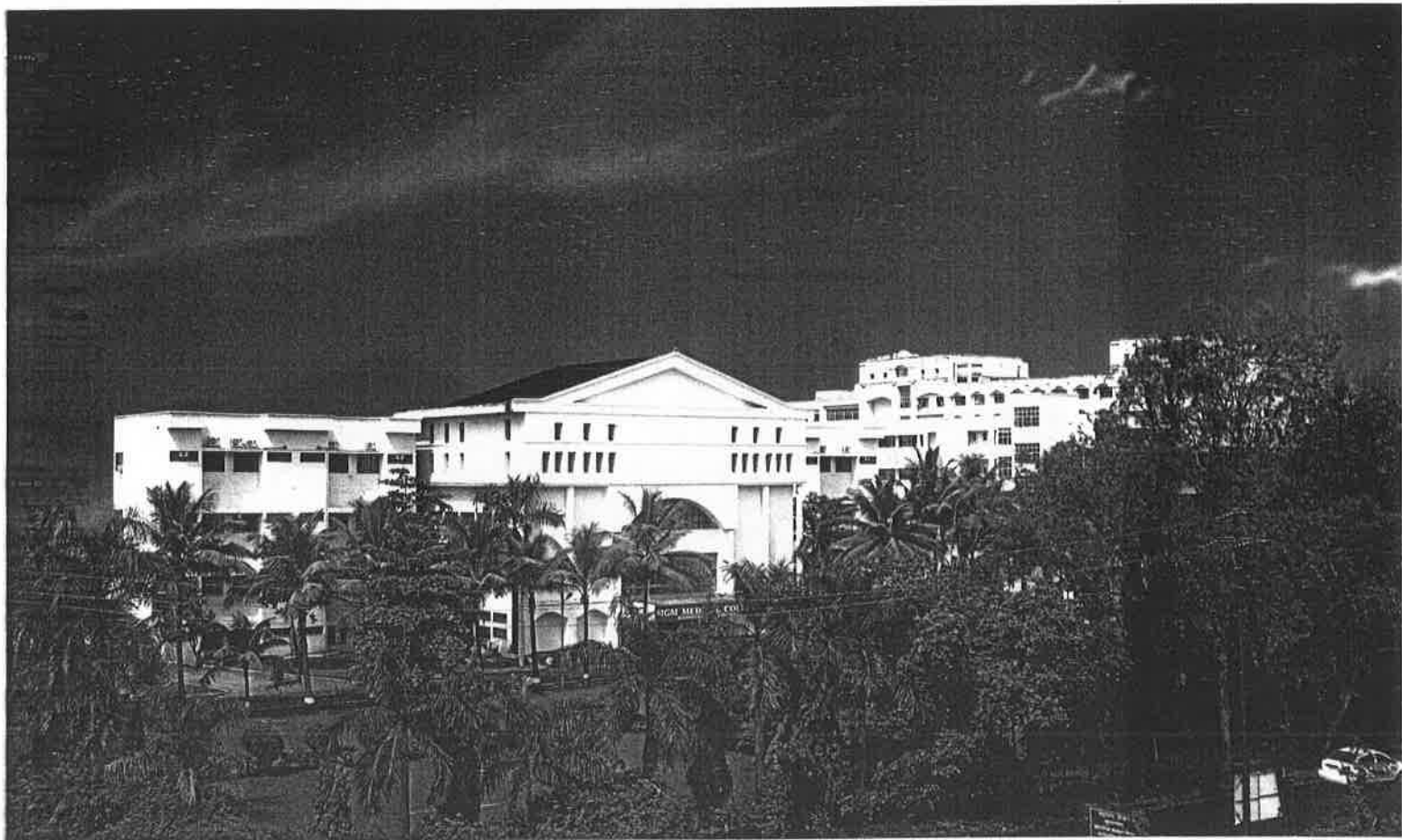


Curriculum for MD Degree in Paediatrics



IN PURSUIT OF EXCELLENCE



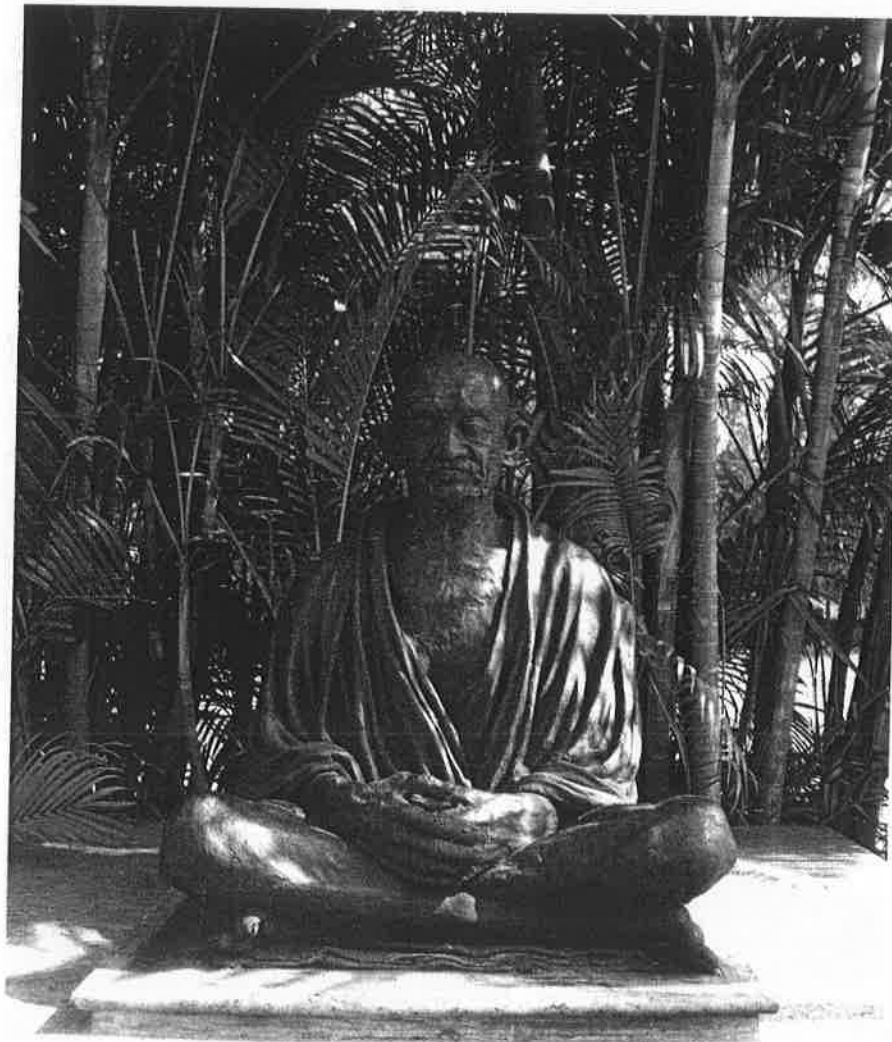
MGM INSTITUTE OF HEALTH SCIENCES

(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 21st 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.

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Chancellor's Message



It is my pleasure to welcome you to join constituent colleges of Mahatma Gandhi Misson's (MGM) University of Health Sciences, Navi Mumbai. I wish to avail this opportunity to apprise you and your parents about the academic excellence of the deemed university.

The MGM University of Health Sciences was established u/s 3 of UGC Act, 1956 vide HRD Notification No.F.9-21/2005-U.3(A) dated 30-8-2006. The MGM University is an outcome of untiring efforts of our educationists, professionals, social activists, technocrat, students and parents. The Mahatma Gandhi Mission Trust that manages the University of Health Sciences and over 40 institutions in Navi Mumbai, Aurangabad, Nanded, and Noida has the vision to empower the masses with the availability of state-of-the-art education. Most of our institutions have ISO certifications that further endorse our commitment to stringent quality standards. I am proud to state that we have succeeded in these accomplishments during our journey of the past 25 years.

I recollect the memories of struggle and determination when the MGM Trust established its two medical colleges, one each at Navi Mumbai and Aurangabad some twenty years ago. Both the medical colleges have grown into institutions imparting both undergraduate and postgraduate courses, and delivering quality health care to communities in their respective areas. While both colleges are engaged in their primary functions of teaching, patient care and research, they have

also excelled in their pursuit for advancement of science and in taking health services to communities through extension programmes. A shining example is the establishment of the Department of Infectious Diseases in 1993 in collaboration with the University of Texas-Houston, USA. This department has established the state-of-the-art clinical services and laboratories for research and care of infectious diseases and received the acclaim of Director General of ICMR when he stated "MGM is the first medical college in India to establish a separate department of infectious diseases. This is the need of the hour." The department has undertaken path-breaking research and shaped the course of our national control programmes on HIV/AIDS and tuberculosis. The original research of the constituent colleges has been acclaimed among the scientific world globally.

