CENTRAL COUNCIL OF INDIAN MEDICINE

NISABE TALEEM OF AMRAZ-E-ATFAL
(PEDIATRICS)

MAHIR-E-AMRAZ-E-ATFAL (PEADIATRIS)

SYLLABUS OF
DOCTOR OF MEDICINE
(MD-UNANI)
MAHIR-E-AMRAZ-E-ATFAL (PEADIATRIS)

3 YEARS DEGREE COURSE

CENTRAL COUNCIL OF INDIAN MEDICINE
61-65, INSTITUTIONAL AREA,
JANAKPURI
NEW DELHI - 110058

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Syllabus of M. D. AMRAZ-E-ATFAL (PEADIATRIS)
OBJECTIVES:
The broad goals of teaching of P.G. students in pediatrics are to acquire specified knowledge and specialized skills for optimally dealing with pediatric Growth and development and tackle the various pediatrics diseases, deformities and problem.

M.D. First year

Paper I –
Part A- Research Methodology
Part B- Bio or Medical statistics

Paper II –
Part A- Applied Basic sciences in Pediatrics including Pediatric Surgery, Unani therapeutics in Pediatrics
Part B- Concern subject (Amraz-e-Atfal) Nutrition, growth and development

M.D. Final year

III year
Paper I – History taking and Examination in Pediatrics, Immunology and Infectious diseases.

Paper II- Neonatology, embryology and Genetics

Paper III – Pediatric Surgery, Pediatric emergencies and Systemic pediatrics I st

Paper IV - Systemic pediatrics II nd
First Year
Paper-I

"RESEARCH METHODOLOGY AND BIOSTATISTICS"
(Usool-e-Tahqeeqat-e-Ilaj-e-Tadbeeri wa Hayati Shumariyat)

Common paper for all PG courses

Paper II- Part –A

Part A- Applied Basic sciences in Pediatrics including Pediatric Surgery, Unani therapeutics in Pediatrics

امراض اطفال میں اطلاقی بنیادی سائنس مع جراحت و یونانی معالجات

1) Applied Anatomy – Applied Embryology, Development of Major Organ Systems
2) Applied Physiology – Applied Physiology with regard to physiology of major organ systems, Physiological differences in child compare to adult.
3) Consideration of physiology and pathology of akhlat, Mizaj, Afaal and Quwa in Children
4) Darjaat-e-Umar (Classification of Age) according to various classical literature.
5) Applied Biochemistry – Biochemical basis of disease in Children, Nutrition and Metabolic
7) Applied Microbiology – Clinical Microbiology applied to investigation for disease in Childhood, serology staining and culture.
8) Applied Pharmacology – Andarooni and Bairooni Adviaat (External and Intergal drugs), Amraz e Atfal me Advia ka istamaal aur unki Meqdar-e-khuraak. Drug interaction and common drugs used in modern medicine with special reference to antibiotics.
9) Applied Tahafuzzi wa Samaji Tib(Social and Preventive Medicine) – Health care delivery system structure and function, Health statistics, National Programmes
11) Applied Radiology – X-Ray, Ultra sono-graphy, ECG and Echo Cardio Gram, EEG, CT Scan, MRI
12) Legal Ethical Medicine: Rights and Protection of Children, Consumer Protection Act, Basic Principles of Ethics
13) Role of Unani in child care
14) Consideration of Umoor-e-Tabiya in pediatrics
15) Fundamentals and Unani treatment and specific procedures in Unani
16) Role of Unani medicine in Childs psychology.
17) Unani Immuno modulators and its importance in pediatrics.
Part – B Concern subject (Amraz-e-Atfal) Nutrition, growth and development (امراض اطفال-تغذیه و نشو نما)

I) Growth and Development

1) Growth and Development
2) Assessment of Growth and development
3) Developmental Assessment according to Unani concept
4) Standards / Nomo grams (including Indian)
5) Growth disorders
6) Approach to Short stature
7) Approach to Obesity
8) Preventive and Social Paediatrics
9) Approach to under nutrition

II) Psychological Disorders

III) Children with special Need and care

a) Role of Unani Dieto therapy in Paediatrics
b) Specific diet for specific diseases
c) Diet and Nutritional Evaluation and values of Indian food

IV) Infant and Child Feeding

1. Breast Milk Feeding, and supplementary feeding and Management,
2. Weaning foods, Feeding 1st to 2nd year

V) Nutritional disorders Including Obesity

1) Protein energy Malnutrition
2) Hypo and hyper vitaminosis
3) Micro nutrient Malnutrition
4) Nutrition in Special situations-
   a) LBW and Premature babies, Inborn errors of Metabolism,
   b) Chronic Illness, Surgery,
   c) Critically ill child
5) Dehydration and fluid management
6) Electrolyte disorders
7) Acid Base Disorders
8) Special Situations – Pyloric stenosis, CNS disorders, Burns, Pre-operative, endocrinal disorders, Renal Failure and obesity
M.D. Final year
(III year)
Paper I – History taking and Examination in Pediatrics, Immunology and Infectious diseases.

