Note :- For MD (Hom.) Part-II Examination there shall be only main Specialty subject and no Subsidiary Subject.

M.D.(HOM.) PART II SYLLABUS
PAEDIATRICS

Introduction :-

Part II of the academic programme covers the clinical-homoeopathic integration in understanding the different Paediatric conditions. Simultaneously, the Philosophical principles underlying the treatment of these conditions and the commonly indicated MateriaMedica pictures (along with therapeutics) and the Repertorial approach and effective use of the different Repertories which deal with thePaediatric conditions needs to be delineated.

AIMS: The programme is being drawn up with the following **objectives** in mind: The MD (Hom) student should be able to:

1. Recognize the importance of growth and development as the foundation of Paediatrics and help each child realize her/his optimal potential in this regard
2. Orient the parents about the energy and nutritional needs of the child to prevent nutritional deficiencies
3. Able to recognize the Anxiety/Concerns of Parents & Care takers & its impact on Child's Health & Parents Health Care Seeking Behaviour.
4. Plan and advise measures for the prevention of childhood disease and disability, particularly from the Homoeopathic point of view.
5. Acquire clinical competence in recognizing, diagnosing and managing common Paediatric clinical conditions.
6. Take detailed history, perform full physical examination including neuro-development and behavioral assessment, neonatal examination and gestational assessment, SMR rating for sexual maturation and anthropometric measurements of the child and make clinical diagnosis.
7. Perform relevant investigative procedures and interpret important imaging and laboratory results
8. Diagnose illness in children based on the analysis of history, physical examination and investigative work up
9. Plan rehabilitation of children suffering from chronic illness and handicap, and those with special needs with emphasis on adjuvant therapies like physiotherapy, occupational therapy, speech therapy, psychological remedial measures
10. Demonstrate competence in basic concepts of research methodology and epidemiology;
11. To develop a working knowledge of Community Paediatrics& its application for the benefit of the population at large.
12. To have a working knowledge of all the National & International Health Programs for Children & build necessary skills to implement it.
13. Facilitate learning of medical/nursing students, practicing physicians, para-medical health workers and other providers as a teacher-trainer
14. Be in touch with the contemporary advances in modern Paediatrics and have a basic knowledge of contemporary pharmacology understand its impact and side effects
15. Knows own capabilities and when to seek support from the TEAM and how to become efficient part of the team

In addition to the above and taking into account the preventive and health-promoting role of Homoeopathic Medical Science, the following are the specific concepts that the course would rest on:

1. Embryological Development including influence of Maternal Health on the Foetus.

2. Physical (structural & functional) & Psychological (Personality) Growth & Development of the Infant, Child & Adolescent.
3. To evolve a concept of Normalcy with regards to 1 & 2 above. To evolve an understanding of the concept of *Susceptibility.*
4. Identifying Abnormal Psychological development and Pathology in the developing stages in order to prevent their full-scale development or modify the expression.
5. Non-Invasive and Invasive methods of Clinical Investigations in ascertaining status of Health and Disease.
6. Special attention shall be given to inculcation of humanitarian approach, and attitudes in the students towards patients, their relatives & their behavior towards professional colleagues in and out of work place.
   Rural application, NHP and clinical epidemiological approach, aspects related to public health, and health education shall be taught in all sessions.

Clinical Guidelines for the study of each topic

Typical method of carrying out an integrated study of any clinical condition should follow the pattern laid down below. There would be variations based upon the data available in the field with respect to Homoeopathy.

1) **Definition with Hahnemannian classification of disease**
   Introduce the disease condition with its definition; nature of illness; history of the particular illness; impact on society-urban and rural, nation and the world.
   Classify according to the Hahnemannian classification.

2) **Review of the Homoeopathic literature**
   Give a short review of the available homeopathic literature of the condition.

3) **Predisposition**:
   Outline Epidemiology- worldwide, continents, nations, regions, races, urban and rural distribution, etc.
   Present the data on communities affected, the family predisposition and genetic propensities. Define Disposition, i.e. the personality types, which are known to suffer from this disease.
   Work out the fundamental miasm.
   Discuss mass susceptibility where applicable and its impact on individuals.