In an era of economic liberalization and the competition among varsities, both in and out of India, the task of grooming professionals who will compete with the best in the world, is tough. To aid our efforts to excel, MGM University of Health Sciences has the latest research facilities, a dedicated research faculty, as well as an array of distinguished visiting faculty members. The quiet ambience of our campuses, the well filled library with subscriptions to international and national journals, and the lush-green gardens add to our accomplishments.

Considering the manpower needs of

educational, industrial agricultural, and health sector to maintain their steady growth, several fresh M.Sc. courses have been launched. M.Sc. courses introduced at the

University from the current academic year shall provide knowledge, skills and subsequent employability that are at par with the counterparts in India and abroad. The curricula of the courses have been designed by experts and peer-reviewed with an emphasis on the job requirements of educational institutions, industries, health care, and research institutions. These courses will empower the students to choose a career in a classroom, a research laboratory or an industry. I am happy that the university is ticking towards the pinnacle with the introduction of these value-added postgraduate courses in medical biotechnology, medical genetics and other basic sciences.

Finally, I wish to place on record my gratitude to the founder members, stake-holders, faculty, staff, students and their parents for providing the MGM Trust with your advice and support.

Once again, it is my pleasure to welcome you to join constituent colleges of MGM University of Health Sciences' at Navi Mumbai and Aurangabad.

Kamal Kishore Kadam
Chancellor



Dr R.D.Bapat
Vice Chancellor



Dr S.N.Kadam
Pro Vice Chancellor



Dr N.N.Kadam
Director (Examination)



Dr Ajit shroff
Dean (Aurangabad Campus)



Dr Z.G. Badade
Registrar



Dr G.S.Narshetty
Dean (Navi Mumbai Campus)

Post-graduate Degree Course M.D. (Paediatric Medicine)

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1. Goal

The Goal of M.D. (Pediatrics) Program is to provide training in Pediatrics and Neonatology to produce competent specialists who are able to provide basic and speciality care of the highest order to neonates, infants, children and adolescents at the community level and at primary, secondary and tertiary levels of health care, and to act as future trainers, teachers, and researchers in the field of Pediatrics and Neonatology.

2. Course Description

MD (Pediatrics)

Duration: 3 years

Eligibility: MBBS and Completion of 1 yrs compulsory rotatory houseman ship / inter ship.

3. Intramural and Extramural Rotation

MD (Pediatrics):

- At least 6 and not more than 9 months in Neonatology.
- At least 3 and not more than 6 months in sub-speciality areas: e.g. 6 months NN, 3 months Intensive Pediatric Care Unit (IPCU) and Emergency Pediatric Services.
- Desirable Maximum up to 6 months in Allied areas: e.g. – Hematology, Infectious Diseases, Dermatology, Cardiology, Nephrology, Chest Medicine, Gastroenterology and Genetics.