I) Immunization
   a) Principles and updated Schedules
   b) Controversies
   c) Standard and Optional Vaccines

II) Infectious & communicable Diseases

   a) Pediatric Viral Infections
      1) Chickenpox (Varicella)
      2) Measles (Rubeola)
      3) German Measles (Rubella, Three-Day Measles)
      4) Mumps (Epidemic Parotitis)
      5) Poliomyelitis
      6) Guillain-Barre Syndrome (GBS)
      7) Acute Flaccid Paralysis (AFP) Surveillance
      8) Infectious Mononucleousis
      9) Dengue Fever
      10) Chikungunya Fever
      11) Japanese Encephalitis
      12) Hydrophobia (Rabies)
      13) Viral Hepatitis
      14) Pediatric HIV / AIDS
      15) Respiratory Syncytial Virus (RSV) Infection
      16) Bird (Avian) Flu
      17) Severe Acute Respiratory Syndrome (SARS)

   b) Pediatric Bacterial Infections
      1) HIB Disease
      2) Pertusis (Whooping Cough)
      3) Diphtheria
      4) Epidemic Typhus
      5) Typhoid Fever (Enteric Fever)
      6) Brucellosis
      7) Tetanus
      8) Leprosy (Hansen Disease)
      9) Syphilis
      10) Leptospirosis
      11) Meningococcal Infections
      12) Tuberculosis
13) Anaerobic Infection
14) Helicobacter Pylori (H. pylori) Infection
15) Opportunistic Infections
16) Nosocomial Infections
17) Noma

c) Pediatric Parasitic infestation
1) Malaria
2) Tropical Splenomegaly
3) Kala-azar (Black Sickness)
4) Filariasis
5) Tropical Eosinophilia
6) Giardiasis
7) Amebiasis
8) Acanthamoeba
9) Cryptosporidiosis
10) Ascariasis
11) Oxyuriasis
12) Ancylostomiasis
13) Strongyloidiasis
14) Trichuriasis
15) Tapeworms
16) Neurocysticercosis
17) Hydatid Disease

Paper II - Neonatology, embryology and Genetics

1) Human Genetics
   a) Molecular Basis of Genetic Disorders
   b) Molecular Diagnosis
   c) Patterns of inheritance
   d) Chromosomal clinical abnormalities
   e) Genetic Counseling
   f) Dysmorphism
   g) Gene therapy

2) Fetus and Newborn
   a) Newborn history, and examination,
   b) Routine delivery care, Nursery care, Infant-mother bonding Kangaru mother care (KMC)
   3) Maternal medications and toxin exposure on Fetus and medicine contraindication in Pediatrics.
      Teratogens and radiation.
      a) High risk infant
      b) Multiple pregnancies
      c) Prematurity and Intrauterine Growth Retardation, Low Birth Weight infants, Post-term infants

4) Hematological disorder
5) Metabolic disorders
6) Endocrine disorders
7) Nutrition and feeding the newborn term/preterm LBW, IUGR
8) Neonatal transportation

9) Surgical problems
   a) Tracheo-esophageal Fistula with esophageal atresia
   b) Anorectal malformations
   c) diaphragmatic Hernia
   d) Hirschsprung’s disease
   e) Urogenital anomalies
   f) NEC
   g) Congenital Lobar emphysema
   h) Volvulus
   i) Phimosis and paraphimosis

10) Thermoregulation

11) Neonatal follow up

**Paper III – Pediatric Surgery, Pediatric emergencies and Systemic pediatrics Ist**

اطفال جراحات و طوارئ،امراض اطفال نظامي اول.

