormone	3	IVF procedure
4	General & Systemic Embryology	4	Research Methodology & Biostatistics (Core Course)
Practical			
1	Relevant Gross Anatomy	1	Infertility & Ovulation induction methods
2	Histology	2	Quality assessment, statistics, handling data, ethics, legislation
3	Genetics and Reproductive Hormone	3	IVF procedure
4	General & Systemic Embryology	4	Research Methodology & Biostatistics (Core Course)

COURSE OF INSTRUCTION

M.Sc. Clinical Embryology

YEAR WISE SUBJECT DISTRIBUTION

<table>
<tr><th colspan="4">Second Year
(Semester III & IV)</th></tr>
<tr><td colspan="4">Theory</td></tr>
<tr><td colspan="2">Semester III</td><td colspan="2">Semester IV</td></tr>
<tr><td>1</td><td>Introduction to IVF lab</td><td>1</td><td>Dissertation / Project</td></tr>
<tr><td>2</td><td>Techniques used in IVF Lab</td><td rowspan="2">2</td><td rowspan="2">General Elective Course
I Pursuit of Inner Self Excellence (POISE)
II IPR & Bioethics (Multidisciplinary / Interdisciplinary)
III Disaster Management and Mitigation Resources
IV Human Rights</td></tr>
<tr><td>3</td><td>Core Elective Course
I. ICSI
II Biochemistry including steroid metabolism
III Lab equipment</td></tr>
<tr><td>4</td><td>Dissertation/Project Proposal</td><td colspan="2"></td></tr>
<tr><td colspan="4">Practical</td></tr>
<tr><td>1</td><td>Introduction to IVF lab</td><td>1</td><td>Educational Tour / Field Work/Industrial Visit/Hospital Visit</td></tr>
<tr><td>2</td><td>Techniques used in IVF Lab</td><td colspan="2"></td></tr>
<tr><td>3</td><td>Core Elective Course
I. ICSI
II Biochemistry including steroid metabolism
III Lab equipment</td><td colspan="2" rowspan="2"></td></tr>
<tr><td>4</td><td>Seminar</td></tr>
</table>

Masters In Hospital Administration

Duration of the Course - 2 Years

ELIGIBILITY CRITERIA:

Candidates admitted to the MHA should be a graduate from a recognized University with minimum 50% marks in qualifying examination. The candidates with experience will be given preference.

PROGRAMME SPECIFIC OUTCOME:

• Hospital Administration is a branch which is gaining increasing importance. As successful management is required in the ever-expanding field of corporate, Similarly, able and capable managers/ administrators are required in the hospitals too, who serve as a strong 'Back Bone' of the health care industry.

• Hospitals in India whether it belongs to a private or public sector, should have at least 2-3 qualified and trained Hospital Administrators.

• There are about 2.5 lac hospitals and for their smooth administration, about 15000 trained hospital administrators are required every year.

• The demand for trained hospital administrators is increasing not only in government sectors like "National Rural Health Mission" but also in private sectors like- Medical Diagnostic Hardware and Software Companies, Health Insurance Companies, Pharma-Companies, Health Diagnostic Centre, Medico - Legal Consulting Companies and also in companies involved in the production of Hospital Equipments, Hospital Information System (H.I.S).

• The programme is designed to impart multi-dimensional knowledge of the aforesaid domain to the students.

• Masters in Hospital Administration can be taken up by any student who has completed any medical related graduation degree or has completed B.Sc (Nursing). It's a two year course which deals with the subjects like, Mathematics, Accounts, Principles of Management, Business Communication etc. Along with these, various other subjects related to hospitals like- Hospital Planning & Design, Medico -Legal, Operation Management, Health Statistics, Health-Economics etc. are also being taught in it.

• This course is a fantastic option for the graduates like- M.B.B.S, B.D.S, B.A.MS, B.H.M.S, Bio-Technology), B.P.T.,B.Sc.(Nursing), Pharmacy ,etc.

COURSE OF INSTRUCTION

Masters in Hospital Administration

YEAR WISE SUBJECT DISTRIBUTION

First Year (Semester I & II)			
Theory			
Semester I			**Semester II**
1	Epidemiology and Demography	1	Hospital Planning and Management
2	Health Economics	2	Organizational Behaviour
3	Business Communication	3	Managerial Communication
4	Health Care System and Policies & Health Surveys	4	Accounting & Costing
5	Principles of Management	5	Management Information System
6	Orientation of Hospital Industry	6	Human Resource Management
		7	Project Management
		8	Research Methodology & Biostatistics (Core Course)
Practical			
1	Industry Posting (P)	1	Hospital Project (P)
		2	Research Methodology & Biostatistics (Core Course) (P)

COURSE OF INSTRUCTION

Masters in Hospital Administration

YEAR WISE SUBJECT DISTRIBUTION

Second Year (Semester III & IV)			
Theory			
Semester III		**Semester IV**	
1	**Core Elective Course** I. Quality Management & Accreditation in Hospital II Health Insurance III Hospital Super-specialty IV Services Management	1	**General Elective Course** I Pursuit of Inner Self Excellence (POISE) II Bioethics, Biosafety, IPR & Technology Transfer (Multidisciplinary/ Interdisciplinary) III Disaster Management and Mitigation Resources IV Human Rights
2	Legal Framework in Hospital	2	Dissertation Project
3	Marketing Management for Hospital		
4	Material Management		
5	Financial Management		
6	Strategic Management		
7	Medical Technology Management		
8	Dissertation/Project Proposal		
Practical			
1	Internship (P)	1	Educational Tour/Field Work/Industrial Visit/Hospital Visit (P)

M.Sc. Biostatistics
Duration of the Course - 2 Years

ELIGIBILITY CRITERIA:

Candidates with 50% marks in Bachelor's degree from recognized universities in Mathematics or Statistics or BE/B.tech. BCA B.Sc. Computer science subjects or with at least two full papers of Mathematics or Statistics.

