

अखिल भारतीय आयुर्विज्ञान संस्थान, नागपुर
ALL INDIA INSTITUTE OF MEDICAL SCIENCES, NAGPUR



Department of Pediatrics
Curriculum for MD Pediatrics

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1. GOALS

MD Pediatrics

The goal of MD course in Pediatrics is to produce a competent pediatrician who recognizes the health needs of infants, children and adolescents and carries out professional obligations in keeping with principles of National Health Policy and professional ethics; has acquired the competencies pertaining to pediatrics that are required to be practiced in the community and at all levels of health care system; has acquired skills in effectively communicating with the child, family and the community; is aware of the contemporary advances and developments in medical sciences as related to child health; is oriented to principles of research methodology; and has acquired skills in educating medical and paramedical professionals.

2. Programme outcomes

Specific Aims and Objectives of the Junior Resident Training Program in Pediatrics

As a result of the training under this program, at the end of 3 years of postgraduate training, a resident must acquire the following knowledge, skills and competencies:

2.1 Cognitive:

At the end of the MD course in Pediatrics, the student should be able to

1. Recognize the key importance of child health in the context of the health priority of the country.
2. Practice the specialty of Pediatrics in keeping with the principles of professional ethics.
3. Identify social, economic, environmental, biological and emotional determinants of child and adolescent health, and institute diagnostic, therapeutic, rehabilitative, preventive and promotive measures to provide holistic care to children.
4. Recognize the importance of growth and development as the foundation of Pediatrics; and help each child realize her/his optimal potential in this regard.

2.2 Psychomotor

At the end of the MD course in Pediatrics, the student should be able to

1. Take detailed history, perform full physical examination including neuro-development and behavioral assessment and anthropometric measurements of the child and make clinical diagnosis.
2. Perform relevant investigative and therapeutic procedures for the pediatric patient.
3. Interpret important imaging and laboratory results.
4. Diagnose illness in children based on the analysis of history, physical examination and investigative work up.
5. Plan and deliver comprehensive treatment for illness in children using principles of rational drug therapy.
6. Plan and advice measures for the prevention of childhood disease and disability.
7. Plan rehabilitation of children suffering from chronic illness and handicap, and those with special needs.

8. Manage childhood emergencies efficiently.
9. Provide comprehensive care to normal, 'at risk' and sick neonates.
10. Demonstrate skills in documentation of case details, and of morbidity and mortality data relevant to the assigned situation.
11. Develop skills as a self-directed learner, recognize continuing educational needs; use appropriate learning resources, and critically analyze relevant published literature in order to practice evidence-based pediatrics.
12. Demonstrate competence in basic concepts of research methodology and epidemiology.
13. Facilitate learning of medical/nursing students, practicing physicians, para-medical health workers and other providers as a teacher-trainer.
14. Play the assigned role in the implementation of national health programs, effectively and responsibly.
15. Organize and supervise the desired managerial and leadership skills.
16. Function as a productive member of a team engaged in health care, research and education.

2.3 Affective

At the end of the MD course in Pediatrics, the student should be able to

1. Recognize the emotional and behavioral characteristics of children, and keep these fundamental attributes in focus while dealing with them.
2. Demonstrate empathy and humane approach towards patients and their families and respect their sensibilities.
3. Demonstrate communication skills of a high order in explaining management and prognosis, providing counseling and giving health education messages to patients, families and communities.

3. Syllabus

By the end of the course, the student should have acquired knowledge (cognitive domain), professionalism (affective domain) and skills (psychomotor domain) as specified in the syllabus.

3.1 Theory

Sr. No	System/Section	List of topics
	<i>Growth and development</i>	<ul style="list-style-type: none">• Short stature• Obesity• Precocious and delayed puberty• Developmental delay• Impaired learning• Principles of growth and development• Normal growth and development in childhood and adolescence• Deviations in growth and development,• Sexual maturation and its disturbances.
	<i>Neonatology</i>	<ul style="list-style-type: none">• Normal newborn• Low birth weight newborn• Sick newborn. Perinatal care• Normal newborn, care in the labor room and resuscitation• Low birth weight, prematurity• Newborn feeding• Common transient phenomena• Respiratory distress, apnea, infections, jaundice, anemia and bleeding disorders, neurologic disorders, gastrointestinal disorders, renal disorders, malformations, thermoregulation and its disorders• Understanding of perinatal medicine• Newborn screening.
	<i>Nutrition</i>	<ul style="list-style-type: none">• Lactation management and complementary feeding• Protein energy malnutrition (underweight, wasting, stunting) and micronutrient deficiencies• Failure to thrive• Obesity• Maternal nutritional disorders: impact on fetal outcome, nutrition for the low birth weight, breast feeding, infant feeding including complementary feeding, protein energy malnutrition, vitamin and mineral deficiencies