The Department of Pediatrics will decide the posting of students in Neonatology, Allied Branches and Sub-speciality areas.

4. Syllabus

- I) Basic Sciences and Laboratory Medicine as applied to Pediatrics and Neonatology.
- II) Clinical Epidemiology
- III) Ethics in Pediatrics and Child Care
- IV) Information Technology in Pediatrics
- V) Pediatric and Neonatal Therapeutics
 - Effects of physical and physiological changes on the pharmacokinetics of commonly used medications in Pediatrics.
 - Recognition of drugs that are contraindicated, and used with extreme caution in specific pediatric populations.
 - Effects of maternal therapy on the fetus and the neonate.
 - Secretion of drugs in the breast-milk.
 - Principles of drug therapy in pediatrics & Neonatology
 - Patient education and parent education for appropriate drug dosing, formulations and administration techniques.

VI) Preventive Pediatrics

- National Health programs as relevant to Pediatrics and neonatal Care.
- Epidemiology of common health problems and diseases.
- Vital statistics: Maternal Mortality Rate, Perinatal Mortality Rate, Neonatal Mortality Rate, Under-5 mortality Rate: Definitions, National Status, Determinants, Interventions aimed at reduction of the rates.
- National Immunization Programs and policies.
- Other optional vaccines not included in national immunization program.

VII) Social Pediatrics

- Child labour, Child abuse, Child neglect, Failure to thrive, Social issues relevant to Pediatrics, Child rights.
- Media and children
- Children at special risk
- Adoption
- Environmental health hazards.
- Substance abuse, gender education and school health.

VIII) Psychological Behavioral manifestations disorders

- Identification and assessment of Psychological and behavioral disorders.
- Intervention and management strategies for Psychological and behavioral disorders.

IX) Growth and Development

- Normal pattern and factors affecting growth and development. Recognition of normal variants of growth and development.
- Developmental assessment in infancy and childhood.
- Physiological changes during adolescence and usual problems faced by adolescents.
- Assessment of growth.
- Deviations from normal patterns of growth and development: Their recognition, prevention, early intervention and management.
- Tools for assessment of growth and development at various ages including Indian adaptations.

X) Nutrition

- Understanding of energy balance in humans.
- Basic biochemistry of proteins, carbohydrates and fats.
- Proximate Principles, Vitamins, Minerals and Micronutrients: Biochemistry, Physiological Functions, Daily Requirements, Manifestations and Management of deficiency and excess states.
- Normal requirement of protein, fat, carbohydrate for newborns, children, Adolescents, pregnant and lactating women.
- Nutritional values of common Indian foods.
- Breastfeeding and lactation management
- Infant feeding and weaning foods.
- Balanced diet old vs new paradigm.

- Assessment of nutritional status.
- Nutritional disorders-Etiology, Clinical features, patho-physiology, pathogenesis and management
- Clinico - pathological features of various nutritional disorders.
- Diet therapy during illness.

XI) Fluids and Electrolytes

Pathophysiology of body fluids, fluid therapy, electrolytes, acid-base balance, parenteral and enteral fluid therapy

Total parenteral nutrition.

XII) Emergency pediatric services

- Pediatric resuscitation
- Evaluation of critically ill child.
- Pediatric Emergencies and poisoning.
- Pediatric injuries, Sports injuries. Injury control and accidents.
- Insect, animal and snakebites.
- Drowning & near drowning.
- Planning and management of pediatric intensive care unit
- Anesthesia, preoperative care and pain management in children.
- Essential emergency drugs.

XIII) Genetics

- Principles and molecular basis of genetic disorders.
- Clinical features and management of genetic and chromosomal disorders.
- Prenatal diagnostic techniques and neonatal screening tests.
- Effects of teratogenic agents.
- Genetic counseling.
- Gene therapy.

XIV) Metabolic diseases

Metabolic diseases of protein (amino acids), carbohydrates, fats, mucopolysaccharides, purines, pyrimidines, heme and others

XV) Neonatology: The fetus and neonatal infant

- High-risk pregnancy
- Assessment of fetal growth, wellbeing and maturity.
- Fetal distress: Manifestation, identification and management
- Maternal diseases and their effects on the fetus and newborn.
- Prevention of transmission of Perinatal infections e.g.-TORCH group of viral diseases, HIV / AIDS etc.
- Identification and management of various fetal diseases.
- High-risk infant – identification and management.
- Delivery room emergencies, resuscitation of newborn and care of normal newborn.
- Birth injuries.
- Adaptation of newborn.

- Examination of newborn and assessment of maturity.
- Etiology, clinical features, pathophysiology, pathogenesis and management of various diseases of newborn.
- Basic Neonatal Ventilation
- Neonatal transport.
- Neonatal procedures.
- Developmental assessment, and early intervention programmes for infants at high risk for developmental delay.
- Care of newborn in the community.
- Planning and organization of level I, level II, Level III Neonatal care centers.
- Organizing high risk non-born following clinics.

XVI) Infectious diseases

- Clinical features, management of viral, bacterial, fungal, spirochetal, rickettsial, parasitic, protozoal and other infections.
- Prevention and management of nosocomial infections.
- Infection control and preventive measures.
- Immunization against infections diseases.
- Approach to fever and its management.
- Laboratory techniques for diagnosis of infections diseases.
- Infections in immunocompromized host.
- Clinical syndromes caused by various infections agents.

XVII) Immunological system and its disorders

- Components of immune system and their functions.
- Disorders of immune system – Etiology, Clinical features, pathophysiology, pathogenesis and management.
- Pharmacotherapy.
- Transplantation medicine.
- Allergic diseases – etiology, clinical features, patho-physiology, pathogenesis and management.
- Relevant diagnostic and therapeutic modalities in various immunological and allergic disorders.