SCOPE OF THE COURSE:

- Our Bio-statistics M.Sc. programme will benefit the students to learn through real examples by applying the statistical research techniques to variety of health data generated from our own hospital
- Students will enable to understand and interpret the data generated in biology public health and other health sciences using modern Statistical Methods.
- Students will develop a thorough grasp of statistical methodology, before going on to apply statistical skills to solve real-life problems in various field.
- Student will be equipped with the skills needed to begin a career as a professional biostatistician

COURSE OF INSTRUCTION

M.Sc. Biostatistics

YEAR WISE SUBJECT DISTRIBUTION

First Year (Semester I & II)			
Theory			
Semester I			**Semester II**
1	Basic Mathematics and Introduction to Statistical Methods	1	Research Methodology-I
2	Epidemiology	2	Sampling Techniques in Health
3	Health Economics	3	Estimation and Testing of Hypothesis
4	Demography	4	Applied Multivariate Analysis
5	Health Care System and Policies & Health Surveys		
Practical			
1	Basic Mathematics and Introduction to Statistical Methods	1	Research Methodology-I
2	Epidemiology	2	Sampling Techniques in Health
3	Health Economics	3	Estimation and Testing of Hypothesis
4	Demography	4	Applied Multivariate Analysis
		5	Seminar

COURSE OF INSTRUCTION

M.Sc. Biostatistics

YEAR WISE SUBJECT DISTRIBUTION

Second Year (Semester III & IV)			
Theory			
Semester III		**Semester IV**	
1	**Core Elective Course** I. Non parametric Test II Advance Statistical Computing III Time Series Analysis IV Operations Research	1	**General Elective Course** I Pursuit of Inner Self Excellence (POISE) II Bioethics, Biosafety, IPR & Technology Transfer (Multidisciplinary/ Interdisciplinary) III Disaster Management and Mitigation Resources IV Human Rights
2	Survival Analysis	2	Dissertation / Project
3	Design of Experiment and Clinical Trials		
4	Biostatistics and Research Methodology-II		
5	Dissertation / Project		
Practical			
1	**Core Elective Course** I. Non parametric Test II Advance Statistical Computing III Time Series Analysis IV Operations Research	1	Educational Tour/Field Work/Industrial Visit/Hospital Visit
2	Survival Analysis		
3	Design of Experiment and Clinical Trial		
4	Biostatistics and Research Methodology-II		
5	Seminar		

M.Sc. Clinical Nutrition
Duration of the Course- 2 Year

ELIGIBILITY CRITERIA:

Eligibility students with the following undergraduate degree are eligible, B.Sc. Biochemistry or any Life Sciences, MBBS, BHMS, BAMS, B.Sc. Nursing.
Student should have obtained minimum 50% marks in the undergraduate degree or B grade from any recognized University.

SCOPE OF THE COURSE:

To impart knowledge and develop capacities of the students through higher education in the area of Clinical Nutrition and Dietetics and application in Medical Nutrition Management.

To develop students to become health care professionals for services in various fields of clinical nutrition and medical nutrition management and related areas such as hospitals academics, research, industry, clinical nutrition department, training, extension and community service.
To develop capacities and abilities and enable them to pursue higher education and research in Clinical Nutrition and Dietetics.

COURSE OF INSTRUCTION

M.Sc. Clinical Nutrition

YEAR WISE SUBJECT DISTRIBUTION

First Year (Semester I & II)			
Theory			
Semester I			**Semester II**
1	Principles of Nutrition	1	Medical Nutrition Therapy I
2	Biochemistry & Applied Biochemistry	2	Advance Nutrition
3	Basic Human Physiology	3	Food Microbiology and Safety
4	Pathophysiology	4	Nutrition Directed Clinical Education-II
5	Nutrition Directed Clinical Education-I	5	Research Methodology & Biostatistics (Core Course)
Practical			
1	Biochemistry & Applied Biochemistry	1	Medical Nutrition Therapy I
2	Basic Human Physiology	2	Research Methodology & Biostatistics (Core Course)
3	Pathophysiology		

Master of Public Health (MPH)
Duration of the Course- 2 Year

ELIGIBILITY CRITERIA:

The graduates from science background will be admitted for the course. Candidates from the field of sociology, Psychology, Nursing, Social work, Pharmacy, Medical and Paramedical will be admitted.

SCOPE OF THE COURSE:

- To develop human resource with expertise in the field of public health and epidemiology, who can ensure comprehensive health development of the community and better quality of life;
- To create good advocates for launching public health movements;
- To promote the understanding of the need to integrate social and cultural factors and determinants into the practice of public health;
- To develop qualities that encourage the development of innovative and alternative approaches to meet the varying local needs of communities;
- To train students in health services/systems research in order to encourage this as an integral part of health administration/management.

COURSE OF INSTRUCTION
Master of Public Health
YEAR WISE SUBJECT DISTRIBUTION

First Year (Semester I & II)			
Theory			
Semester I		**Semester II**	
1	Concept of Public Health & Basic Epidemiology	1	Health Management: Principles and Practices
2	Introduction to Demography & Basic Biostatistics	2	Reproductive, Maternal Health, Child Health and Adolescent Health
3	Introduction to Health System, Policy and Programs	3	Communicable and Non-Communicable Diseases & Nutrition
4	Introduction to Health Economics	4	Practice of Public Health (Advanced) – Rural Outreach
5	Practice of Public Health (Basic)	5	Research Methodology & Biostatistics (Core Course)
Practical			
		1	Research Methodology & Biostatistics (Core Course)

<table>
<tr><th colspan="4">Second Year
(Semester III & IV)</th></tr>
<tr><td colspan="4">Theory</td></tr>
<tr><td colspan="2">Semester III</td><td colspan="2">Semester IV</td></tr>
<tr><td>1</td><td>Environment and Occupational Health and Public Health Laws</td><td rowspan="2">1</td><td rowspan="2">General Elective Course
I Pursuit of Inner Self Excellence (POISE)
II Bioethics, Biosafety, IPR & Technology Transfer (Multidisciplinary/ Interdisciplinary)
III Disaster Management and Mitigation Resources
IV Human Rights</td></tr>
<tr><td>2</td><td>Introduction to Financial Management and Budgeting</td></tr>
<tr><td>2</td><td>Medical Sociology and Effective Communication in Health Care</td><td colspan="2" rowspan="3"></td></tr>
<tr><td>3</td><td>Practice of Public Health (Advanced) – Urban Outreach</td></tr>
<tr><td>4</td><td>Internship/Dissertation / Project*</td></tr>
<tr><td colspan="4">Practical</td></tr>
<tr><td>1</td><td>Advanced Epidemiology & Biostatistics</td><td>1</td><td>Dissertation / Project</td></tr>
<tr><td>2</td><td>Health Systems, Policy, Planning and Programme Management</td><td colspan="2"></td></tr>
</table>

M.Sc. Cardiac Care Technology
Duration of the Course- 2 years

ELIGIBILITY CRITERIA:

B.Sc. Cardiac Care/Cardiovascular Technology OR 2 years of Diploma in Cardiovascular Technology (post regular general B.Sc.) with minimum of 3 year experience.

