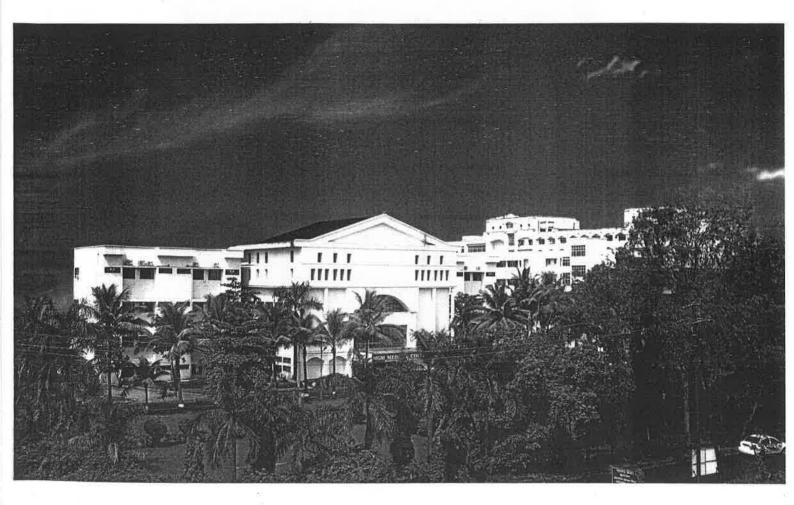
# Curriculum for Diploma Ophthalmology



IN PURSUIT OF EXCELLENCE

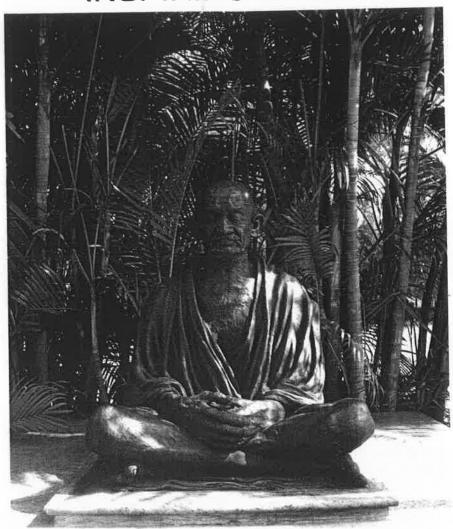


#### MGM INSTITUTE OF HEALTH SCIENCES

(Deemed University Established u/s 3 of UGC Act, 1956) Navi Mumbai - 410 209

www. mgmuhs.com

# **INSPIRING MINDS**



## Mission

To improve quality of the life for individuals and community by promoting health, preventing and curing disease, advancing biomedical and clinical research and educating tomorrow's Physicians and Scientists.

### Vision

By 2020 the MGM University of Health Sciences will rank one of the top private Medical Institution. This will be achieved through ground breaking discoveries in basic sciences and clinical research targeted to prevent and relieve human suffering, excellence in Medical Education of the next generation of academic clinicians and intrinsic scientists.

MGM University of Health Sciences will transform the **Education of** tomorrow's Physicians and Scientists conducting Medical **Research** to advance health and improving lives by providing world-class patient care.

Many see the 21<sup>st</sup> Century as the golden age of biomedical research. The MGM University of Health Sciences will position for leadership at the horizon of this new era to promote and stabilise stand human health with a standard of excellence.

# **DIPLOMA IN OPHTHALMOLOGY(D.O.)**

# Objectives:-

- 1. Posses the basic knowledge of the structure, function and development of the human body as related to ophthalmology
- 2. Clinical knowledge should be such so as to be able to practice and handle most day to day problems independently
- 3. Candidate should be able to integrate the preventive and promotive methods with curative and rehabilitative measures in treatment of disease
- 4. Should practice ophthalmology at the door step of community

### I. BASIC

- 1. Anatomy and embryology of eye
- 2. Orbit-anatomy and contents
- 3. Physiology of eye
- 4. Physiology of vision-
  - visual acuity, accommodation, pupillary reflexes, light and dark adaptation, colour vision
  - Tear film, aqueous and vitreous
  - Visual fields
  - Eye movements
  - Stereopsis
- 5. Retinal Neurochemistry
- 6. Ocular Pharmacology
- 7. Ocular Microbiology
- 8. Ocular Pathology
- 9. Optics and Refraction
- 10. Optical Principles of Refractive Surgery