		<ul style="list-style-type: none"> • Trace elements of nutritional importance • Obesity • Adolescent nutrition • Nutritional management in diarrhea • Nutritional management of systemic illnesses (celiac disease, hepatobiliary disorders, nephrotic syndrome) • Parenteral and enteral nutrition in neonates and children.
	<i>Cardiovascular</i>	<ul style="list-style-type: none"> • Murmur • Congestive heart failure • Systemic hypertension • Arrhythmia, shock. • Congenital heart diseases (cyanotic and acyanotic), rheumatic fever and rheumatic heart disease • Infective endocarditis • Arrhythmia • Diseases of myocardium (cardiomyopathy, myocarditis) • Diseases of pericardium • Systemic hypertension • Hyperlipidemia in children.
	<i>GIT and liver</i>	<ul style="list-style-type: none"> • Acute • Persistent and chronic diarrhea • Abdominal pain and distension • Ascitis • Vomiting • Constipation • Gastrointestinal bleeding, jaundice, hepatosplenomegaly and chronic liver disease • Hepatic failure and encephalopathy • Diseases of mouth, oral cavity and tongue, disorders of deglutition and esophagus, peptic ulcer disease, H. • Pylori infection, foreign body, congenital pyloric stenosis, intestinal obstruction • Malabsorption syndrome, • Acute and chronic diarrhea • Irritable bowel syndrome • Cystic Fibrosis • Ulcerative colitis • Hirschsprung's disease • Anorectal malformations • Liver disorders: hepatitis, hepatic failure, chronic

		liver disease, Wilson's disease, Budd-Chiari syndrome, metabolic diseases of liver, cirrhosis and portal hypertension.
	<i>Respiratory</i>	<ul style="list-style-type: none"> • Cough/chronic cough • Noisy breathing • Wheezy child • Respiratory distress, hemoptysis. • Congenital and acquired disorders of nose • Infections of upper respiratory tract, tonsils and adenoids • Obstructive sleep apnea • Congenital anomalies of lower respiratory tract • Acute inflammatory upper airway obstruction, • Foreign body in larynx, trachea and bronchi, subglottic stenosis (acute and chronic) • Trauma to larynx • Neoplasm of larynx and trachea • Bronchitis, bronchiolitis • Aspiration pneumonia • GER • Acute pneumonia, recurrent and interstitial pneumonia, suppurative lung disease • Atelectasis • Lung cysts • Emphysema and hyperinflation bronchial asthma • Pulmonary edema • Bronchiectasis • Pleural effusion • Pulmonary leaks • Mediastinal mass.
	<i>Infections</i>	<ul style="list-style-type: none"> • Acute onset pyrexia • prolonged pyrexia with and without localizing sign (including PUO) • recurrent infections • nosocomial infections. • Bacterial, viral, fungal, parasitic, rickettsial, Mycoplasma, Pneumocystis carinii infections • Chlamydia, protozoal and parasitic • Tuberculosis • HIV • Nosocomial infections • Control of epidemics and infection prevention.

