

**M.D. (HOM.) PART – II**

**PAEDIATRICS**  
**(Speciality Subject)**

## **M.D. (Hom) – PART II**

### **HOMOEOPATHIC PAEDIATRICS SPECIALITY**

**The syllabus for Basic Science related to**

**Paediatrics Comprises of following:-**

1. Brief study of the normal growth and development of infant and child
2. Study of Embryology and Anatomy in brief
3. Study of Physiology and clinical Biochemistry in brief
4. Study of Pathology, Microbiology, Parasitology in childhood infections diseases with homoeopathic therapeutics.
5. Effects of Homoeopathic drugs (\*) therapy used in Paediatrics conditions at cellular level with Miasmatic approach.
  - a. Diseases of children including Nutritional, Behavioral disorders, preventive aspects of paediatrics
  - b. Miasmatic study
  - c. Diagnostic procedures
  - d. Practice of Homoeopathy in paediatrics
6. Old and latest investigative procedures in Paediatrics.

## **DISTRIBUTION OF PAEDIATRICS SYLLABUS**

### **Paper – I**

#### **Consists:-**

1. Brief study of the Normal growth and Development of infant and child.
2. Study of Embryology and Anatomy in brief.
3. Study of Physiology and clinical Biochemistry in Brief.

### **Paper –II**

#### **Consists:-**

4. Study of Pathology, Microbiology, Parasitology in childhood infections and diseases with Homoeopathic therapeutics.
5. Effects of Homoeopathic drugs (\*) therapy used in pediatric conditions at cellular level with miasmatic approach
6. Old and latest investigative procedure in Paediatrics

## M.D. (Hom) – PART II

### HOMOEOPATHIC PAEDIATRICS SPECIALITY PAPER – I (DETAILS) :

1. Growth and Development of Infant and child.
  - a. Mechanism of skeletal growth in childhood.
  - b. Body composition, normal chemical values and changes at different ages.
  - c. Factors influencing growth and development.
  - d. Principles of child development.
  - e. Importance of study of growth and development
    - i) Period of - ? (Growth & Development)
    - ii) Assessment of growth
    - iii) Growth tables
    - iv) Charts.
    - v) Growth curves
  - f. Eruption of Teeth and Bone development
  - g. Childhood and Behavioral development and toilet training assessment
  - h. Denver development Screening test.
  - i. Disorders of growth and development.
  - j. Body composition different ages- growth curves and growth velocity, normal chemical value and changes.

#### **2. Study of Embryology and Anatomy in Brief :**

- a. Basic Anatomy including surface anatomy, blood supply, lymphatics, Nerve supply
- b. Embryology :- Give in Brief Embryology.
- c. What in brief :
  - . \*Applied Embryology
  - \*Development
  - \*Stages of development.

#### **3. Study of Physiology and clinical Biochemistry in brief :**

##### **Biochemistry:-**

- a. The cell and its function.
- b. Cell metabolism.
- c. Enzymes
- d. Carbohydrate Metabolism
- e. Fat metabolism
- f. Vitamin and its synthesis
- g. Mechanism of contraction of skeletal smooth and Heart muscle

##### **Physiology :-**

- a. Cardiovascular system :- in brief
  - i) Cardiac cycle; cardiac output, venous return and control mechanism.
  - ii) Systemic blood circulation, pulmonary blood circulation.
  - iii) Heart failure
  - iv) Pathophysiology of shock
  - v) Heart Auto regulation and conduction system
  - vi) ECG.

## **b. Respiratory System : in Brief**

- i) Allergic conditions of Respiratory tract with homoeopathic management.
- ii) Environment \_\_\_\_\_ Dyscrasias of Respiratory tract with Homoeopathic management.
- iii) Chronic Respiratory diseases – of child with homoeopathic management Special emphasis- Cold, Cough, Nasal discharges, Sore throat Epistaxis ; otitis media, pneumonias, lung abscess with homoeopathic management
- iv) Diseases – related to ventilation perfusion, imbalances like conditions of Anoxia, hypoxia, Cyanosis, Asphaxia & acute respiratory failures croup, cough, haemoptosis – pulmonary tuberculosis with homoeopathic management.
- v) Chronic conditions – Bronchial Asthma, Bronchitis, COPD, pneumonia, pleurisy with Homeopathic management

## **GIT: Gastrointestinal Tract:-**

### **a. All conditions with Homoeopathic management Special emphasis on:-**

- i. Vomiting with Homoeopathic management
- ii. Constipation Homoeopathic management
- iii. Abdominal pain Homoeopathic management
- iv. Diarrhoea Homoeopathic management
- v. Malabsorption Syndrome Homoeopathic management
- vi. Chronic diarrhea Homoeopathic management
- vii. Hepatomegaly Homoeopathic management
- viii. Liver cirrhosis Homoeopathic management

### **b. Endocrinology :-** The general principle of Hormones, Hormone receptor mechanism of release regulation and integrating of Hormones, & integration of endocrine function as well as specific endocrine functions of each organ as system must be un describe all the conditions with Homoeopathic Management

#### - Special emphasis on :-

- i) Thyroid-----with Homoeopathic management Malfunctions – eg. Goiter, Hypothyroidism with Homoeopathic Management
- ii) Diabetes millitus ( Junenile diabetesmellitus )

Complications- with Homeopathic Management

Attention weds to be paid to the following :-

- Hormonal control of glucose Homocostasis
- Hormonal control of growth & Metabolism
- Puberty & Physiology of puberty and its disfunction.