I) **Pediatric Pulmonology**
   a) Clinical Evaluation of a Respiratory system
   b) Special Diagnostic Procedures
   c) Upper Respiratory Tract Infection
   d) Foreign Body in Lower Respiratory Tract
   e) Acute Respiratory Distress Syndrome
   f) Acute Bronchiolitis
   g) Acute Bronchiolitis
   h) Pneumonias
   i) Bronchiectasis
   j) Dry Pleurisy
   k) Pleural Effusion
   l) Empyema Thoracic
   m) Lung Abscess
   n) Bronchial Asthma
   o) Cystic Fibrosis

II) **Pediatric Cardiology**
   a) Evaluation of a Cardiovascular Case
   b) Fetal Circulation
   c) Congenital Heart Disease
   d) Acquired Heart Disease

III) **Pediatric Neurology**
   a) Bell’s Palsy
   b) Guillain-Barre Syndrome
c) Mental Retardation
d) Cerebral Palsy
e) Autism
f) Tuberculoma
g) Encephelitis
h) Hydrocephalus
i) Intracranial Space Occupying Lesions
j) Brain Abscess
k) Subdural Hematoma
l) Intracranial Tumors
m) Convulsive Disorders
n) Febrile Seizures
o) Reye Syndrome

IV) Pediatrics Ophthalmology
   a) Diseases of Eyelid
   b) Diseases of lacrimal system
   c) Diseases of conjunctiva
   d) Refractory errors

V) Pediatrics Ear, Nose, Throat (ENT) and Dental Problem
   a) The Ear Disorders
   b) The Nose Disorders
   c) The Throat Disorders
   d) Normal dentation
   e) Abnormal dentation
   f) Early and delayed dentition
   g) Dental Caries
   h) Cleft, lip and palate

Paper IV - Systemic pediatrics IInd

I) Pediatric Gastroenterology
   a) Basics Of Gastrointestinal Tract
   b) Special Investigative Work-up
   c) Diarrhoea and dysentry
   d) Acute Bacillary Dysentery
   e) Pseudomembranous Colitis
   f) Oral Rehydration Thraphy(ORT)
   g) Celiac Disease
   h) Cystic Fibrosis
   i) Endemic Tropical Sprue
   j) Protein-Losing Enteropathy
   k) Cow Milk Allergy
   l) Inflammatory Bowel Disease
   m) Constipation
   n) Recurrent Aphthous Stomatitis
o) Geographic Tongue

II) Pediatric Hepatology
a) Hepatitis
b) Chronic Liver Disease
c) Australia Antigen
d) Portal Hypertension
e) Neonatal Cholestatic Syndrome
f) Cholecystitis
g) Drug-Induced Liver Injury
h) Hepatomegaly
i) Liver Abscess
j) Wilson Disease
k) Approach To The Child With Ascites
l) Orthotopic Liver Transplantation

III) Pediatric Nephrology
a) Proteinuria
b) Hematuria
c) Urinary Tract Infection (UTI)
d) Acute Glomerulonephritis
e) Renal Tubular Disease
f) Acute Renal Failure (ARF)
g) Chronic Renal Failure (CRF)
h) Nephrotic Syndrome
PRACTICALS:-
OSPE (Objective, structural, practical, examination)
PI: Perform Independently
PA: Perform with assistance
O: Observe
Number at end of item indicates minimum number of supervised and documented skills.
Psychomotor skills

Procedural
Procedures: List of PI Skills
• Clinical History and Physical examination
• Human Lactation management (counseling and practical skills) 20
• Neonatal resuscitation 30
• Pediatric resuscitation 30
• Teaching encounters 05
• Intravenous injections 50
• Intravenous cannulation 50
• Lumbar puncture 10
• Test dose 10
• Infusions 10
• Pleural tap 10
• Paracentesis – diagnostic and therapeutic 10
• Mantoux test 10
• DPT, OPV, Measles vaccination 10
• Sampling for Fluid cultures 10

Respiratory management (All PI)
• Nebulization 50
• Inhaler therapy 50
• Oxygen delivery 10

Critically Ill child (All PI)
• Monitoring a sick child 50
• Pulse oximetry 50
• Infant feeding tube/ Ryle’s tube, stomach wash 10
• Urinary catheterization 10
• Restraining a child for a procedure 10
• ORS and ORT 50
• Prognostication /Counseling about prognosis 10

Laboratory- Diagnostic (All PI)
• Urine Protein, sugar, microscopy 10
• Peripheral blood smear 10
• Malarial smear 10
• Ziehl Nielson smear – sputum, gastric aspirate 10
• Grams smear – CSF, pus 10
• Stool pH, reducing substances, microscopy 10
• KOH smear

**List of Observations:**

• Genetic counseling 02
• Classification of diseases 02

Reference Books:

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