PROGRAMME SPECIFIC OUTCOME:

• This course offers the opportunity to study all aspects of clinical cardiology including expert assessment and management of a range of cardiac conditions, cardiac interventions, interpretation and practical skills.

• Includes hyper acute stroke and thrombolysis management, interpretation of cardiac CT and MRI, TIA management, maximizing stroke care and rehabilitation.

• The programme can be regarded as vital training for the early stages of cardiology or stroke specialist training with clear learning objectives.

COURSE OF INSTRUCTION

M.Sc. Cardiac Care Technology

YEAR WISE SUBJECT DISTRIBUTION

First Year (Semester I & II)			
Theory			
Semester I		**Semester II**	
1	Introduction to Clinical Cardiology	1	Introduction to Non-Invasive Techniques in Cardiology
2	Fundamentals of Cardiac Diagnostic Procedures and Investigations	2	Invasive Cardiology
3	Introduction to Pacing and Electrophysiology study techniques	3	CCT Directed Clinical Education-II
4	CCT Directed Clinical Education-I	4	Research Methodology & Biostatistics (Core Course)
Practical			
1	Introduction to Clinical Cardiology	1	Introduction to Non-invasive techniques in Cardiology
2	Fundamentals of Cardiac diagnostic procedures and Investigations	2	Invasive cardiology
		3	Research Methodology & Biostatistics (Core Course)
		Core Elective Course	
		1	Basics of Clinical Skills Learning
		2	Hospital Operation Management

Second Year (Semester III & IV)			
Theory			
Semester III		**Semester IV**	
1	Echocardiography- Advanced	1	Pursuit of Inner Self Excellence (POISE)
2	Quality Assurance, Standardization & Accreditation (Cardiac Care)	2	Bioethics, Biosafety, IPR & Technology transfer
3	CCT Directed Clinical Education-III	3	Disaster Management and Mitigation Resources
4	Dissertation/Project*	4	Human Rights
		5	Dissertation / Project
Practical			
1	Echocardiography- Advanced	1	Educational Tour / Field Work/IV/Hospital Visit
Seminars			
1	Seminars		

M.Sc. Medical Radiology and Imaging Technology
Duration of the Course- 2 years

ELIGIBILITY CRITERIA:

B.Sc. in Medical Radiology& Imaging Technology/B.Sc. Medical Technology Radio diagnosis and Imaging / B.Sc. Radiological Technology/B.Sc. in Radiography B.Sc. Medical Technology (X-ray) with a minimum 50% marks in B.Sc.

PROGRAMME SPECIFIC OUTCOME:

After taking this course...

- The student will learn principles of tomographic imaging with different modalities such as x-ray, PET and SPECT, NMR/MRI, ultra sound and optical with non-diffracting and diffracting energy sources.
- Learn principles of non-invasive medical imaging techniques and non destructive techniques for industrial imaging.
- After completion of this curriculum, a Medical Radiology & Imaging Technologist gets opportunities to work at various health care institutes under designations as: Radiographer, Radiological Technologist, X-ray Technologist ,CT scan Technologist, MRI Technologist ,Mammography Technologist, Cathlab Technologist, Ultrasonography Technologist, Applications Specialist, Radiological Safety Officer, Interventional Technologist, Quality control Technologist, PACS manager, Sales and marketing of radiology industry, Diagnostic Manager, Teaching & research faculty in Medical colleges

COURSE OF INSTRUCTION
M.Sc. Medical Radiology and Imaging Technology

YEAR WISE SUBJECT DISTRIBUTION

First Year (Semester I & II)			
Theory			
Semester I		**Semester II**	
1	Conventional Radiology and Imaging Equipment	1	Radiographic and Imaging Techniques
2	Modern Radiological and Imaging Equipment	2	Interventional Radiological Techniques
3	Radiation Safety and Protection	3	Radiological Physics for Imaging
4	MRIT Directed Clinical Education - I	4	MRIT Directed Clinical Education - II
		5	Research Methodology & Biostatistics (Core Course)
Practical			
1	Conventional Radiology and Imaging Equipment	1	Radiographic and Imaging Techniques
2	Modern Radiological and Imaging Equipment	2	Radiological Physics for Imaging
		3	Research Methodology & Biostatistics (Core Course)
		Core Elective Course	
		1	Basics of Clinical Skills Learning
		2	Hospital Operation Management

Second Year (Semester III & IV)			
Theory			
Semester III		**Semester IV**	
1	Radiological and Imaging Procedures	1	Pursuit of Inner Self Excellence (POISE)
2	Quality Assurance in Diagnostic Imaging	2	Bioethics, Biosafety, IPR & Technology transfer
3	MRIT Directed Clinical Education - III	3	Disaster Management and Mitigation Resources
4	Dissertation/Project	4	Human Rights
		5	Dissertation / Project
Practical			
1	Quality Assurance in Diagnostic Imaging	1	Educational Tour / Field Work/IV/Hospital Visit
Seminars			
1	Seminars		

M. Optometry

Duration of the Course- 2 years

ELIGIBILITY CRITERIA:

Bachelor of Optometry or equivalent from a recognized university with minimum 5.5 CGPA

PROGRAMME SPECIFIC OUTCOME:

At the end of the course the students will be knowledgeable in the following aspects of ocular diseases:

1. Etiology, Epidemiology, Symptoms, Signs, Course sequelae of ocular disease, Diagnostic approach and Management of the ocular diseases.

2. The students will be skilled in knowing the purpose, set-up and devices required for the test, indications and contraindications of the test, step-by-step procedures, documentation of the findings, and interpretation of the findings of the various clinical optometry procedures.