## II. CLINICAL:

- 1. Trauma and emergency ophthalmology
- 2. Disorders of lids, lacrimal drainage apparatus, orbit
- 3. External eye disease- sclera, comea and anterior uvea
- 4. Optics and Refraction
- 5. Disorders of lens
- 6. Glaucoma
- 7. Retina- Diabetic and Hypertensive Retinopathy
- 8. Community Ophthalmology
- 9. Investigative Ophthalmology- USG (A and B Scan), Perimetry
- III. Teaching of Clinical Ophthalmology is done while working in wards, OPDs, OTs and Speciality Clinics

# LECTURE SERIES

- 1. Ocular injuries
- 2. Cataract types and surgeries
- 3. Glaucoma
- 4. Cornea KCS, Keratoconus, Keratoprosthesis
- 5. Uvea
- 6. Optics refractive errors, schematic eye
- 7. Retina retinal detachment, exudative retinal detachment, RIOFB, ARMD, Diabetic Retinopathy, Hypertensive Retinopathy
- 8. Lasers in Ophthalmology
- 9. Investigative Ophthalmology USG, FFA, Electrophysiology, OCT, DCG, MRI
- 10. Visual and Pupillary Pathways
- 11. Lids ptosis, lid deformities
- 12. Dry eye
- 13. Vitreous haemorrhage, degeneration, endophthalmitis, vitrectomy
- 14. Lacrimal Apparatus- Dacrocystitis, Tumors

#### **EVALUATION**

The evaluation of candidates is done at the end of the course under the following headings

1. The resident shall be required to demonstrate a comprehension of basic knowledge of the subject by answering three papers of 3 hours each to the satisfaction of the board of examiners.

The theory examination shall have the following pattern:

- a. First paper- Anatomy, Physiology and Optics of the eye
- b. Second paper- Ophthalmic Medicine and Surgery
- c. Third paper- Ophthalmology in relation to Medicine and new innovations and techniques

All three papers should have a minimum of twenty five percent of MCQs of high standard 25% SAQ and 50% LAQ.

Each paper should be of one hundred marks
A candidate needs to score at least fifty percent marks
to pass after which the candidate will be permitted to
appear in the practical examination

2. The resident shall be evaluated in all fields of the instruction areas of work and demonstrate skills to elicit history, examine, diagnose and treat (medically or surgically or both) cases in out patient department and admitted cases including the relevance of investigative procedures in the case under discussion. The resident will be required to see and interpret X-rays, charts, laboratory reports and special investigations pertaining to these cases.

- 3. The resident may be required to demonstrate the use of appliances and specialized diagnostic techniques including their utility and limitations
- 4. The resident will be required to report on specimens and slides of pathology
- 5. Oral viva an any aspect of speciality
- 6. Instruments and Operative understanding is evaluated

7. The marking for practical examination will be as follows:-

OSCE 5

50 marks (x10 spots)

Clinical cases

200 marks (1 long)

(2 short)

**Demonstrations** 

50 marks (Skill to use the

equipment)

Oral viva

100 marks

Total

400 marks

50% to pass

A candidate needs to score atleast fifty percent marks to pass

# **LOG BOOK**( record of daily working to be kept)

- 1. OPD Procedures:
  - a. Tonometry
  - b. Gonioscopy
  - c. Syringing
  - d. Staining
- 2. Surgeries done
- 3. Special clinical investigations
- 4. Clinical case presentation
- 5. Symposia
- 6. Journal club
- 7. Teaching experience
- 8. Meetings / conference attended
- 9. Papers presented / published

# OPERATIONS FOR D.O(OPHTHAL) CANDIDATES

At the end of D.O. candidate should have following surgical skills-

- 1. Lens ECCE & SICS, to assist in phacoemulsification.
- 2. Lids- Entropion, Ectropion, Chalazion, Tarsorraphy
- 3. Sac- DCT
- 4. Cornea- Carbolization, Pterygium surgery
- 5. Glaucoma- YAG laser Iridotomy
- 6. Orbit and Globe- Enucleation
- 7. Injuries- repair of wounds