	<i>Renal</i>	<ul style="list-style-type: none"> • Hematuria/dysuria • Bladder/bowel incontinence • Voiding dysfunctions • Inguinoscrotal swelling, • Renal failure (acute and chronic). • Acute and chronic glomerulonephritis • Nephrotic syndrome • Hemolytic uremic syndrome • Urinary tract infection • VUR and renal scarring • Renal involvement in systemic diseases • Renal tubular disorders • Congenital and hereditary renal disorders • Renal and bladder stones • Posterior urethral valves • Hydronephrosis • Voiding dysfunction • Enuresis, undescended testis • Wilm’s tumor • fluid-electrolyte disturbances.
	<i>Hematooncology</i>	<ul style="list-style-type: none"> • Lymphadenopathy • Anemia • Bleeding • Deficiency anemia • Hemolytic anemia • Aplastic anemia • Pancytopenia • Disorders of hemostasis • Thrombocytopenia • Blood component therapy • Transfusion related infections • Bone marrow transplant/ stem cell transplant • Acute and chronic leukemia • Myelodysplastic syndrome • Hodgkin disease • Non Hodgkin’s lymphoma • Neuroblastoma, hypercoagulable states.
	<i>Neurology</i>	<ul style="list-style-type: none"> • Limping child • Convulsions • abnormality of gait • intracranial space occupying lesion • hemiplegia, paraplegia • Quadriplegia

		<ul style="list-style-type: none"> • large head, small head, floppy infant • acute flaccid paralysis, cerebral palsy and other neuromotor disability • headache • Seizure and non seizure paroxysmal events • epilepsy and epileptic syndromes of childhood • meningitis, brain abscess • coma, acute encephalitis and febrile encephalopathies • Guillain-Barre syndrome • neurocysticercosis and other neuro-infestations • HIV encephalopathy • SSPE • Cerebral palsy • Neurometabolic disorders • Mental retardation, learning disabilities, muscular dystrophies, acute flaccid paralysis and AFP surveillance, ataxia, movement disorders of childhood • CNS tumors, malformations.
	<i>Endocrine</i>	<ul style="list-style-type: none"> • Thyroid swelling • Ambiguous genitalia • Obesity • Short stature • Hypopituitarism/hyperpituitarism • Diabetes insipidus • Pubertal disorders • Hypo- and hyper-thyroidism • Hypo- and hyperparathyroidism • Adrenal insufficiency • Cushing's syndrome • Adrenogenital syndromes • diabetes mellitus, hypoglycemia • short stature • failure to thrive • gonadal dysfunction and intersexuality • pubertal changes and gynecological disorders.
	<i>Skin/Eye/ENT</i>	<ul style="list-style-type: none"> • Skin rash • pigmentary lesions • pain/discharge from ear, hearing loss • epistaxis, refractory errors, blindness, cataract, eye discharge, redness, squint, proptosis. <p>Exanthematous illnesses, vascular lesions, pigment disorders, vesicobullous disorders</p>

		<ul style="list-style-type: none"> • infections: pyogenic, fungal and parasitic • Steven-Johnson syndrome, eczema, seborrheic dermatitis, drug rash, urticaria, alopecia, ichthyosis • Refraction and accommodation • Partial/total loss of vision, cataract, night blindness, chorioretinitis, strabismus, conjunctival and corneal disorders • Retinopathy of prematurity, retinoblastoma, optic atrophy, papilledema • Acute and chronic otitis media, conductive/sensorineural hearing loss, post-diphtheritic palatal palsy • Acute/chronic tonsillitis/adenoids, allergic rhinitis/sinusitis, foreign body.
	<i>Musculoskeletal</i>	<ul style="list-style-type: none"> • Arthralgia • arthritis
	<i>Miscellaneous</i>	<ul style="list-style-type: none"> • Habit disorders • Hyperactivity and attention deficit syndrome • Multiple congenital anomalies.
	<i>Emergency and critical care</i>	<ul style="list-style-type: none"> • Emergency care of shock • Cardiorespiratory arrest • Respiratory failure, congestive cardiac failure, acute renal failure, status epilepticus • Fluid and electrolyte disturbances and its therapy acid-base disturbances • Poisoning, accidents, scorpion and snake bites, burns.
	<i>Immunology and rheumatology</i>	<ul style="list-style-type: none"> • Arthritis (acute and chronic) • Connective tissue disorders • Disorders of immunoglobulins, T and B cell disorders • Immunodeficiency syndromes.
	<i>Behavioral and psychological disorders</i>	<ul style="list-style-type: none"> • Rumination, pica, enuresis, encopresis • Sleep disorders, habit disorders, breath holding spells, anxiety disorders, mood disorders, temper tantrums, attention deficit hyperactivity disorder, infantile autism
	<i>Social pediatrics</i>	<ul style="list-style-type: none"> • National health programs related to child health • Child abuse and neglect, child labor, adoption, disability and rehabilitation, rights of the child,

		national policy of child health and population, juvenile delinquency
	<i>Genetics</i>	<ul style="list-style-type: none"> • Chromosomal disorders • Single gene disorders • Multifactorial/polygenic disorders • Genetic diagnosis, and prenatal diagnosis
	<i>Orthopedics</i>	<ul style="list-style-type: none"> • Major congenital orthopedic deformities, bone and joint infections: pyogenic, tubercular, and common bone tumors