COURSE OF INSTRUCTION
M. Optometry

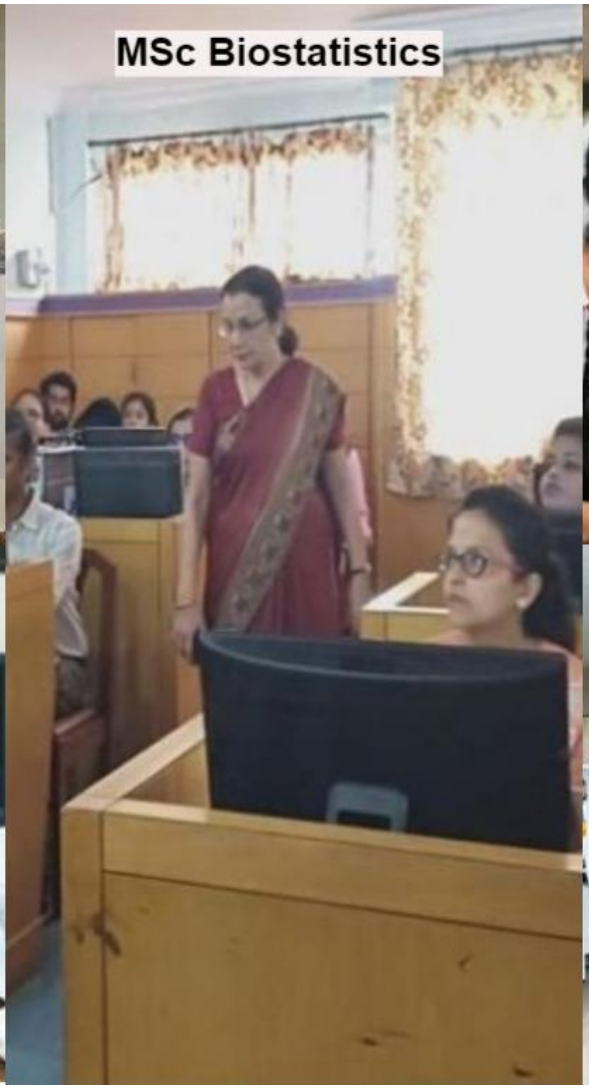
YEAR WISE SUBJECT DISTRIBUTION

First Year (Semester I & II)			
Theory			
Semester I		**Semester II**	
1	Epidemiology Public health & Community Eye Health	1	Ocular Diseases and Diagnostics II
2	Ocular Diseases	2	Advanced Contact Lenses I
3	Anterior Segment Diagnostic	3	Binocular Vision and Pediatric Optometry
4	Optometry Directed Clinical Education-I	4	Low vision and Geriatric Optometry
		5	Optometry Directed Clinical Education-II
		6	Research Methodology & Biostatistics (Core Course)
Practical			
1	Epidemiology Public health & Community Eye Health	1	Ocular Diseases and Diagnostics II
2	Anterior Segment Diagnostic	2	Advanced Contact Lenses I
		3	Binocular Vision and Pediatric Optometry
		4	Low vision and Geriatric Optometry
		5	Research Methodology & Biostatistics (Core Course)
Core Elective Course			
		1	Basics of Clinical Skills Learning
		2	Hospital Operation Management

Second Year (Semester III & IV)			
Theory			
Semester III		**Semester IV**	
1	Advanced Dispensing Optics	1	Pursuit of Inner Self Excellence (POISE)
2	Advanced Contact Lenses II	2	Bioethics, Biosafety, IPR & Technology transfer
3	Visual Perception, Neuroscience and Psychophysics	3	Disaster Management and Mitigation Resources
4	Applied Vision Therapy	4	Human Rights
5	Optometry Directed Clinical Education-III	5	Dissertation / Project
6	Dissertation/Project		
Practical			
1	Advanced Dispensing Optics	1	Educational Tour / Field Work/IV/Hospital Visit
2	Advanced Contact Lenses II		
3	Applied Vision Therapy		
Seminars			
1	Seminars		

LABORATORY FACILITY FOR M.Sc. COURSES


MSc Medical Biotechnology


MSc Biostatistics


MSc Clinical Nutrition


MSc Medical Genetics


MSc Molecular Biology

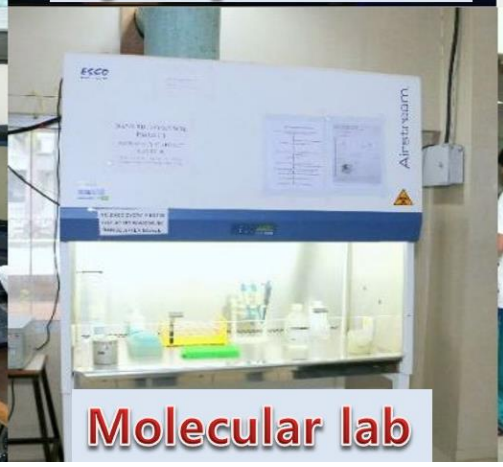
M.OPTOM

MSc Cardiac Care Technology

MSc Medical Radiology & Imaging Technology

RESEARCH, INNOVATION & EXTENSION

Research and development–
Highlighting sophisticated and modern facilities



Number of JRFs, SRFs, and Ph.D research fellows in the MGM SBS enrolled during the last five years.

Sr. No.	Name of Research Fellow	Year of Enrolment	Type of Fellowship	Granting agency
1	Dr. Himanshu Gupta	2014	JRFs	BRNS
2	Mr. Yogesh Patil	2014	JRFs	BRNS
3	Mrs. Kshitija Rane-Yadav	2016	Women Scientist	DST, India
		Ph.D		
1	Mrs. Amita Anant Bhagit	2013	Ph.D	MGMIHS
2	Mrs. Kshitija Chandrashekhar Rane	2013	Ph.D	MGMIHS
3	Dr. Himanshu Rajat Gupta	2014	Ph.D	MGMIHS
4	Mrs. Mansi Sitaram Sawant	2014	Ph.D	MGMIHS
5	Mrs. Smital Sameer Kulkarni	2014	Ph.D	MGMIHS
6	Mrs. Chandana Charudatta Kulkarni	2016	Ph.D	MGMIHS
7	Mrs. Priyanka Rathod	2016	Ph.D	MGMIHS
8	Mrs. Sasmita Kumari Behera	2016	Ph.D	MGMIHS
9	Ms. Panikar Surya Anand Sheela	2017	Ph.D	MGMIHS
10	Mr. Yogesh Patil	2018	Ph.D	MGMIHS
11	Dr. Niharika Swain	2018	Ph.D	MGMIHS
12	Mrs. Renuka Bhosle	2018	Ph.D	MGMIHS
13	Dr. Kamlesh Dekhate	2018	Ph.D	MGMIHS