# MGM UNIVERSITY OF HEALTH SCIENCES, NAVI MUMBAI

# MARK LIST FOR PRACTICAL AND VIVA-VOCE EXAMINATION

		mination:			-	
EXAM	INA	TION FOR:	DIPLOMA II	OPHTHALI	MOLOGY	
SI. NO	Sr. No Heads  1 Osci  2 Demonstrations  3 Clinical cases  4 Viva		Total		Marks	
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### PG COURSES: - DIPLOMA

Sr. No.	Course	Subject Name	Paper No. & Topics
i)	D.C.H.	DIPLOMA IN PAEDIATRIC	Basic medical as applied to paediatrics.     Neonatology, social and preventive Paediatric.     Systemic disease in Paediatrics Respiratory cardiology, CVS, Neurology, Haematology, Nephrology, Rheumatology, Immunology, Gastroenterology, growth and development.     Congenital & acquired disorder of Eye care, Nose, Throat and joints, Endocrine system and miscellaneous
ii)	D.A.	DIPLOMA IN ANAESTHESIALOGY	diseases.  1. Basic Sciences as related to Anaesthesia (History, Anatomy, Physiology, Pharmacology, Pathology, Physics, Instrument & Equipments, etc.)  II. Theory & Practice of Anaesthesia
			N. Clinical Sciences like Medicine & Surgery related to Anaesthesia
iii)	D.G.O.	DIPLOMA IN OBST. & GYNAECOLOGY	Obstetrics including the diseases of newborn.  II. Gynaecology, Gynaecological Pathology & Operative Gynaecology.  III. Medical and surgical diseases complicating obstetrics & Gynaecology, social obstetrics & Gynaecology including M.CH. & F. W.
iv)	D. ORTHO	DIPLOMA IN ORTHOPAEDICS	<ul> <li>I. Anatomy, Physiology and Pathology as applicable to Orthopaedics.</li> <li>II. Traumatology and general Surgery.</li> <li>III. General Orthopaedics</li> </ul>
v)	D.O.	DIPLOMA IN OPHTHALMOLOGY	Anatomy, Physiology and Optics.     Ophthalmic Medicine and surgery.     Ophthalmology related to systemic diseases and new innovations and techniques in Ophthalmology.



# IN PURSUIT OF EXCELLENCE

#### MGM DEEMED UNIVERSITY OF HEALTH SCIENCES

#### Consultuent, Collèges

#### Navi Mumbai

M.G.M. Medical College

M.G.M School of Biomedical Science

M.G.M School of Physiotherapy

M.G.M New Bombay College of Nursing

M.G.M College of Nursing

#### Aurangabad

M.G.M. Medical College

M.G.M School of Biomedical Science M.G.M-School of Physiotherapy

M.G.M College of Nursing



**MAHATMA GANDHI MISSION** 



#### **AURANGABAD**

- MGM's Jawaharlal Nehru Engineering College
- · MGM's Institute of Management
- MGM's Mother Teresa College of Nursing
- MGM's Mother Teresa Institute of Nursing Education
- MGM's College of Journalism & Media Science
- MGM's Medical Center & Research Institute
- MGM's College of Fine Arts
- MGM's Dr. D. Y. Pathrikar College of Comp. Sc. & Tech.
- MGM's Hospital & Research Center
- MGM's College of Agricultural Bio-Technology
- MGM's Dept. of Bio-Technology & Bio-informaties.
- MGM's Inst. of Hotel Management & Catering Tech.
- MGM's Institute of Indian & foreign Languages & Comm.
- · MGM's College of Physiotherapy
- MGM's Hospital, Ajabnagar
- MGM's Sangeet Academy (Mahagami)
- MGM's Institute Naturopathy & Yoga
- MGM's Sports Club & Stadium
- · MGM's Institute of Vocational Courses
- · MGM's Horticulture
- MGM's Health Care Management
- MGM's Junior College of Education (Eng. & Mar.)
- MGM's Sanskar Vidyalaya (Pri. & Sec. Mar.)
- MGM's Clover Dale School (Pri. & Sec. Eng.)
- MGM's First Steps School (Pre-Primary English)
- MGM's Sanskar Vidyalaya (Pre-Priamary Marathi)
- · MGM's School of Biomedical Sciences