4) **Causation and modifying factors**:
   Along with the fundamental causes as mentioned above, the exciting, maintaining causes need to be entered both at the level of Man (mind and body) and environment (all the causes including microorganism) keeping in mind that all developments are after all the play of susceptible constitutions.

5) **Pathogenesis, Pathology, Clinicopathological and miasmatic correlations with pathological end result**
   Describe the prodrome, functional and structural phase of the disease in full where applicable.
   Delineate where applicable, the host and organism response
   The clinical expressions (Forms) are to be understood as reflections of Structural and Functional changes induced by the disease force evolving over a period of Time. The evolving miasmatic state should be stated with the implications of Dominant miasm. This should be followed by a discussion of known pathological end results with complications and sequelae.
6) **Classification and evolution of disease according to varying expressions of susceptibility:**

All diseases evolve in time and run their course. The same disease also runs its course in different ways in different individuals. Text books classify them as types, but homeopathically they are the differential expressions of susceptibility. One needs to clearly define the qualitative and quantitative aspects of susceptibility. The focus will be on the psycho-neuro-endocrine and immunological understanding.

7) Case taking, examination, investigation and approach to clinical diagnosis:

Put down the special care to be taken in case taking and examination process and the findings relating with the stage, state and miasm. Also, should be included all the investigations and the expected findings relating with the stage, state and miasm.

8) Differential diagnosis:

State the differential indications for the diagnoses that may be entertained given a certain form of presentation

9) Management-General and Homoeopathic:

Base this on the assessment of susceptibility carried out on the basis of the information gathered through the clinical processes.

a. General Management

   It includes diet, exercises, ancillary measures (including surgical where indicated), education and counseling/orientation of the patient and the family.

b. Standard management:

   Here give the accepted strategies of management including the scope and limitations of the approach

c. Principles of Homoeopathic management:
   i. *Scope and limitations:* Curative and palliative
   ii. *Role of different forces:*Acute, Phase, Specific, Chronic and Intercurrent remedial forces
   iii. *Potency and repetition:* Discus factors of susceptibility which will influence potency selection in individual disease and suggest range of potencies and repetition schedules most likely in acute and chronic phases of managements.
   iv. *Follow up management*: Present general guidelines of what to observe in the follow up. The criteria for improvement and criteria for worsening based on assessment of susceptibility. Also to put down any important causation or any caution while dealing with the condition from the Homoeopathic perspective. Hering's law and its application.

d. Add, where applicable, a note on the multidisciplinary approach and the Advantages, if any.

10) Common repertorial rubrics related to the condition:

Here the student should present the approach to the MateriaMedica through the repertory. The important rubrics which can some up for consideration should be listed.

11) MateriaMedica:

Commonly indicated acute remedies, chronic, constitutional and intercurrent with their indications in terms of causation, evolution, clinico-pathological and miasmatic understanding along with the indication at stage and state of disease.
Differential MateriaMedica also may be considered.

12) Prognosis

Discuss epidemiological prognosis

Non interventional natural prognosis
Homeopathic prognosis based on understanding of susceptibility and miasms

13) **Future advances;**
    a. Add a note on the scope of knowledge generation in the current illness
    b. Directions for Research

PAPER I

Diseases of children including nutritional, behavioural disorders, preventive aspects of Paediatrics

1. VITAL STATISTICS:
a. Definition and overview of Paediatrics with special reference to age-related disorders
b. Epidemiology and vital statistics related to childhood and maternal morbidity and mortality.
c. Definition, causes, present status and measures for attainment of goals.

2. GROWTH AND DEVELOPMENT: NORMAL AND ABNORMAL
a. Normal growth from conception to maturity. Milestones
b. Anthropometery — measurement and interpretation of weight, length/height, head circumference, mid-arm circumference. Interpretation of Growth Charts: Road to Health card and percentile growth curves
c. Abnormal growth patterns-failure to thrive, short stature. Preventable causes and assessment of developmental retardation.