XVIII) Rheumatic and connective tissue disorders of childhood:

Etiology, pathogenesis, manifestation, laboratory diagnosis and management of Rheumatic diseases, rheumatoid arthritis (JRS), SLE etc. in childhood and adolescents

XIX) Respiratory system

- Development of respiratory system, congenital anomalies.
- Physiology of respiration and mechanics of ventilation.
- Etiology, clinical features, Pathophysiology, pathogenesis and management of various respiratory diseases.
- Relevant diagnostic and therapeutic modalities in respiratory diseases in children.
- Pharmacotherapy of respiratory diseases.
- An outline of interventional cardiology on applied to paediatrics and neonatology.

XX) Cardiovascular system

- Embryology of heart and vascular system.
- Adaptations of cardiovascular system at and after birth.
- Etiology, pathophysiology, pathogenesis, clinical features and management of congenital and acquired heart and vascular diseases, including rheumatic heart disease.
- Management of acute & chronic diarrhea, malabsorption
- Rheumatic fever – Epidemiology, clinical features, pathophysiology, pathogenesis, prevention and management.
- Relevant diagnostic and therapeutic modalities in heart diseases in children. Congestive cardiac failure – Etiology, pathophysiology, pathogenesis, clinical features and management.
- Pharmacotherapy of cardiovascular diseases.

XXI) Gastrointestinal tract

- Development of gastrointestinal tract, hepatobiliary system and their abnormalities.
- Physiology of digestion.
- Etiology, pathophysiology, pathogenesis, clinical features and management of various gastrointestinal and hepatobiliary and other abdominal diseases.
- Pathological features of gastrointestinal, hepatobiliary and pancreatic disorders.
- Surgical emergencies in gastrointestinal tract diseases.

XXII) Hematology and Oncology

- Physiology of erythropoiesis, leukopoiesis and physiology of hemostasis.
- Etiology, pathophysiology, pathogenesis, clinical features and management of hematological diseases.
- Common neoplastic conditions in childhood, their diagnoses and management.
- Laboratory diagnosis and other relevant diagnostic and therapeutic modalities in hematological and oncological disorders.
- Pharmacotherapy of Hematological and Oncological Diseases.
- Component therapy in Pediatric Practice.
-

XXIII) Nephrology and genitourinary tract

- Development and developmental anomalies of the kidneys and the genitourinary tract.
- Physiology of urine formation and metabolic functions of the kidney.
- Etiology, Pathophysiology, pathogenesis, clinical features and management of various disorders of the kidney and the genitourinary tract.
- Acute glomerulo nephritis, nephritic syndromes etc.
- Relevant diagnostic and therapeutic modalities for diseases of the kidney and the genitourinary tract.
- Pharmacotherapy of renal and genitourinary disorders.
- Management of end stage renal disease.

XXIV) Central and peripheral Nervous System

- Development of the brain, spinal cord and peripheral nervous system and their anomalies.
- Neurological evaluation of newborns, infants and children.
- Etiology, Pathophysiology, pathogenesis, clinical features and management of various diseases affecting central nervous system and peripheral nervous system.
- Seizures disorders in childhood and their management.
- Neuromuscular diseases – etiology, clinical features, Pathophysiology and Management.

XXV) Endocrine system

- Synthesis, physiological functions and pharmacological actions of various hormones.
- Disorders of the endocrine glands.
- Pubertal development and its disorders, management of short stature.

XXVI) Congenital and acquired disorders of eye, ear, nose, throat, bones and joints.**XXVII) Miscellaneous diseases**

- Unclassified diseases including SIDS, Sarcoidosis, Progeria histiocytosis, chronic fatigue syndrome, battered baby syndrome etc.
- Metabolic bone diseases.
- Genetic skeletal dysplasias.

XXVII) Development of diagnostic approach and interpretation of symptomatology clinical signs in infants, children and adolescents.**Understanding & application of Denver Development serial Tech. (DDST)****XXVIII) Basics of Research Methodologies and Ethical aspects of Clinical Research**

Biostatistician methods mean, mode, median, students to test, chi-square tests, regression analysis etc.

XXIX) Basics of Information Technology as applied to Medical Sciences**5. List of skills**

1. Elicitation of history from parents, guardians, relatives and patients regarding complaints, previous diseases and therapy, events around birth, prenatal period, growth and development, diet and immunization, socio-educational and economic background and other relevant aspects.
2. Conduct physical examination of well and sick newborn babies, infants, children, & adolescents with due regard to bed-side manners and skill.
3. Accurately measure length or height, weight, head circumference, MAC and plot the data on an appropriate chart for interpretation.
4. Accurately measure arm circumference of aged 1-5 year olds.
5. Identify abnormal growth and development patterns interpreting anthropometric.
6. Data obtained by anthropometric measurement and developmental assessment.
7. Nutritional assessment and advice for newborn babies, infants, children and Adolescents.
8. Provide advice regarding breast-feeding, weaning and balanced diet.