#### **NAVI MUMBAI**

- · MGM's College of Engineering & Technology
- MGM's Institute of Management Studies & Research
- MGM's Dental College & Hospital
- MGM's College of Physiotherapy
- MGM's College of Media Science
- MGM's Institute of Research
- MGM's New Bombay Hospital, Vashi
- MGM's Hospital, CBD
- MGM's Hospital, Kamothe
- MGM's Hospital, Kalamboli
- MGM's Infotech & Research Centre
- MGM's Pre-Primary School (English & Marathi)
- MGM's Primary & Secondatry School (Eng. & Mar.)
- MGM's Junior College Science
- MGM's Junior College of Vocational Courses
- MGM's Florence Nightingale Inst. Nursing Edu.
- MGM's College of Nursing
- MGM's College of Law

#### NANDED

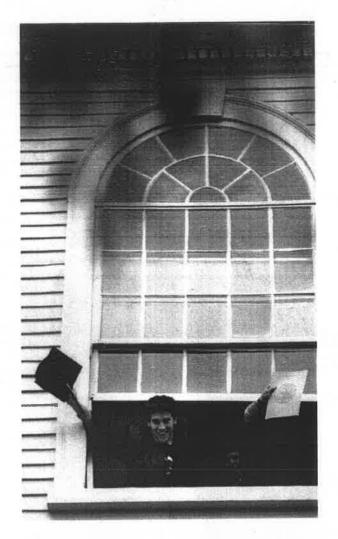
- · MGM's College of Engineering
- MGM's College of Fine Arts
- MGM's College of Computer Science
- MGM's College of Journalism & Media Science
- MGM's Centre for Astronomy & Space Tech.
- MGM's College of Library & Information Science

#### PARBHANI

MGM's College of Computer Science

#### NOIDA (U.P.)

· MGM's College of Engineering & Technology



MGM University of Health Sciences (Education - Health Services - Research) A Mission started, nurtured and Managed by Professional Doctors, Scientists Engineers...





#### MGM INSTITUTE OF HEALTH SCIENCES

(Deemed University u/s 3 of UGC Act, 1956)

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Ph: -022-27422471, 65168127, 65138121 Fax: 022-27420320
E-mail: mgmuniversity@mgmuhs.com
Website: www.mgmuhs.com

Resolution No. 1.3.7.11 (i) of BOM-51/2017: Resolved that the following Bioethics topics in PG Curriculum are to be included for PG students of all specialization and a sensitization of these topics can be done during PG Induction programme:

- Concept of Autonomy
- Informed Consent
- Confidentiality
- Communication Skills
- Patient rights
- Withholding / Withdrawing life-saving treatment
- Palliative Care
- Issues related to Organ Transplantation
- Surgical Research and Surgical Innovation
- Hospital Ethics Committee
- Doctor-Patient relationship

Resolution No. 1.3.23 of BOM-51/2017: Resolved to implement a Structured Induction programme (07 days) for PG students. [Annexure XLIV]



# MGM INSTITUTE OF HEALTH SCIENCES Navi Mumbai

# Induction Program for newly admitted Postgraduate students

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	1.24 14				
<ul> <li>Biomedical Waste Management</li> </ul>	A Committee of the Comm				
<ul> <li>Infection Control Policy</li> </ul>					
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• Laboratory services	- 100 FM - 1				
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•	Control Professional Control C				
<ul><li>Principles of Ethics</li></ul>					
• Professionalism					
Research Ethics	A CONTRACTOR OF THE CONTRACTOR				
<ul> <li>Informed Consent</li> </ul>					
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Post-test					
	Pre-test Communication Skills Universal Safety Precautions Biomedical Waste Management Infection Control Policy Emergency services Laboratory services Laboratory services Medicolegal issues Prescription writing Adverse Drug Reaction Handling surgical specimens Principles of Ethics Professionalism Research Ethics Informed Consent Confidentiality Doctor-Patient relationship Research Methodology Synopsis writing Statistics ATLS				

The Induction Program will be conducted in the first week of June. Timing: 9.30 am to 3.30 pm

(Prof. Dr. Siddharth P. Dubhashi)
Director (Academics)

**Resolution No. 4.5.4.2 of BOM-55/2018:** Resolved to have 10 short notes out of 11 (10 marks each) in all the papers in university examination for PG courses including superspeciality. To be implemented from batch appearing in April/May 2019 examination onwards for MD/MS/Diploma and August/September 2019 examination onwards for superspeciality.