Sr No	Name of the Project, Clinical Trial, Endowment, Chairs	Name of the Principal Investigator	Name of the Funding agency	Department of Pricipal Investigator
1	Validation Of Ingenious Device Designed By ACTOFIT For Kinematic Analysis Of Joint Motion	PI: Dr D S Joshi Co PI: Mansee Thakur	BRNS, Department of Atomic Energy, Govt. of India	Biotechnology (SBS)
2	Development of photonic crystal waveguide (PCW) based multiplexers for optical Networks and sensor applications.	Dr. Raman P.Yadav (Co-Principal Investigator)	BRNS, Department of Atomic Energy, Govt. of India	Omics (SBS)
3	Confirmation of Nano-Particle Hypothesis with Respect to Homeopathic Medicines	PI: Dr. Mansee Takur	BRNS, Department of Atomic Energy, Govt. of India	Biotechnology (SBS)
4	Non - Invasive monitoring of heamoglobin and blood sugar	Dr G D Jindal	BRNS	Biomedical Engineering / Biotechnology
5	Development of Prototype Micro PCR for Identification of MDR MTB	PI: Dr. Mansee Takur Co PI: Dr. DS Joshi	BRNS, Department of Atomic Energy, Govt. of India	Biotechnology (SBS)
6	Genetic and Phenotypic analysis of fucosyltransferase-2 (FUT-2) in Mumbai Population.	Ms Kshitija Rane-Yadav	DST, India	MGMIHS OMICS Research Center / Medical Genetics
7	Study, Evaluate and analysis of MGM-TB detector system	Dr. P V Potdar Dr. Mansee Thakur	Jt. Director of Health Services, (TB and Leprosy) Pune	Respiratory medicine
8	Analysis of ECG parameters & report generation on android platform for tele & stress ECG	Co PI G D Jindal	BRNS	Biotechnology

Number Of Patents/ Copyrights Published/Awarded/Technology-Transferred During The Last Five Years

Sr No	Name of the Patenter/ Copyright awardee	Patent/Copyright Number	Title of the patent/Copyright	Year patent was awarded/published	Published /Applied
1	YADAV, Raman Prasad**,** KADAM, Sudhirchandra Nanasaheb, BHAGIT, Amita Anant and MHATRE, Sveeta Vishnu.	**1948/MUM/2015 A**	Method for the synthesis of bifunctional cerium oxide nanoparticle with enhanced antioxidant and carbonic anhydrase inhibitory activity.	**06-05-2015**	Published
2	YADAV, Raman Prasad**,** KADAM, Sudhirchandra Nanasaheb, BHAGIT, Amita Anant and MHATRE, Sveeta Vishnu.	**1949/MUM/2015 A**	Preparation comprising a pancreatic lipase inhibitory fraction an anti-obesity principle obtained from dietary spice M*esuaferrea***.**	**06-05-2015**	Published
1	YADAV, Raman Prasad**,** KADAM, Sudhirchandra Nanasaheb, BHAGIT, Amita Anant and MHATRE, Sveeta Vishnu.	**2685/MUM/2015 A**	Biogenic method for generation of monodisperse and fluorescent cerium oxide nanoparticles with enhanced antioxidant activity.	**31/07/2015**	Published
2	YADAV, Raman Prasad**,** KADAM, Sudhirchandra Nanasaheb, BHAGIT, Amita Anant and MHATRE, Sveeta Vishnu.	**3616/MUM/2015 A**	Biogenic method for generation of multiple nanoparticles (Zn, Fe, Mg,Ca,Ce,Si,Ag).	**10-09-2015**	Published
3	Thakur Mansee, Joshi DS, Suri VK Pai Girish ,Srinkhala ,Shivam, Bhand Sunil, Pal Souvik. Joint Patent with Department of Atomic Energy, MGM Institute of Health Sciences and Birla Institute of Technology and Science, Pilani	**3620/MUM/2015**	Micro-trench based biochip device for screening of infectious diseases using metal nano particles / nano coating.	**02-05-2016**	Published
1	YADAV, Raman Prasad**,** KADAM, Sudhirchandra Nanasaheb, BHAGIT, Amita Anant.	**201721018037 A**	Bioreactor for very fast generation of multifunctional fluorescent nanoparticles	**16/6/2017**	Published
1	YADAV, Raman Prasad**,** KADAM, Sudhirchandra Nanasaheb, KADAM, Nitin Nanasaheb, BHAGIT, Amita Anant.	**201721040727A**	Quantum dot powered IP-10 antibody based kit for latent TB and TB antigen	**12-01-2017**	Published
1	Suri V K, Thakur Mansee, KhedkarSanotsh, Singh Indra Vijay, Rao MuralidharaNakka, PatilYogesh,KadamSudhirchandra, Gupta Himanshu, ShriramPrajyot P, DoggaBharadwaj S, Chhabra S Harpreet, ChavanPrashant R, (MGMCET, MGMIHS)	**20172102379 4**	A Biological Safety Cabinet And A Kit Thereof	**01-11-2019**	Published

Copyright

Sr No	Name of the Patenter/ Copyright awardee	Copyright Number	Title of the patent/Copyright	Year of Award of patent	Published/ Awarded
1	Mansee Thakur, Navmi Dayal	10843/2018-CO/L	Histological and Bioaccumulation Evaluation of Gold Nanoparticles in Gonads of ZebraFish (Danio Rerio)	28/07/2018	Published
2	Mansee Thakur , Himanshu Gupta	10841/2018-CO	Characterization and Toxicity Assessment of Homeopathy Drugs in Zebra fish Embryos	28/07/2018	Published
3	Mansee Thakur, Smital Kulkarni, Poonam Patil	1087/2019-CO/L	Establishment Of Hydroponics Lab & Preliminary Phytochemical Screening Of Vegetables	24/01/2019	Applied
4	Yogesh Patil, Mansee Thakur, Dr.V.K. Suri, Dr. Salgotra	751/2019-CO/L	MGM – Vacuum DressingSystem	18/01/2019	Applied
5	Dr. Mini Mol, Dr.Gautam Shroff, Dr. Mukherjee	744/2019-CO/L	Calculation Of The Percentage Of Chromogranin A Cells In Foetal Suprarenal Gland Of Different Gestational Ages Using Immuno histochemisty	18/01/2019	Applied