9. Provide advice parents and children regarding healthy & hygienic practices with a view to prevent diseases, disorders, injuries, accidents and poisoning.
10. Develop a diagnostic approach to any clinical problems in newborns, infants, children and adolescents.
11. Develop communication skills between doctors and parents e.g. :
 - a) To discuss the characteristics of the patient and of the illness that must be considered when making the decision to manage the patient in the outpatient setting or admit to hospital.
 - b) To discuss the differential diagnosis of symptoms, signs and presentations in neonates, infants, children and adolescents.
 - d) To undertake relevant investigations for diagnostic and prognostic evaluation taking into consideration the risks, benefits and costs involved.
 - e) To convince parents and guardians regarding undertaking investigations and obtain their co-operation and valid informed legal consent.
15. Interpretation of laboratory Reports ECG, EEG, respirogyra and other graphics. Counseling parents regarding the child's health status, health needs, illness & disabilities
16. Performance of Diagnostic & Therapeutic Procedures:
 - Venepuncture (10)
 - Intravenous access for administration of drugs and intravenous fluids (10)
 - Administration of drugs via intra-dermal, intra-muscular or subcutaneous routes (5 each)
 - Administration of drugs and fluids through intra-osseous route (2)
 - Lumbar puncture to draw out cerebro-spinal fluid for examination (5)
 - Sub-dural tap (2)
 - Ventricular tap (1)
 - Peritoneal (Ascitic) tap for diagnostic and therapeutic purposes (2)
 - Pleural tap for diagnostic and therapeutic purposes (4)
 - Collection of blood from an artery for arterial blood gas analysis (4)
 - Obtaining Central IV Access (3)
 - End tracheal Intubation in Newborn babies, Infants, Children & Adolescents (5)
 - Cardiopulmonary Resuscitation (5)
 - Supra-pubic tap for obtaining a urine sample (5)
 - Administration of drugs via a nebulizer (5)
 - Catheterization of the urinary Bladder (5)
 - Liver Biopsy (4)
 - Kidney Biopsy (2)
 - Arterial Cannulation for monitoring of Blood Pressure, obtaining (5)
 - Peritoneal dialysis (2)
 - Cannulation of the umbilical vessels (7)
 - Exchange Transfusion (5)
 - Bone Marrow aspiration (2)
 - Bone Marrow Biopsy (2)
 - Pericardiocentesis (2)
 - Cardioversion (4)

(The numbers in the brackets indicate the minimum number of the procedure that a post-graduate student needs to observe/ assist/ perform/ supervise)

6. Teaching/Learning Activities and Opportunities

Inpatient management
Outpatient Management, including specialties wise form up devices.
Presentation of cases on Clinical Rounds
Topic presentation.
Case discussions.
Clinicopathological conferences.
Clinicoradiological conferences.
Biopsy Meetings.
Mortality Review Meetings
Journal Club
Guest Lectures
In-house lectures
Conferences,
Seminars.
CME sessions
Participation in Workshops
Presentation of Papers
Teaching Undergraduate students.
Teaching Postgraduate students & paramedical staff.
Use and Maintenance of biomedical equipments and gadgets
Counseling regarding performance of procedures, disease process and prognostication
Group discussions Sessions
Assisting in diagnostic and therapeutic procedures.
Performing diagnostic and therapeutic procedures.
Patient/Health education.

7. Research

All the postgraduate students will be exposed to Research Methodologies through their participation in the Journal Club.

A candidate registered for M.D. (Pediatrics) will be submitting a dissertation to the university.

This will be a pre-requisite for appearing for the MD examination. The dissertation will be done under the guidance and full satisfaction of the post-graduate teacher under whom the candidate is registered.

8. Reference Books and Suggested Reading

(A) Books & Textbooks

(I) *Pediatrics & Medicine*

- Nelson Textbook of Pediatrics (Behrman)
- Forfar Textbook of Pediatrics (Campbell).
- Rudolph's Pediatrics (Rudolph).
- Pediatric Medicine (Avery).
- Paediatric differential diagnosis (Richmond Green)
- Manual of Pediatric therapeutics (Graef).
- Manual of Neonatal Care (Cloherty)
- Common symptoms (Illingworth).

- Signs and symptoms in Pediatrics (Tunnessen).
- Harrison's Principles of Internal Medicine.
- Mcleod's clinical methods.
- IAP Textbook of Pediatrics
- Harriet Lane Handbook (Barone).
- Handbook of Pediatric Physical diagnosis (Barness)

(II) Super-speciality Reference Books

- Neurology* : Pediatric Neurology : Principles and Practice(Swaiman)
Clinical Pediatric Neurology :A Signs and symptoms
Approach: (Fenichel / John Patten / Bikerstaff)
- Nephrology*: Pediatric kidney diseases (Edelmann).
Pediatric Nephrology (Holliday).
Clinical Pediatric Nephrology (Kher & Makker).
- Cardiology*: Nada's Pediatric Cardiology (Fyker).
Heart Disease in Infants, children and Adolescents
(Adams-Moss's).
- Pereioiff – congenital heart diseases.
Rheumatic fever (Markowitz).
Pereioiff - Pediatric Cardiology for Practitioner's (Myung Park).
How to read Pediatric ECGs (Park).
- Hematology*: Clinical hematology in medical practice (de Gruchy's).
Blood diseases of infancy and childhood (Miller).
Nathan & Oski's Hematology of Infancy and childhood
Living with Thalassemia (Aggarwal)
- Gastroenterology*: Pediatric Gastroenterology (Sheila Sherlock)
Liver disorders in childhood (Mowat)
Paediatric Gastroenterology (Anderson).
- Respiratory*: Kendig's disorders of the respiratory tract in children
(Chernick).
- Infectious Diseases & Parasitology*:
Poliomyelitis (Huckstep).
Tuberculosis in Children. (Miller)
Essentials of Tuberculosis in children. (Vimlesli Sheth)
Parasitology (Charterjee)
Textbook of Pediatric Infections diseases(Fegin & Cherry)
- Growth & Development* :
The Development of the Infant and Young Child –
Normal & Abnormal (Illingworth)
The Normal Child (Illingworth).
- Miscellaneous* : Protein Energy Malnutrition
a) Alleyne,
b) Waterlow.
Essentials of Human Genetics (Kothari & Mehta)
Genetics in Medicine (Thomson & Thomson).
Birth Defects encyclopedia (Buyses).
Smith's Recognizable Patterns of Human Malformation
(Jones).
Breastfeeding – A Guide for the medical profession

(Lawrence)

Medical Embryology (Langman).