3.2 Practical/ Skills

History and examination

History taking including psychosocial history, physical examination including fundus examination, newborn examination, including gestation assessment; thermal protection of young infants, nutritional anthropometry and its assessment, assessment of growth, use of growth chart, SMR rating, developmental evaluation, communication with children, parents, health functionaries and social support groups; and genetic counseling.

Bedside procedures

(a) Monitoring skills: Temperature recording, capillary blood sampling, arterial blood sampling.

(b) Therapeutic skills: Hydrotherapy, nasogastric feeding, endotracheal intubation, cardiopulmonary resuscitation (pediatric and neonatal), administration of oxygen, venepuncture and establishment of vascular access, administration of fluids, blood, blood components, parenteral nutrition, intraosseous fluid administration, intrathecal administration of drugs, common dressings, abscess drainage and basic principles of rehabilitation.

(c) Investigative skills: Lumbar puncture, ventricular tap, bone marrow aspiration, pleural, peritoneal, pericardial and subdural tap, biopsy of liver and kidney, collection of urine for culture, urethral catheterization, suprapubic aspiration.

Bedside investigations

Hemoglobin, TLC, ESR, peripheral smear staining and examination, urine: routine and microscopic examination, stool microscopy including hanging drop preparation, examination of CSF and other body fluids, Gram stain, ZN stain, Apt test / shake test on gastric aspirate.

Interpretation of

X-rays of chest, abdomen, bone and head; ECG; ABG findings; CT scan; MRI.

Understanding of

Common EEG patterns, audiograms, ultrasonographic abnormalities and isotope studies.

4. PG activity programme: Department of Pediatrics

General Principles

- Acquisition of practical competencies being the keystone of postgraduate medical education, postgraduate training should be skills oriented.
- Learning in postgraduate program should be essentially self-directed and primarily emanating from clinical and academic work. The formal sessions are merely meant to supplement this core effort.

Formal Teaching Sessions

In addition to bedside teaching rounds, there will be at least 5 hours of formal teaching per week.

S.No	Activity	Frequency
1.	<i>Journal club/ Medical and perinatal audit</i>	Once a week
2.	<i>Seminar/lecture</i>	Once a week
3.	<i>Case based discussion</i>	Twice a week
4.	<i>Interdepartmental case/seminar [Cardiology/ Pediatric surgery etc.]</i>	Once a week

Additional integrated seminars on basic sciences, biostatistics, research methodology, teaching methodology, health economics, medical ethics and legal issues related to pediatric practice will be taken.

Note: These additional sessions may be organized as an institutional activity for all postgraduates.

5. Rotations/postings

The Junior Residents in Pediatrics will undergo the following rotation-training during their 3 years' course towards M D (Pediatrics):

