

Paper II: Technical Subject

1. Growth and development
 - 1.1. Physical and psychosocial growth and development of normal child
 - 1.2. Disorders of growth
 - 1.3. Delay and deviations of development
 - 1.4. Assessment of growth and development
 - 1.5. Disorders of psychological development
 - 1.6. Common behavioral problems of preschool children
 - 1.7. Common speech disorders
2. Nutrition:
 - 2.1. Normal nutrition in infancy and childhood
 - 2.2. Common nutritional disorders in childhood
 - 2.3. Nutrition supplementation programs
3. Preventive pediatrics
 - 3.1. Immunizations
 - 3.2. Prevention and management of common disorders of childhood
 - 3.3. Prevention and management of poisonings and accidents
4. Social pediatrics:
 - 4.1. School health services
 - 4.2. National health programmes related to maternal and child health
 - 4.3. Community health services for the maternal and childhood
 - 4.4. Organizing health care delivery and referral systems for children
5. Genetics:
 - 5.1. Genetic and chromosomal disorders
 - 5.2. Inborn errors of metabolism
 - 5.3. Genetic counseling including antenatal diagnosis
6. Neonatology:
 - 6.1. Management of normal, high risk and sick neonates
 - 6.2. Monitoring and ventilatory support of the sick neonates
 - 6.3. Foetal disorders
 - 6.4. Perinatology
 - 6.5. Preventive neonatology
 - 6.6. Organization of neonatal care service in health institution with secondary level of care
7. Infectious diseases: diagnosis of common infectious diseases in the pediatric age group
8. Immunity, allergy and related disorders
9. System based pediatrics:

Diagnosis and management of common disorders affecting digestive, hepatobiliary, cardiovascular, respiratory, endocrine system, blood and lymphoreticular system including malignancies, genitourinary, nervous, musculoskeletal system and skin.

10. Eye, ear, nose and throat:

Diagnosis and management of common disorders of eye, ear, nose and throat in the pediatric age group

11. Pediatric surgery:

Diagnosis and supportive management of common surgical disorders of neonates, infants and children and appropriate referral

12. Pediatric emergencies:

Diagnosis and management of common pediatric emergencies such as coma, convulsions, shock, asthmatic attacks, cyanotic spells, poisonings, accidents etc. Pediatric advance life support skills, pediatric anesthesia, ventilatory support, cardiovascular support and stabilization

13. Pediatric dermatology:

Structure and function of skin, examination of skin, Infective dermatosis (bacterial, fungal, viral, parasitic), Non-infective dermatoses (congenital, eczema, immunological, nutritional and miscellaneous), Sexually transmitted diseases, AIDS.

14. Neoplastic disorders and tumors:

Epidemiology, principles of diagnosis and treatment, leukaemias, lymphomas, neuroblastoma, renal neoplasms, soft tissue sarcoma, retinoblastoma, benign tumors:

15. Child psychiatry:

- 15.1. Assessment and interview
- 15.2. Epidemiology and etiology of psychiatric disorders in children
- 15.3. Behavioural and emotional disorders
- 15.4. Neurotic, stress related and somatoform disorders
- 15.5. Mood disorders
- 15.6. Suicide and attempted suicide
- 15.7. Psychosis in childhood
- 15.8. Gender identify disorders in childhood
- 15.9. Psychiatric aspects of mental retardation
- 15.10. Treatment of psychiatric problems in children

16. Radiodiagnosis:

- 16.1. Interpretation of
 - 16.1.1. Basic chest and abdominal and abdominal radiography in different views
 - 16.1.2. Contrast radiography of different organs like IVP, MCU, Ba-series and myelogram
 - 16.1.3. Radiology of bones and joints
 - 16.1.4. Ultrasonography of brain, abdomen and other organs
 - 16.1.5. Echocardiography
- 16.2. Recent advances in radiology like CT, MRI, USG, radioisotope scanning and PET

17. Research methodology:

- 17.1.1. Bio-statistics

- 17.1.2. Basic in research methodology including search and critical review of medical literature, selection of appropriate study design, analysis of findings etc.
- 17.1.3. Problem oriented medical record
- 17.1.4. Management of information system
- 18. Medical education:
 - 18.1. Curricular components, teaching learning strategies, lesson plan methods of evaluation
 - 18.2. Identification of learning resources to meet the learning objectives
 - 18.3. Use of overhead projectors, slides, models etc in the teaching learning objectives.
- 19. Medical ethics:
 - 19.1. Introduction to ethical theories
 - 19.2. Medical ethics
 - 19.3. Professional ethics
 - 19.4. Ethics in research
 - 19.5. Ethics in health policy
- 20. Recent advance in pediatric physiology, molecular biology and genetics as well in the different diagnostic and therapeutic approaches in child health.