Frontiers in social Pediatrics (Patwari)

Medical emergencies in children (Meharban Singh)

Immunization : Immunization in Practice (Mittal)

Immunization update (Mittal)

IAP amideline on Immunisation

(B) Journals in Pediatrics & Other Periodicals

Year Book of Pediatrics – Stockman III

Indian Pediatrics

Indian Journal of Pediatrics

Paediatrics Today.

Archives of Diseases in Childhood

Pediatrics (Journal of the AAP)

Journal of Pediatrics

Drugs.

State of the World's Children (UNICEF)

Pediatric Clinics of North America (PCNA)

Recent Advances in Pediatrics

Advances in Pediatrics

Clinics in Perinatology.

(C) Sub-speciality Journals

Pediatric Nephrology

Pediatric Cardiology

Pediatric Neurology

Pediatric Radiology

Pediatric Neurosurgery

Journal of Infection

9. Evaluation Form
(A) Postgraduate Seminars

Name:

Date:

Seminar Topic:

Evaluation Points:

1. Presentation:
2. Completeness of Preparation:
3. Cogency of presentation:
4. Use of audiovisual aids.
5. Understanding of subjects:
6. Ability to answer questions:
7. Time scheduling:
8. Consulted all relevant literature:
9. Overall performance.

Guidance for Scoring**0****1****2****3****4**

Poor Below average Average Above average Very Good

Faculty members:

1.

2.

3.

Mean Score:

Evaluation Form
(B) Case Presentation

Name:

Date:

Case Title:

1. Logical order in presentation:
2. Cogency of presentation:
3. Complete /Relevant history:
4. Accuracy of General Physical Examination:
All signs elicited correctly.
5. Accuracy of Systemic Examination:
6. Diagnosis – Logical flow based on History & findings:
7. Order of differential diagnosis (logical):
8. Investigations required:
(Complete list, Relevant order, Interpretation of investigations, unnecessarily investigations asked)
9. Treatment: Principles & details
10. Patient/Relatives communication (Diagnosis & Management Health education)

Overall:

1. Abilities to react to questioning:
2. Abilities to defend diagnosis:
3. Ability to justify differential diagnosis:
4. Acceptability of plan of management
5. Confidence

Score

0

1

2

3

4

Poor Below average Average Above average Very Good

Faculty members:

- 1.
- 2.
- 3.

Mean Score:

**Evaluation Sheet
(C) Journal Club**

Name:

Date:

Points for consideration: Score

1. Choice of article relevant:
2. Cogency of presentation:
3. Whether understood and conveyed the purpose of the article:
4. How did he defend article:
5. Whether cross references have been consulted:
6. Understood explained basics of statistic in article:
7. Whether relevant information mentioned from other similar articles.
8. Use of audio visual aids:
9. Presentation:
10. Response to questioning:

Score	0	1	2	3	4
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Poor Below average Average Above average Very Good

Faculty members:

- 1.
- 2.
- 3.

Mean Score:

**Evaluation Form
(D) Clinical Work**

Name:

Date:

Point to be considered:

1. Punctuality:
2. Regularity of attendance:
3. Quality of ward work (procedures):
4. Maintenance of case records:
5. Presentation of cases during rounds (approach):
6. Investigation work up:
7. Bedside manners:
8. Rapport with patients:
9. Rapport with colleagues:
10. Motivation for blood donation:
11. UG teaching (if applicable):
12. Counseling patient's relatives:
13. Management of emergencies:
14. Knowledge of Pediatrics as a subject:

Score	0	1	2	3	4
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Poor	Below average	Average	Above average	Very Good
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Faculty members:

1.

2.

3.

Mean Score:

Approved in Bom - 38/2014, Dated 28/11/2014

Resolution No. 3.3(d): Resolved to include "Pediatric Advanced Life Support" module in Theory and Practical (Annexure-10) in the Paediatrics PG curriculum from academic year 2015-16.

Resolution No. 3.3(e): Resolved to include "Neonatal Advanced Life Support" module in Theory and Practical (Annexure-11) in the Paediatrics PG curriculum from academic year 2015-16.

Resolution No. 3.3(f): Resolved to include "Palliative care" topic in Theory (Annexure-8) in the Paediatrics PG curriculum from academic year 2015-16.

Resolution No. 3.3(g): Resolved to include "Rational Antibiotic Policy" topic in Theory and Practical (Annexure-9) in the Paediatrics PG curriculum from academic year 2015-16.

WHO Definition of Palliative Care for Children (Annexure-2) A-8

DEPT OF PAEDIATRICS SUGGESTS INCLUDING THE ABOVE IN BOTH UG AND PG THEORY CURRICULUM.

Palliative care for children represents a special, albeit closely related field to adult palliative care. WHO's definition of palliative care appropriate for children and their families is as follows; the principles apply to other pediatric chronic disorders (WHO; 1998a):

- Palliative care for children is the active total care of the child's body, mind and spirit, and also involves giving support to the family.
- It begins when illness is diagnosed, and continues regardless of whether or not a child receives treatment directed at the disease.
- Health providers must evaluate and alleviate a child's physical, psychological, and social distress.
- Effective palliative care requires a broad multidisciplinary approach that includes the family and makes use of available community resources; it can be successfully implemented even if resources are limited.
- It can be provided in tertiary care facilities, in community health centers and even in children's homes.

IMPORTANCE: cognitive and communication skill development for undergraduate and post graduates.

RATIONAL ANTIBIOTIC PRACTICE (Annexure-3) A-9

PAEDIATRICS DEPT SUGGESTS, INCLUDING AND EMPHASIZING THE ABOVE IN THEORY AND PRACTICALS FOR BOTH UG AND PG.