S.No	Department (Internal/External)	Duration & timing	Rotation objectives
Internal			
1.	Neonatology (including perinatology)	6 months [maximum 9 months]	<ul style="list-style-type: none"> The student should be well versed with the basic and advanced neonatal care including normal newborn care immediately after delivery, neonatal resuscitation, neonatal ventilation, management of common and uncommon neonatal illnesses, management and feeding of low birth weight and preterm babies, management of sepsis, neonatal hyperbilirubinemia, kangaroo mother care. Procedures such as neonatal intubation, exchange transfusion, umbilical catheterization, phototherapy. To learn operating common equipments in neonatal intensive care unit.
2.	Intensive Care/Emergency	3 months	<ul style="list-style-type: none"> The student should be well versed with the basic and advanced pediatric ventilation strategies, management of pediatric emergencies including poisoning, cardiovascular stabilization, management of status epilepticus, status asthmaticus, hypotension, hypertensive crisis, acute and chronic renal impairment, congestive cardiac failure, shock, sepsis, SIRS, MODS. Procedures: Invasive BP monitoring, Endotracheal intubation, BLS, ALS, Long line insertion, peritoneal dialysis, Defibrillation. To learn operating common equipments in pediatric intensive care unit.
External (Outpatient Department)			
1.	Dermatology	12 hours (e.g., 3 hours/day for 4 days or 2 hours/day for 6 days)	<ul style="list-style-type: none"> The student should be well versed with the diagnosis and management of common pediatric skin conditions like exanthematous illnesses, vascular lesions, pigment disorders, vesicobullous disorders, infections: pyogenic, fungal and parasitic; Steven-Johnson syndrome, eczema, seborrheic dermatitis, drug rash, urticaria, alopecia, ichthyosis etc.
2.	Pediatric surgery	24 hours (e.g., 3 hours/day for 8 days)	<ul style="list-style-type: none"> The student should be well versed with the diagnosis and management of common pediatric and neonatal surgical conditions like intestinal obstruction, Hirschsprung's disease, anorectal mal-formations, renal and bladder stones, posterior ure-thral valves, hydroneph-

			rosis, undescended testis, Wilm's tumor etc.
3.	Physical Medicine and Rehabilitation	12 hours (e.g., 3 hours/day for 4 days)	<ul style="list-style-type: none"> The student should be well versed with the physical medicine and rehabilitation techniques for common pediatric neurological and developmental problems like cerebral palsy, neurometabolic disorders, mental retardation, learning disabilities, muscular dystrophies, global developmental delay etc.
4.	Community	24 hours (e.g., 3 hours/day for 8 days)	<ul style="list-style-type: none"> The student should be well versed with the preventive and social community pediatrics issues national health programs related to child health and nutrition, nutrition screening of community, prevention of blindness, school health programs, prevention of sexually transmitted diseases, contraception, health legislation, national policy on children, adolescence, adoption, child labor, child abuse and neglect, juvenile delinquency, government and non-government support services for children, disability and rehabilitation, rights of the child, national policy of child health and population, investigation of adverse events following immunization in the community, general principles of prevention and control of infections including food borne, waterborne, soil borne and vector borne diseases, investigation of an outbreak in a community.
5.	Neurology	42 hours (e.g., 3 hours/day for 14 days)	<ul style="list-style-type: none"> The student should be well versed with the diagnosis and management of common neurological conditions like convulsions, myopathies, neuropathies, Neurometabolic disorders, Movement disorders, Pediatric stroke, Neurodegenerative disorder, CNS malformations, Coma, CNS tumors; and with diagnostic modalities like EEG, Neuroimaging, NCV, EMG and the interpretation of their results.
6.	Cardiology	42 hours (e.g., 3 hours/day for 14 days)	<ul style="list-style-type: none"> The student should be well versed with the diagnosis and management of common cardiological conditions like Congenital heart disease; Acquired heart diseases like Rheumatic fever, Rheumatic heart disease, Myocarditis, Pericardial effusion, Kawasaki disease; Infective endocarditis; Hypertension; Cardiomyopathy; CCF; and interpretation of various diagnostic modalities ECG, ECHO, Cath lab procedures, Pericardiocentesis etc.

6. Dissertation

Objectives

By carrying out a research project and presenting his work in the form of thesis, the student will be able to:

- Identify a relevant research question
- Conduct a critical review of literature
- Formulate a hypothesis
- Determine the most suitable study design
- State the objectives of the study
- Prepare a study protocol
- Undertake a study according to the protocol
- Analyze and interpret research data, and draw conclusions
- Write a research paper.

Guidelines

While selecting thesis topics, following should be kept in mind:

- The scope of study should be limited so that it is possible to conduct it within the resources and time available to the student
- The emphasis should be on the process of research rather than the results; (iii) the research study must be ethically appropriate
- The protocol, interim progress as well as final presentation must be made formally to the entire department
- Only one student per teacher/thesis guide
- There will be periodic departmental review of the thesis work as per following schedule
 - End of 1st year Submission of protocol
 - During 2nd year Mid-term presentation
 - 6 months prior to examination Final presentation and submission

Timing of six monthly progress report submission to Academic Section

Report	July Session		January session	
	Period	To be submitted	Period	To be submitted
First	July to December	7 th January	January to June	7 th July
Second	January to June	7 th July	July to December	7 th January
Third	July to December	7 th January	January to June	7 th July
Fourth	January to June	7 th July	July to December	7 th January
Fifth	July to December	7 th January	January to June	7 th July
Sixth	January to June	10 th June	July to December	10 th December

Note: The first five reports will be taken into consideration to decide the eligibility of the student to appear for the Professional Examination.