MoUs/Linkages With Institutions/ Collaborative Research

Sr No	Title of the MoU/ linkage	Name of the partnering institution/ industry /research lab/corporate house with contact details	Year of commencement
1	Research , PhD work and Publications	National Institute for Research in Reproductive Health (NIRRH), Mumbai	2014
2	Indian Patent fill	Birla Institute of Technology and Science (BITS), Goa	2014
3	Development of Product	Raja Ramanna centre foradvanced, technology (RRCAT) Indore	2015
4	Reserch Purpose	IIT Mumbai	2015
5	Reserch Purpose	Shraddha Analytical	2015
6	Academic and Reserch cooperation	SVERIS college of Engineering Pandharpur	2016
7	Annual Preventive health checkup	Alliz Health	2018
8	Research	Sinergy nanosystem	2017
9	Research	MGM CET	2017
10	Research	Allied Scientific products	2017
11	Research	Chennai Interventional pulmonology and critical care assosiates pvt ltd	2017
12	Research	Pavan Green Technologies Ltd	2018
13	Research	Bai Jerabai Wadia Hospital for children ,Acharya Dhonde Marg Parel Mumbai	2018

Institutional Social Responsibility

Swachh Bharat Abhiyan : - An Initiative by MGM SBS

SWACH BHARAT



CLEANLINESS DRIVE



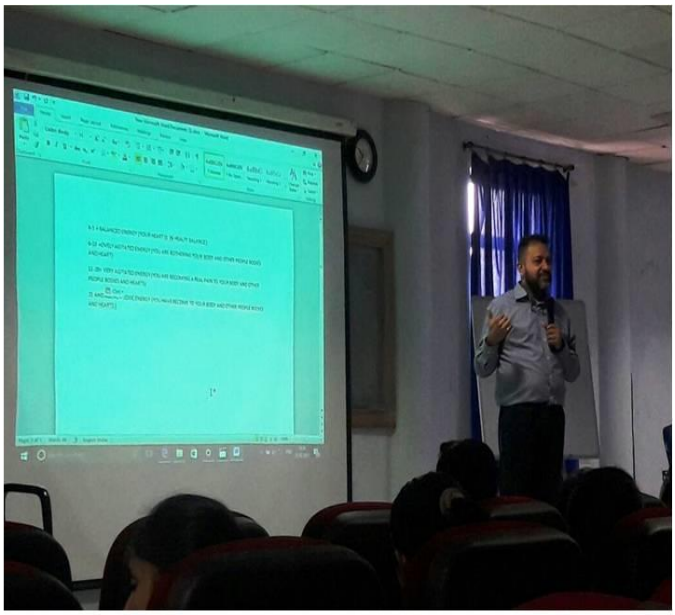

TREE PLANTATION DRIVE



Orientation Programme on Health Issue of Junk Food

Fire Safety Awareness conducted for B.Sc. & M.Sc. Students

CME-Heartfulness Conducted for Doctors and Health Professionals




214
SEMINAR HALL


SEMINAR HALL

Yoga Day Programme

Workshop on Phlebotomy:

Swachhta Pakhwada conducted by B.Sc. Students






Swachhta Hi Seva:

MGM SCHOOL OF BIOMEDICAL SCIENCES, NAVI MUMBAI

(A constituent unit of MGM INSTITUTE OF HEALTH SCIENCES)
(Deemed University u/s 3 of UGC Act 1956)
Grade "A" Accredited by NAAC
Sector 1, Kamothe Navi Mumbai-410209, Tel.No.:022-27437631,27432890
Email. sbsnm@mgmuhs.com/ Website : www.mgmsbsnm.edu.in

Report on Swachta Hi Sewa

MGM School of Biomedical Sciences, MGMIHS,Navi Mumbai

With regard to letter No:MGM/01/A-56(2)/2017/1262 , Dated 16.11.2017 ,MGM School of Biomedical Sciences conducted pledge taking ceremony(sankalp se siddhi)-New India Movement2017-22 which was attended by all the faculty members and approximately 300 students.

Students from B.Sc Paramedical Second and Third Year participated in the "Swachta hi Sewa" drive. Students from every department came together and planned for a rally to make the local people aware about the importance of cleanliness and it's benefits.

We also organized a Cleanliness awareness rally to the nearby village, Navpada, Kamothe on January 9, 2018 at 2:30 pm to 4:00PM

CODE OF CONDUCT

1. Students should report to college before 9.00 am.
2. A grace time of 5 minutes will be allowed to a student entering late in class after which they will be marked late. Three late marks will be considered, as 1 day of absenteeism.
3. Any student who is going to remain absent due to a foreseeable reason should inform the respective class in-charge coordinator staff in writing.
4. If the student is absent due to a medical reason, it should be informed to the respective class in-charge. On the day of joining back, student **must** produce a medical certificate for their absence; and a letter from parent / guardian informing about the same. Certificate will NOT be accepted at a later date.
5. Every student should have mandatory 75% attendance in lectures as well as practical. Students with less than 75% attendance will not be eligible to appear for University exam.
6. When lectures are followed by practical/posting, students will have to reach the area within 10 minutes, after which they will be marked late for that particular practical or posting.
7. Students should wear uniform, aprons with identity badges in the campus for all practical, classroom sessions & examinations.
8. Use of mobile phones is prohibited during lectures, practical, postings, symposiums/presentation & examination. Failure to comply with this rule will result in confiscation of the phone.
9. Accessories like long earrings, flashy bracelets, watches etc. will NOT be allowed.
10. Students should wear uniform in college premises.
11. Girl students should tie their hair neatly & Boys to have a descent haircut.
12. Use of indecent language & behavior is strictly prohibited.
13. Silence should be observed in college premises especially when lectures / practical for other batches are taking place.
14. All audio vision property in the classroom in college property & should not be tampered with, by the students failing which students will be fined or asked to compensate for the loss.

All students are expected to follow code of discipline. Students failing to maintain the above discipline will be given one warning. If the same behavior continues then appropriate action will be taken against the student.