Prompt antimicrobial therapy for an infected patient can make the difference between cure and death or long-term disability. Unfortunately, the use and misuse of antimicrobials has driven the relentless expansion of resistant microbes leading to a loss of efficacy of these "miracle drugs".

Improving antimicrobial use

Because of their widespread availability and familiarity, generally low cost, and relative safety, antimicrobials are among the most misused of all medicines. Improving antimicrobial use decisions ultimately involves guiding treatment decisions made by patients and healthcare providers.

Increase appropriate use

Ensure that infected patients who need antimicrobial therapy have access to quality medicines which conform with policy recommendations and standard treatment guidelines.

Decrease inappropriate use

Discourage the indiscriminate use of antimicrobials in patients unlikely to derive any benefit.

Educational and regulatory strategies

The WHO Medicines Department provides guidance into educational and regulatory strategies for improving the use of medicines by patients, healthcare professionals, and national authorities.

Paediatrics Advanced Life Support (PALS) (Annexure A) 10

PAEDIATRICS DEPARTMENT SUGGESTS PEDIATRIC ADVANCED LIFE SUPPORT (PALS) PROGRAMME TO BE INCLUDED IN THE PG CURRICULUM

Pediatric Advanced Life Support (PALS) is a classroom, video-based, instructor-led course that uses a series of simulated pediatric emergencies to reinforce the important concepts of a systematic approach to pediatric assessment, basic life support, PALS treatment algorithms, effective resuscitation and team dynamics. The goal of the PALS Course is to improve the quality of care provided to seriously ill or injured children, resulting in improved outcomes.

Audience

The PALS Course is for healthcare providers who respond to emergencies in infants and children. These include personnel in emergency response, emergency medicine, intensive care and critical care units such as physicians, nurses, paramedics and others who need a PALS course completion card for job or other requirements

Course content

- 1- and 2-rescuer child CPR and AED use
- 1- and 2-rescuer infant CPR
- Cardiac, respiratory and shock case discussions and simulations
- Key changes in pediatric advanced life support, reflecting the new science from the 2010 American Heart Association Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care
- Management of respiratory emergencies
- Resuscitation team concept
- Rhythm disturbances and electrical therapy
- Systematic Approach to Pediatric Assessment
- Vascular access

Course Completion Card or Certificate

Students who successfully complete the PALS Course, including the following components, will receive a PALS Provider Course Completion Card, valid for two years:

- Actively participate in practice and complete all learning stations
- Complete the closed book written exam with a minimum score of 80%
- Pass the 1- and 2-Rescuer Child BLS and APD and 1- and 2-Rescuer Infant CPR Skills Tests
- Pass 2 PALS core case scenarios (1 cardiac and 1 respiratory or shock) as a team leader providing appropriate medical treatment and demonstrating effective team dynamics

DNB has made this course mandatory before appearing for postgraduate examination in Paediatrics.

NEONATAL RESUSCITATION PROGRAMME (Annexure) A-11

PAEDIATRICS DEPARTMENT SUGGESTS NEONATAL RESUSCITATION PROGRAMME TO BE INCLUDED IN THE PG CURRICULUM

Contents

Lesson 1: Overview and Principles of Resuscitation

Lesson 2: Initial Steps in Resuscitation

Lesson 3: Use of a Resuscitation Devices for Positive Pressure Ventilation

Lesson 4: Chest Compressions

Lesson 5: Endotracheal Intubation

Lesson 6: Medications

IMPORTANCE: Under the NRHM, the Government of India is committed to improve the newborn care and bring a significant decline in the neonatal and infant mortality to meet the Millennium Development Goals. In this context, the Government is planning to

Operationalize the primary health centers for round the clock deliveries and upgrade the health facilities at the district hospitals and referral centers in terms of inpatient neonatal

care. With an aim to strengthen Facility Based Newborn Care in high IMR National Rural

Health Mission (NRHM) states, NNF entered into a PCA with UNICEF in the year 2006

with the objective to establish or strengthen existing referral system for providing Comprehensive newborn care.

MGM INSTITUTE OF HEALTH SCIENCES, NAVI MUMBAI

MARKLIST FOR PRACTICAL AND VIVA-VOCE EXAMINATION

EXAM CENTRE: _____ **COURSE / EXAM :** PG –

DATE OF EXAMINATION: _____ **EXAMINATION FOR: M.D. (PEADIATRICS)**

[illegible]

<u>NAME OF EXAMINER</u>	<u>COLLEGE</u>	<u>SIGNATURE WITH DATE</u>
<u>1.</u>		
<u>2.</u>		
<u>3.</u>		
<u>4.</u>		

Paper wise Distribution of Topic

v)	M.D.	PAEDIATRICS	I. Basic Medical Sciences as applied paediatrics II. Neonatology, Community and preventive Paediatrics III. Systemic diseases in Paediatrics: - Respiratory Cardiology, C.V.S., Neurology, Haematology, Nephrology, Rheumatology, Immunology, Metabolic, Liver Gastroenterology, Growth and Development, Congenital and acquired disorders Endocrine System and Miscellaneous diseases. IV. Recent advances in Paediatrics
vi)	M.D.	PHYSIOLOGY	I. General physiology, Cellular physiology, Applied Biochemistry, Biophysics and Biostatistics, History of Physiology, Comparative Physiology II. Nerve muscle, Blood, Cardiovascular system, Respiratory System, Gastrointestinal system, Renal Physiology. III. Endocrine, special senses, Nervous system, Reproductive system IV. Exercise Physiology, Nutrition, recent advances, Medical education technology, stress relaxation, medical ethics & applied physiology.
vii)	M.D.	ANAESTHESIOLOGY	I. Basic Sciences related to Anaesthesia (History, Anatomy, Physiology, Pharmacology, Pathology, Physics, Instrument & Equipments, etc.) II. Theory & Practice of Anaesthesia III. Clinical sciences like Medicine & Surgery Related to Anaesthesia IV. Recent Advances in Anaesthesia.