Synopsis submission and approval:

Process to be completed within six months of admission to MS / MD program:

Activity	January admission	July admission
Selection of topic in consultation with PG Guide	March / April	September / October
Approval by Department PG Committee		
Institute Scientific Committee approval	May / June	November / December
Institute Ethics Committee approval		
Final approval letter by Academics Section	30 th June	31 st December
Final submission to academic section		

The Dissertation will be submitted to Academic Section at least six months prior to the scheduled examination, i.e. by 31st December for June examination and by 30th June for December examination.

7. Assessment plan

General principles

- The assessment should be valid, objective, and reliable.
- It must cover cognitive, psychomotor and affective domains.
- Formative, continuing and summative (final) assessment should be conducted in theory as well as practical/clinicals. In addition, thesis should be assessed separately.

7.1 Six monthly report: as per standard format. Format - Annexure 1

Every six months, the performance of the students will be assessed and they would be required to submit a six monthly report.

Report	July Session		January Session	
First	July to December	7 th January	January to June	7 th July
Second	January to June	7 th July	July to December	7 th January
Third	July to December	7 th January	January to June	7 th July
Fourth	January to June	7 th July	July to December	7 th January
Fifth	July to December	7 th January	January to June	7 th July
Sixth	January to June	10 th July	July to December	10 th December

7.2 List of certifiable skills

List of certifiable skills for 1st year of residency

The PG students in their first year residency must have...

- Passed a Basic Life Support Course
- Passed Pediatric Advanced Life Support Course
- Passed Advanced Neonatal Resuscitation Course
- Assisted all listed procedures
- Presented in at least 2 journal clubs
- Presented in at least 2 seminars
- Presented at least 1 poster-presentation in a conference

List of certifiable skills for 2nd year of residency

The PG students in their second year residency must have...

- Conducted a Basic Life Support Course for MBBS students as faculty
- Conducted a Neonatal Resuscitation Course for MBBS students as faculty
- Independently performed all listed procedures
- Presented in at least 4 case presentations
- Presented in at least 2 journal clubs
- Presented in at least 2 seminars
- Presented at least 1 oral-presentation in a conference

List of certifiable skills for 3rd year of residency

The PG students in their third year residency must have...

- Presented in at least 4 case presentations
- Taught in the bedside clinics for final MBBS student
- Taught in the theory lectures for MBBS students
- Published at least 1 article apart from the thesis topic

7.3 Formative Assessment

7.3.1 Theory

S.N.	Schedule	Marks
1.	At end of First year	100 (1 Paper)
2.	At end of Second year	100 (1 Paper)
3.	Pre-professional	400 (4 Papers of 100 marks each)
	Total	600 Marks

7.3.2 Practical

S.N.	Schedule	Marks
1.	At end of First year	100
2.	At end of Second year	100
3.	Pre-professional	400 (Practical 300 + Viva 100)
	Total	600 marks

Candidate should secure a minimum of 50% marks in Theory and Practical separately, in order to be eligible to appear for Professional Examination.

Syllabus for end term theory assessment

First year- General pediatrics, growth and development, nutrition, Bio-statistics, infectious disease, neonatology.

Second year- Approach to clinical disorders and emergencies.

Third year- Whole syllabus.