DETAILS OF COMMITTEES

MGM School of Biomedical Sciences, Navi Mumbai			
Sr. No.	**Members**	**Department**	**Designation**
Anti Ragging Flying Squad Members			
1	Dr. R.S. Inamdar	Professor & HOD, Physiology	Chairman
2	Dr. Mini Mol	Assistant Professor, Anatomy	Secretary
3	Dr. Anjali Sabnis	Professor & Head, Anatomy	Member
4	Dr. Prabhakar Patro	Associate Professor, Pathology	Member
5	Dr. Vishwas Sathe	Associatie Professor, Anesthesia	Member
6	Dr. Shilpi Shahu	Associate Professor, Pathology	Member
7	Ms. Shrushti	Student representative, MSc	Member
Anti Ragging Committee			
1	Dr. Mansee Thakur	I/C Director	Chairman
2	Dr. Sanhita Walawalkar	Associate Professor, Physiology	Secretary
3	Dr. A.D.Urekar	Professor and Head, Microbiology	Member
4	Dr. Prabhakar Patro	Associate Professor, Pathology	Member
5	Dr. Aruna Mukherjee	Emeritus Professor, Anatomy	Member
6	Dr. Mini Mol	Assistant Professor, Anatomy	Member
7	Ms. Amita Bhagit	Student representative (Ph.D)	Member
8	Ms. Rumaney Aalia Aslam	Student representative (M.Sc.)	Member
9	Mr. Erande Pruthweeraj Maruti	Student representative (M.Sc)	Member
10	Mr. Ghag Shubham Ram	Student representative (B.Sc)	Member
11	Mrs. Poonam Patil	Non teaching	Member
Grievance Redressal Cell			
1	Dr. N.C. Mohanty	Professor of Pedratics & Joint Controller	Chairman
2	Dr. Haritha Kumari	Associate Professor, Anatomy	Secretary
3	Dr. Sharwari Samant	Professor, Microbiology	Member
4	Dr. Rishikesh Wadke	Assistant Professor, PSM	Member
5	Dr. Manisha Tambedkar	Associate Professor, Pathology	Member
6	Dr. Karuna Sunil Ramraje	Assistant Professor, Law College	Member
7	Mr. Erande Pruthweeraj	Student representative (M.Sc)	Member
8	Ms. Apoorva Shrivastav	Student representative (M.Sc)	Member
Prevention Of Sexual Harassment And Violence Against Women			
1	Dr. Parineeta Samant	Associate Professor, Biochemistry	Chairman
2	Dr. Rita Khadkikar	Associate Professor, Physiology	Secretary
3	Dr. Rushikesh Wadke	Assistant Professor, PSM	Member

4	Dr. Ipseeta Ray	Professor, Pharmacology	Member
5	Dr. Karuna Sunil Ramraje	Assistant Professor, Law College	Member
6	Dr. Himanshu Gupta	Assistant Professor	Member
7	Ms. Rumaney Aalia Aslam	Student representative (M.Sc.)	Member
8	Mr. Shubham Ghag	Student representative (B.Sc)	Member
9	Mrs. Supriya Pawar	Administrative Clerk & Computer Operator	Member
10	Mr. Yogesh Patil	Research Assistant	Member
Student Welfare Committee			
1	Dr. R.S. Inamdar	Professor & HOD, Physiology	Chairman
2	Dr. Mini Mol	Assistant Professor, Anatomy	Secretary
3	Dr. Sumi Reny	Tutor, Anatomy	Member
4	Dr. Ipseeta Ray	Professor, Pharmacology	Member (Academic Section)
5	Dr. Kavita More	Assistant Professor, Biochemistry	Member (cultural section)
6	Dr. Santosh Gawali	Assistant Professor, Biochemistry	Member (student grevience)
7	Ms. Amita A Bhagit	Student representative (PhD)	Member
8	Ms. Rumaney Aalia Aslam	Student representative (M.Sc.)	Member
9	Mr. Ghag Shubham Ram	Student representative (B.Sc.)	Member

RAGGING: PREVENTION AND PUNISHMENT

(As per committee constituted by the Hon'ble Supreme Court, India in SLP No. 24295 of 2006)

Ragging has been recognized as a criminal offence, hence would be very seriously taken at constituent units of MGM Institute of Health Sciences. The students alleged by the juniors for ragging, shall have to abide by the punishment as per the recommendation of Anti Ragging Committee/ Guidelines of Anti Ragging Act Prescribed by the Committee constituted by the Hon'ble Supreme Court in SLP No. 24295 of 2006 . Broadly ragging has been defined and categorized in the following way for which various terms of punishment prescribed as per the directions of Hon'ble Supreme Court in SLP No. 24295 of 2006 ranging from one year imprisonment and fine to up to 7 years rigorous imprisonment and fine.

Following shall be treated as Act of Ragging:

1. Verbal –where Senior causes mental harassment, discomfort for the junior by forcing him/ her to answer unacceptable/personal questions, forcing to dance or to indulge in other embarrassing actions. It also includes within its ambit cyber ragging.
Punishment: 1 year imprisonment or fine or both

2. Severe verbal Ragging-where the mental harassment, discomfort is to such an act as forces the junior to withdraw from the college.
Punishment: 7 years imprisonment with fine.

3. Physical-Any act by the senior towards the junior which inflicts bodily injury on the junior. Like beating the junior, hitting him/her with objects etc.
Punishment: 7 years imprisonment with fine.

4. Sexual Ragging- Where the senior asks the junior to do an act which damages sexual dignity of the junior.
Punishment: 7 years rigorous imprisonment and fine.

As enactment of anti ragging act is pending in IPC, an Institutional Authority has been set up in MGMIHS with full authority to deal with ragging cases. Following are some of the guidelines for information to junior students to remember in case they are subjected to any act of ragging.

1. The complainant can report orally or in writing to the Dean, Head of the Department or any teacher or non-teaching staff of the institution or to the members of Anti Ragging Committee.

2. Any act of ragging that has been witnessed by teacher, non teaching staff or the administrative staff, shall be treated as evidence and will be considered enough to initiate appropriate action against the culprits.

3. Following action shall be taken for the trial of alleged culprits

a. On receipt of complain, the culprits shall be suspended from college or hostel forthwith report will be submitted.
b. Institutional Enquiry will follow and submit report within 24 hours with recommendation for punishment.
c. Written complaints to the police and FIR will be lodged
d. Expulsion from the college.
e. Endorsement of remarks in College leaving Certificate/ Migration Certificate.

4. All Students are requested to join the institutional authorities for prevention ad monitoring of ragging cases.

5. All cases of ragging are dealt on a fast track basis within specific time –frame

6. There will be periodic review of the mechanism laid down by the University and Medical Colleges in order to plug the loopholes and find other solutions, if necessary.