3. NUTRITION
a. Normal requirements of protein, carbohydrates, fats, minerals and vitamins for newborn, children and pregnant and lactating mother. Common food sources.
b. Breast feeding-Definition and benefits. Characteristics and advantages of breast milk. Hazards and demerits of prelacteal feed, top milk and bottle-feeding. Feeding of LBW babies.
c. Infant feeding/weaning foods, method of weaning.
d. Assessment of nutritional status of a child based on history and physical examination. Protein energy malnutrition-
e. Vitamins-Recognition of vitamin deficiencies (A, D, K, C, B-Complex). Definition, causes and management of obesity.
4. IMMUNIZATION
a. Principles of Immunization.
b. Vaccine preservation and cold-chain.
c. National Immunization Programme

5. NEONATOLOGY: newborn care – examination & diseases.
a. Definition —live birth, neonatal period, classification according to weight and gestation, mortality rates. Birth asphyxia.
b. Care of the normal newborn in the first week of life. Normal variations and clinical signs in the neonate.
c. Neonatal Jaundice: causes, diagnosis and principles of management.
d. Neonatal infection — aetiology, diagnosis, principles of management. Superficial infections, sepsis. Identification of sick newborn (i.e. detection of abnormal signs — cyanosis, jaundice, respiratory distress, bleeding, seizures, refusal to feed, abdominal distension, failure to pass meconium and urine)

6. GENETICS

a. Principles of inheritance and diagnosis of genetic disorders
b. Genetic disorders needing study:
    i. Down's syndrome
    ii. Chromosomal disorders
    iii. Downs syndrome
    iv. Edward's syndrome
    v. Turner syndrome
    vi. Klinefelter's syndrome
c. Single gene disorders
    i. Cystic fibrosis
    ii. Marfan's syndrome
    iii. Hemophilia
    iv. Sickle cell anemia
    v. DMD
    vi. Osteogenesis imperfecta

7. COMMUNITY PAEDIATRICS:
a. Concepts & Principles of Community Paediatrics,
b. Knowledge about School Health Programs to be studied in a detailed manner

8. BEHAVIOURAL AND DEVELOPMENTAL PROBLEMS
a. Breath holding spells
b. Nocturnal enuresis
c. Temper tantrums
d. Pica
e. Autism
f. Learning Problems
g. ADHD
h. Anxiety disorders.

9. PEDIATRIC SURGICAL PROBLEMS
Diagnosis and advise for surgery of
    a. Cleft lip/palate
    b. Hypospadias
    c. Undescended testis
    d. Tracheoesophageal fistula
    e. Hydrocephalus
    f. CTEV (Club foot)
    g. Umbilical and inguinal hernia
    h. Anorectal malformations
    i. Hypertrophic pyloric stenosis

10. PAEDIATRIC EMERGENCIES:
Critical judgement & referral
    a. Status epilepticus
    b. Status asthmaticus
    c. Acute severe asthma
    d. Shock and anaphylaxis
    e. Hypertensive emergencies
    f. Gastrointestinal bleed
    g. Comatose child
    h. Congestive cardiac failure
    i. Acute renal failure

Paper - II

1. INFECTIOUS DISEASES
   Common bacterial, viral and parasitic infections in the region, with special reference to vaccinepreventable diseases:
   a. Tuberculosis,
   b. Poliomyelitis,
   c. Diphtheria,
   d. Whooping cough,
   e. Tetanus including neonatal tetanus,
   f. Measles,
   g. Mumps,
   h. Rubella,
   i. Typhoid,
   j. Viral Hepatitis,
   k. Cholera,
   l. Chickenpox,
   m. Giardiasis,
   n. Amoebiasis,
   o. Intestinal helminthiasis,
   p. Malaria
   q. Dengue

2. HAEMATOLOGY
   a. Anaemia in childhood
   b. Anaemia with lymphadenopathy and/or hepatosplenomegaly
   c. Thalassemia
   d. Approach to a bleeding child
   e. Acute lymphoblastic leukaemia
   f. Haemophilia
   g. ITP

3. RESPIRATORY SYSTEM
   a. Acute upper respiratory infections
   b. Pneumonia with emphasis on bronchopneumonia, bronchiolitis, bronchitis.
   c. Acute and chronic otitis media.
   d. Bronchial asthma. Treatment of acute severe asthma
   e. Pulmonary tuberculosis-tuberculous infection versus tuberculous disease, difference between primary and post-primary tuberculosis. Multidrug resistant tuberculosis
   f. Bronchiectasis,

4. GASTRO INTESTINAL TRACT
   a. Acute diarrhoeal disease-diarrhoea, complications of diarrhoeal illness.
   b. Acute viral hepatitis, causes & diagnosis of Chronic Liver Disease.
   c. Common causes of constipation.