Eligibility to appear in Professional Examination

Sr. No.	Parameters	Criteria
1	Research Methodology Examination conducted at end of Induction Program	Pass
2	Internal Assessment marks	$\geq 50\%$ marks separately in theory & practicals
3	Dissertation	Accepted
4	MD Programme attendance	$\geq 80\%$ in each year
5	Poster & Paper presentation in conference	1 poster and 1 paper presentation
6	Peer reviewed Indexed Publication	One (Accepted / published /sent for publication)
7	Six Monthly Progress Report	At least 4 out of 6 satisfactory Progress Report

Eligibility for summative assessment:

- Candidate should secure a minimum of 40% marks in Theory and Practical separately in formative assessments, in order to be eligible to appear for Professional Examination
- At least five 6 monthly progress report should be satisfactory
- Acceptance of Dissertation is mandatory
- Successful completion of Research Methodology programme at induction

Note: The post graduate students would be required to present one poster presentation, to read one paper at a national/state conference and to submit one research paper for publication/ during period of their postgraduate studies.

7.4 Summative Assessment

A	Theory	4 Papers each of 100 marks = 400 marks
B	Practical	Practical/ Clinical Case + Viva = 400 marks

Final Result

(A) Theory – 400 Marks (Minimum 40% marks in each paper and aggregate of 50% in order to be declared pass)

(B) Practical – 400 Marks

Minimum 50% marks required in Theory & Practical separately, in order to be declared successful at MD/MS Examination.

Six monthly Progress Report for Postgraduate Students (Annexure 1)

Department of Pediatrics

Section - I

Name of the PG student:

Department:

Admitted in (Month and Year):

Name of the PG Guide:

Report for the period: Attendance:

Section II - Grading as per performance

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

OPD work:

Ward work:

ICU work:

Emergency work:

Teaching assignments:

Section III - Progress of Dissertation

Section IV

1. Case Presentations:

Sr. No.	Title of case	Date	Faculty I/C	Marks

2. Microteaching:

Sr. No.	Topic	Date	Faculty I/C	Marks

3. Seminars:

Sr. No.	Title of presentation	Date	Faculty I/C	Marks

4. Journal Clubs:

Sr. No.	Journal	Title of Paper	Date	Faculty I/C	Marks

5. Marks obtained in tests:

Sr. No.	Date	Theory / Practical	Marks obtained

6. Any other academic activity conducted/attended

Sr. No.	Academic Activity	Date	Marks

Section - V

1. Papers presented:

Sr. No.	Title of Paper	Authors	Event	Date

2. Posters presented:

Sr. No.	Title of Poster	Authors	Event	Date

3. Publications:

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

Section VI

Any other significant achievement:

Certificate by the PG Guide and Head of Unit

This is to certify that -----, has an attendance of ----%, during the period -----

Overall Grading:

Date:

Name and Signature of PG Guide:

Name and Signature of Head of Unit:

Certificate by the Head of Department

This is to certify that the performance of -----, during the period -----, has been --
-----.

Overall Grading:

Date:

Name and Signature of HOD:

Maintenance of Log book (Annexure 2)

- Every Post-graduate student shall maintain a record of skills he has acquired during the three year training period certified by the various Heads of Department in which he had undergone training.
- The students should also be required to participate in the teaching and training programme of undergraduate students and interns.
- The students should make entries of all their activities: Academic as well as extracurricular in the logbook.
- The Head of the Department shall scrutinize the Log Book once in every three months.
- At the end of the course, the student should summarize the contents and get the Log Book certified by the Head of the Department.
- The Log Book should be submitted at the time of practical examination for the scrutiny of the Board of Examiners.

Recommended Reading (Annexure 3)

Reference Books

1. Nelson's Textbook of Pediatrics
2. Avery's Diseases of the Newborn
3. PG Textbook of Pediatrics by Piyush Gupta
4. Cloherty And Stark's Manual Of Neonatal Care
5. Rudolph's Textbook Of Pediatrics
6. Feigin And Cherry's Textbook Of Pediatric Infectious Diseases
7. Illingworths Development Of The Infant And The Young Child
8. Moss & Adams Heart Disease In Infants, Children, And Adolescents, Including The Fetus And Young Adult
9. Volpe's Neurology Of The Newborn
10. Fenichel's Textbook of Pediatric Neurology

Reference Journals

1. Indian Pediatrics
2. Indian Journal of Pediatrics
3. Indian Journal of Practical Pediatrics
4. Neo Reviews
5. Pediatrics
6. Journal of Pediatrics
7. Pediatric Clinics of North America
8. Journal of Perinatology
9. Pediatric Critical Care Medicine
10. BMJ Pediatrics