IN PURSUIT OF EXCELLENCE

MGM DEEMED UNIVERSITY OF HEALTH SCIENCES

Constituent Colleges

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-informatics.
- 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-Primary - 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 & Secondary 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

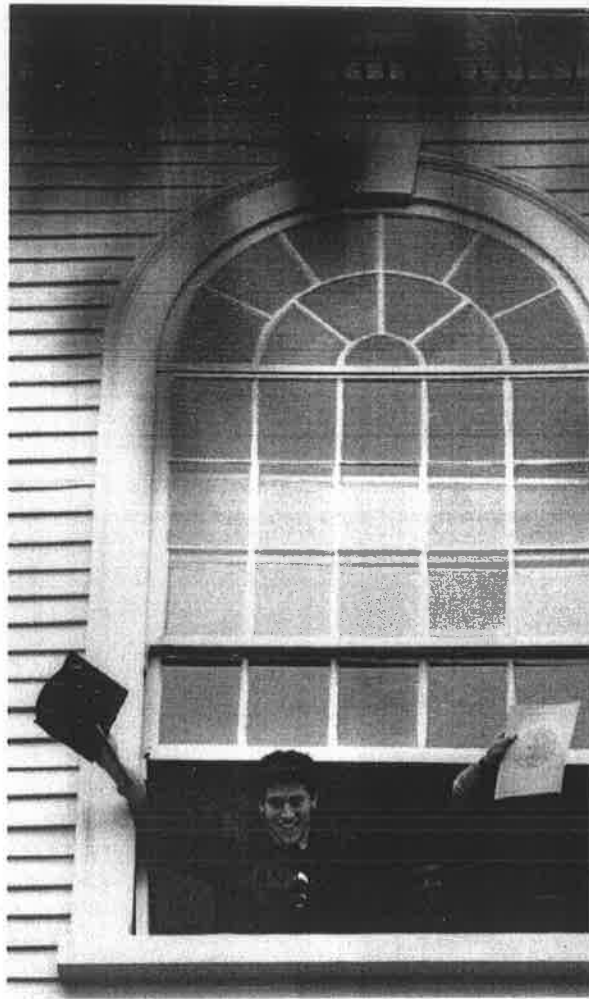
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- MGM's College of Fine Arts
- MGM's College of Computer Science
- MGM's College of Journalism & Media Science
- MGM's Centre for Astronomy & Space Tech.
- MGM's College of Library & Information Science

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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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

PG.

30 copies

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

MGM INSTITUTE OF HEALTH SCIENCES
Navi Mumbai

Induction Program for newly admitted Postgraduate students

Day 1	• Address by Dean, Medical Suptd, Director (Academics) • Pre-test • Communication Skills • Universal Safety Precautions • Biomedical Waste Management • Infection Control Policy
Day 2	• Emergency services • Laboratory services • Blood Bank services • Medicolegal issues • Prescription writing • Adverse Drug Reaction • Handling surgical specimens
Day 3	• Principles of Ethics • Professionalism • Research Ethics • Informed Consent • Confidentiality • Doctor-Patient relationship
Day 4	• Research Methodology • Synopsis writing • Dissertation writing • Statistics
Day 5	
Day 6	
Day 7	• ATLS • Post-test

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 passed in BOM – 48/2017, dated 24/01/2017

Resolution No. 5.25: Resolved to institute 6 monthly progress Report for PG Students of all Courses from the batches admitted in 2016-17. [Annexure-XVII of BOM-48/2017]



**Mahatma Gandhi Mission's Medical College and Hospital
Navi Mumbai**

Six monthly Progress Report for Postgraduate Students

PART A

Name of the PG student: _____

Department: _____

Admitted in (Month and Year): _____

Name of the PG guide: _____

Report for the period: _____ to _____

Attendance: _____ days (_____ %)

PART B

Grading as per performance

Grade	Percentage
A	80% and above
B	65% to 79%
C	50% to 64%
D	Below 50%

1. OPD work:
2. Ward work:
3. Lab work:
4. OT work:
5. ICU work:
6. Teaching assignments:

PART C

Progress of Thesis

PART D

Activities from serial No. 1 to 5 should be rated on a scale of 0 to 10.

1. Case Presentations

Sr. No.	Topic	Date	Guide	Marks

2. Microteaching

Sr. No.	Topic	Date	Guide	Marks

3. Recent Advances

Sr. No.	Topic	Date	Guide	Marks

4. Seminars

Sr. No.	Topic	Date	Guide	Marks

5. Journal Clubs

Sr. No.	Journal	Title of Paper	Date	Guide	Marks

6. Marks obtained in tests

Sr. No.	Date	Theory / Practical	Marks obtained

7. Any other academic activity conducted:

PART E

1. Papers presented

Sr. No.	Title of Paper	Authors	Event	Date

2. Posters presented

Sr. No.	Title of Poster	Authors	Event	Date

3. Publications

(Note: Mention only those publications that are published or are accepted for publication during the said period only)

Sr. No.	Title of Paper	Authors	Journal	Year/Vol/ Issue	Page Nos	Indexed/ Non-Indexed	Status

Certificate by the PG Guide

This is to certify that Dr. _____, has an attendance of _____% , during the period _____ to _____. His /Her performance during the said period has been **satisfactory/ average / unsatisfactory.**

Overall Grading: _____

Date: _____

Name and Signature of PG guide:

Certificate by the Head of Department

This is to certify that the performance of Dr. _____, during the period _____ to _____, has been **satisfactory/ average / unsatisfactory.**

Overall Grading: _____

Date: _____

Name and Signature of HOD:

Final Remarks

Satisfactory / Average / Unsatisfactory

Director (Academics)

Dean

Date:

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.