Campus
Library
Canteen
Bus facility
Facilities
&
Infrastructure
e-Library
Hostel
Classroom

ANNUAL DAYS EXUBERANCE


Traditional day


Annual day
EXUBERANCE 2K19

STUDENT WELFARE


CENTAUR IKON
Industrial visits
NIN

ALUMNI

Outstanding students

Dr. Bhushan Thakur
ACTREC, PDF in NIH, USA

Radha Subramanian,
Univ. of Bufallo, USA

Dr. Gurjeet Singh,
N.C. Medical College Haryana

Dr. Navami Dayal
Pillai college, Mumbai University

Meenakshi Bhattacharjee
Tasgaonkar Institute

Anjum Datta
Tutor , **AIIMS**

Santosh Rawat
Serum Institute of India Pvt. Ltd.

Gargi Thakur
NIRRH, (ICMR)

Ashlesha,
Embryologist, **Nova IVF,Mumbai**

Prathamesh
Fellow and Area Convenor,
TERI

Kaustubh Kolwankar
(MBA) , **Bai Ratanbai Gharda Hospital, Lavel**

Prema Shewale
Tutor MGMSBS.

Reena Patel, **Sr. Perfusionist Sasoon hospital Pune**

Dr. Revati Pattni
Fiona Elsey Cancer Research Institute, Australia

Dr. Girish Pai
HI Media

Eminent speakers

(Invited Guest Speakers in last two years)

Mr. Sanjay Bhatia
Chairman – Mumbai Port Trust

Dr. Lalita Dhareshwar
Ex-BARC Scientist

Dr. Snehal Deshpande
Director SNEH

Mr. Tushar Pradhan
CFO-HSBC

Dr. Harish Mehta
Interventional Cardiologist

Dr. Mohandas Hegde
Director, Crest

Mr. John Barlow
Sr. Director Ambulatory Operations ,
Department of Medicine,
Boston Medical Center

Mrs. Betsy Barlow
BA ,Holistic Studies from Vermont College

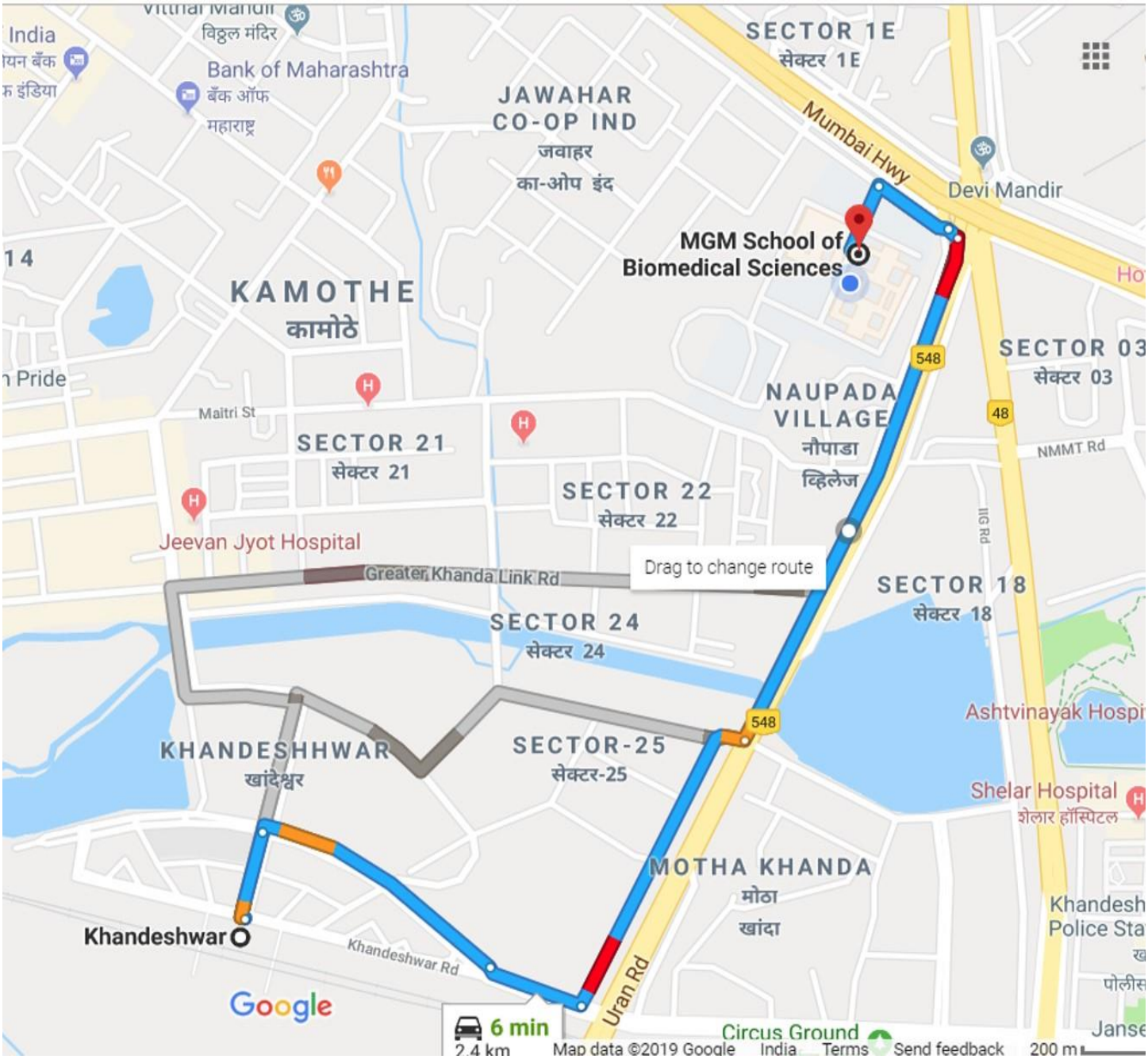
Mrs. Sushila Sharangdhar
Nutritionist

Mr. Bharat Dhareshwar
CMO W.Railway

Mrs. Pragya Kalia
Mkt Head - Hindustan times

Ravi Shankaran Dhesingh | Ph.D. | University of Madras Chennai

Location to Reach MGM School of Biomedical Sciences from Nearest Local Station (Khandeshwar)



CONTACT DETAILS

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MGM SCHOOL OF BIOMEDICAL SCIENCES
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