## **E) C.N.S. – Central Nervous System :**

1. Controal of Emotions
2. Motor and sensory functions of the CNS
3. Neuro – Muscular action
4. Neuro – transmitters
5. C.N.S. – biochemistry – composition, secretion & circulation of cerebrospinal fluid
6. Blood brain barrier
7. Primitive Neurological reflexes

### **Special emphasis :- on**

8. Hemiplegia – with Homoeopathic Management
9. Encephalitis with Homoeopathic Management
10. Meningitis with homoeopathic Management
11. Cerebral palsy with Homoeopathic Management
12. Emotional disturbances with homoeopathic Management
13. Enuresis with Homoeopathic Management
14. Temper tantrum with homoeopathic Management

### **F) Kidney :**

- Glomerular function
- Tubular Function
- Renal function test

### **The role of kidney in**

1. Control of blood volume
2. Osmolarity
3. Renin – angiotensin system
4. Vitamin – D Metabolism
5. Erythropoiesis
6. Counter current Mechanism
7. Routine Urine analysis
8. Renal failure – acute & chronic

### **Special emphasis on**

- 1 .Haematuria with Homoeopathic Management
- 2 .Proteinuria with Homoeopathic Management
3. Acute glomerular nephritis with Homoeopathic Management
- 4 .Oedema with Homoeopathic Management
- 5 .Chronic Nephrotic syndrome with Homoeopathic Management
6. Nephropathy with Homoeopathic Management

### **G) Haematology :**

- Composition and characteristic of blood
- Haemoglobin synthesis & degeneration
- Bilirubin Metabolism
- Physiology of red cell
- Haemopoiesis
- Function of leucocytes & platelets
- Haemostasis & fibrinolysis
- Tests for different types of Anaemia, platelet disorders  
Leukemia including Löffler's test, Osmotic fragility

### **Special emphasis on – Blood diseases like**

1. Anaemia with Homoeopathic Management
2. Leukaemia with Homoeopathic Management
3. Vitamin deficiency with Homoeopathic Management
4. P E M Protein Energy Malnutrition with Homoeopathic Management

## M.D. (Hom) – PART II

### HOMOEOPATHIC PAEDIATRICS SPECIALITY

#### PAPER – II (Details)

H) Study of pathology, Microbiology, parasitology, is childhood infections and diseases with homoeopathic therapeutics

Pathology : Different stains, including gram and Ziehl Neelson.

The R – factor and plasmids

L-forms

Bacteriophages

Serological tests for common presentable diseases in childhood such as lymphitis ?

Mycoplasma infections

Immunofluorescence and counter current immunophoreses

Radio immune tests bronide partition test

Microbiology

Specific attention needs to be given to the different organisms that cause illness in children such as

Bacteria

1. Straptococi
2. Staphylococci
3. Carnea Bacteria
4. Bacillus infections
5. Bordatella infections
6. Food poisoning organisms
7. Shigella
8. Brucellosis
9. Plague
10. Yersinia pestis
11. Vibrio Cholerae
12. Helicobacter pylori
13. Mycobacterial Tb. Leprosy
14. Spirochetes – Leptospira  
-Bordetella infections.
15. Anaerobic organism including tetanus

#### Viruses :

Classification and morphology of various viruses – with their diagnostic tests, serological tests, isolation and culture of the virus of child affected by – influenza, parainfluenza, enterovirus, adenovirus, myxovirus, rotavirus with homoeopathic Management.

Parasitology : Life cycles 1) Treatment 2) Cystodes 3) Nematodes with Homoeopathic Management.

Protozoa – Malaria – Plasmodium group

- Amoebiasis – Entamoeba
- Giardiasis – Intestinalis
- Leishmaniasis
- Sleeping sickness ( African Tripanosomes )

1)Rickettesia - 2) Typhus & Tick bone typhus 3)Rocky mountain spotted fever

T) Old and latest techniques

- 1) Venous infusion
- 2) Venepuncture
- 3) Bone marrow aspiration
- 4) Urine collection
- 5) Lumbar puncture
- 6) Subdural tapping
- 7) X – Rays – Chest; Abdomen, Cranial, Oesophageal barium meal, Barium Enema.
- 8) Liver Biopsy
- 9) Kidney Biopsy
- 10) Nephograms
- 11) Imaging – ECG, EEG
- 12) Ultrasonography
- 13) 2 D – Echo
- 14) Colour Doppler
- 15) C. T. Scan
- 16) MRI
- 17) Procedures -
  - Bronchoscopy
  - Gastroscopy
  - Oesophogscopy
  - Duodenoscopy
  - Sigmoidoscopy
  - Proctoscopy
  - Endoscopy