5. CENTRAL NERVOUS SYSTEM
   a. Acute pyogenic meningitis,
   b. Encephalitis
   c. Tubercular Meningitis.
   d. Seizure Disorder
   e. Febrile convulsions
   f. Cerebral palsy.

6. CARDIOVASCULAR SYSTEM

a. Acute rheumatic fever. Common forms of rheumatic heart disease in childhood. Differentiation between rheumatic and rheumatoid arthritis.
b. Congenital acyanotic and cyanotic heart disease. VSD, PDA, ASD and Fallot's tetralogy (Cyanotic spells).
c. Hypertension in children-recognition and referral.
d. Bacterial endocarditis,
e. Pericardial effusion,
f. Myocarditis.

7. GENITOURINARY SYSTEM

a. Acute post-streptococcal glomerulonephritis
b. Nephrotic syndrome.
c. Urinary tract infection-acute and recurrent.
d. Acute renal failure.
e. Obstructive uropathy in children.
f. Renal and bladder stones

8. ENDOCRINOLOGY

a. Diabetes and hypothyroidism,
b. Hyperthyroidism and Goitre in children.
c. Delayed and precocious puberty

9. FLUID-ELECTROLYTE IMBALANCE

a. Principles of fluid and electrolyte therapy in children
b. Pathophysiology of acid-base imbalance and principle of management

10. NATIONAL HEALTH PROGRAMMES

a. Universal immunisation programme
b. ICDS
c. Mid day meal programme
d. Balwadi nutritional programme
e. National iodine deficiency prevention programme
f. National blindness control programme
g. Reproductive and child health programme

List of Recommended Reference Books for Paediatrics -

1) A.A.P. – Guidelines for Perinatal Care.
2) Beattie – Paediatric emergencies.
3) Bergiman – 20 Common Problems in Paediatrics.
4) Chheda – Practical aspect of Pediatrics.
5) Cloherty – Manual of Neonatal Care.
6) Desai – Handbook of Pediatrics.
7) Elizabeth – Nutrition and Child Development.
8) Duta T. – Principles of Pediatrics.
9) GhaiO. . – Pediatrics, Interprint New Delhi.
10) Gill – Pediatrics.
11) Joy – Diseases of Children.
12) Meherban Singh – Care of new born.
13) Meherban Singh – Paediatric Clinical Methods.
14) Modell – Paediatric Problems in general Practice.
15) Nelson – Essentials of Pediatrics. Harcourt Publishers, International Company, Asia.
16) Roberson – Text Book of Neonatology.
17) Santosh Kumar – Hand Book of Pediatrics.

18) Ambedkar and Khubchandani – Prioities in Pediatrics practice. L. C. R. Publications, Mumbai.
19) Hedwig Imhauser – Homoeopathy in Paediatric Practice, Indian Books and Periodical Publishers, New Delhi.
20) Dorland – Children Types, B. Jain Publishers, New Delhi.
21) Lillienthal S. – Homoeopathic Therapeutics, B. Jain Publishers, New Delhi.
22) Dr. S. K. Tiwari – Homoeopathy and Child Care, B. Jain Publishers, New Delhi.
23) Arvind, Clinical Methods in pediatrics, 2nd Edition, 2002, Jaypee Publishers, New Delhi.
24) Banza, Child Development and Developmental Diagnosis, 2nd Edition, Jaypee Publishers, New Delhi.
25) Gupta, Constructive case studies in Pediatrics, 4th Edition, 2002, Jaypee Publishers, New Delhi.
26) Gupta, Differential Diagnosis in Pediatrics, 4th Edition, 2002, Jaypee Publishers, New Delhi.

HOMOEOPATHIC PAEDIATRICS

1. Hedwig Imhauser – Homoeopathy in Paediatric Practice, Indian Books and Periodical Publishers, New Delhi
2. Borland – Children Types, B. Jain Publishers, New Delhi.
3. Lillienthal S. – Homoeopathic Therapeutics, B. Jain Publishers, New Delhi.
4. Dr. S. K. Tiwari – Homoeopathy and Child Care, B. Jain Publishers, New Delhi.
5. Burnett J. C. , Delicate, Backward, Puny & stunted children, B. Jain Publishers
6. Herscu Paul, The Homoepathic treatment of children, B. Jain Publishers
7. Master F.J., Clinical Observations of Children Remedies, B. Jain Publishers
8. Dr. Fisher, Diseases of children , B. Jain Publishers

List of Recommended Reference Books for Homoeopathic Philosophy

1) S. Hahnemann - Organon of Medicine-5th and 6th Edition, B. Jain Publisher**,** NewDelhi.
2) S. Hahnemann-Chronic Diseases, B. Jain Publisher, NewDelhi.
3) J. T. Kent—Lectures on Homoeopathy Philosophy, B. Jain Publisher, NewDelhi.
4) B. K.Sarkar, - Commentary on Organon of Medicine, Published by Bhattacharya and Company Pvt. Ltd., 73, Netaji S. road,Calcutta.
5) H. A. Roberts - The Principles and Art of Cure by Homeopathy, B. Jain Publisher, New Delhi.
6) Stuart Close - Genius of Homoeopathy, B. Jain Publisher, NewDelhi.
7) M. L. Dhawale, - Principles and Practices of Homoeopathy, Indian Books and Periodicals Publishers, NewDelhi.
8) C. M. Boger - Studies in the Philosophy of healing, B. Jain Publisher, NewDelhi.
9) J. H. Allen-Chronic Miasms, B. Jain Publisher, NewDelhi.
10) Richard Hael; Life of Hahnemann, B. Jain Publisher, NewDelhi.

List of Recommended Reference Books for Homoeopathic Materia Medica (Including Applied Aspects):

1. S. Hahnemann – Materia Medica Pura Vol I & II, Jain Publishers, New Delhi.
2. S. Hahnemann –Chronic Diseases Vol I & II, Jain Publishers, New Delhi.
3. T. F. Allen – Encyclopedia of Homoeopathic Materia Medica, Vol 1 to 12, B. Jain

4. C. Hering – Guiding Symptoms of Homoeopathic Materia Medica, B. Jain Publisher, New Delhi.
5. J.T. Kent – Lectures of Homoeopathic Materia Medica, B. Jain Publisher, New Delhi
6. M. L. Tyler – Drug Pictures of Homoeopathic Materia Medica, B. Jain Publisher, New Delhi
7. E. A. Farrington – Clinical Materia Medica, B. Jain Publisher, New Delhi
8. E. A. Farrington – Comparative Materia Medica, B. Jain Publisher, New Delhi
9. N. M. Choudhary -Materia Medica, B. Jain Publisher, New Delhi
10. C. M. Boger – Synoptic Key, B. Jain Publisher, New Delhi
11. H. C. Allen – Keynotes of Homoeopathic MateriaMedica, B. Jain Publisher, New Delhi
12. W. Boericke – Clinical MateriaMedica, B. Jain Publisher, New Delhi
13. Clarke – Dictionary of Homoeopathic MateriaMedica, B. Jain Publisher, New Delhi
14. Vermulein – Prisma
15. T. F. Allen – Nosodes

List of Recommended Reference Books for Repertory.

1. J. T. Kent - Repertory of the Homoeopathic Materia Medica, B. Jain Publisher. New Delhi.
2. Fredrick Schroyans - Synthesis Repertory, B. Jain Publisher, New Delhi.
3. Robin Murphy - Homoeopathic Medical Repertory, Indian Books and Periodicals Publishers, KaroiBagh, New Delhi.
4. C. M. Boger-Boenninighausen's Characteristics and Repertory, B. Jain Publisher, New Delhi.
5. S. R. Phatak - Concise Repertory of Homoeopathy, B. Jain Publisher, New Delhi.
6. Zandorvoot, Roger: Complete Repertory.