

DEPARTMENT OF PEDIATRICS

The course includes systematic instructions in growth and development, nutritional needs of a child, immunization schedules and management of common diseases of infancy and childhood, scope of Social Paediatrics and counselling.

GOAL

The broad goal of the teaching of undergraduate students in Paediatrics is to acquire adequate knowledge and appropriate skills for optimally dealing with major health problems of children to ensure their optimal growth and development

OBJECTIVES

KNOWLEDGE

At the end of the course, the student should be able to:

- (1) Describe the normal growth and development during foetal life, neonatal period, childhood and adolescence and outline deviations thereof.
- (2) Describe the common paediatric disorders and emergencies in terms of epidemiology, etio-pathogenesis, clinical manifestations, diagnosis, rational therapy and rehabilitation.
- (3) State age related requirements of calories, nutrients, fluids, drugs etc.
- (4) Describe preventive strategies for common infectious disorders, malnutrition, genetic and metabolic disorders, poisonings, accidents and child abuse.
- (5) Outline national programmes relating to child health including Immunisation programmes.

SKILLS

At the end of the course, the student should be able to:

- (1) Take a detailed paediatric history, conduct an appropriate physical examination of children including neonates, make clinical diagnosis, conduct common bedside investigative procedures, interpret common laboratory investigation results and plan and institute therapy.

- (2) Take anthropometric measurements; resuscitate newborn infants at birth, prepare oral rehydration solution, perform tuberculin test, administer vaccines available under current national programs, perform venesection, start an intravenous saline and provide nasogastric feeding.
- (3) Conduct diagnostic procedures such as lumbar puncture, liver and kidney biopsy, bone marrow aspiration, pleural tap and ascitic tap.
- (4) Distinguish between normal newborn babies and those requiring special care and institute early care to all new born babies including care of preterm and low birth weight babies, provide correct guidance and counselling in breast feeding
- (5) Provide ambulatory care to all sick children, identify indications for specialized/inpatient care and ensure timely referral of those who require hospitalization.

INTEGRATION

The training in paediatrics should prepare the student to deliver preventive, promotive, curative and rehabilitative services for care of children both in the community and at hospital as part of a team in an integrated form with other disciplines, e.g. Anatomy, Physiology, Biochemistry, Microbiology, Pathology, Pharmacology, Forensic Medicine, Community Medicine and Physical Medicine and Rehabilitation.

Paediatrics Curriculum

Topic: Normal Growth and Development

- PE1.1 define the terminologies Growth and development and discuss the factors affecting normal growth and development
- PE1.2 Discuss and describe the patterns of growth in infants, children and adolescents
- PE1.3 Discuss and describe the methods of assessment of growth including use of WHO and Indian national standards. Enumerate the parameters used for assessment of physical growth in infants, children and adolescents
- PE1.4 Perform Anthropometric measurements, document in growth chart and interpret
- PE1.5 Define development and discuss the normal developmental mile stones with respect to motor, behavior, social, adaptive and language
- PE1.6 Discuss the methods of assessment of development
- PE1.7 Perform Developmental assessment and interpret

Topic: Common problems related to Growth

- PE2.1 Discuss the etio-pathogenesis, clinical features and management of a child who fails to thrive
- PE2.2 Assessment of a child with failing to thrive including eliciting an appropriate history and examination
- PE2.3 counseling a parent with failing to thrive child
- PE2.4 Discuss the etio-pathogenesis, clinical features and management of a child with short stature
- PE2.5 Assessment of a child with short stature: Elicit history, perform examination, document and present
- PE2.6 Enumerate the referral criteria for growth related problems

Topic: Common problems related to Development -1 (Developmental delay, Cerebral palsy)

- PE3.1 Define, enumerate and discuss the causes of developmental delay and disability including intellectual disability in children
- PE3.2 Discuss the approach to a child with developmental delay
- PE3.3 Assessment of a child with developmental delay - Elicit document and present history
- PE3.4 Counsel a parent of a child with developmental delay S
- PE3.5 Discuss the role of the child developmental unit in management of developmental delay
- PE3.6 Discuss the referral criteria for children with developmental delay
- PE3.7 Visit a Child Developmental Unit and observe its functioning
- PE3.8 Discuss the etio-pathogenesis, clinical presentation and multidisciplinary approach in the management of Cerebral palsy

Topic: Common problems related to Development-2 (Scholastic backwardness, Learning Disabilities, Autism and ADHD)

- PE4.1 Discuss the causes and approach to a child with scholastic backwardness
- PE4.2 Discuss the etiology, clinical features, diagnosis and management of a child with Learning Disabilities
- PE4.3 Discuss the etiology, clinical features, diagnosis and management of a child with Attention Deficit Hyperactivity Disorder (ADHD)
- PE4.4 Discuss the etiology, clinical features, diagnosis and management of a child with Autism
- PE4.5 Discuss the role of Child Guidance clinic in children with Developmental problems
- PE4.6 Visit to the Child Guidance Clinic

Topic: Common problems related to behavior

- PE5.1 Describe the clinical features, diagnosis and management of thumb sucking
- PE5.2 Describe the clinical features, diagnosis and management of Feeding problems
- PE5.3 Describe the clinical features, diagnosis and management of nail biting
- PE5.4 Describe the clinical features, diagnosis and management of Breath Holding spells
- PE5.5 Describe the clinical features, diagnosis and management of temper tantrums
- PE5.6 Describe the clinical features, diagnosis and management of Pica
- PE5.7 Describe the clinical features, diagnosis and management of Fussy infant
- PE5.8 Discuss the etiology, clinical features and management of Enuresis
- PE5.9 Discuss the etiology, clinical features and management of Encopresis
- PE5.10 Discuss the role of child guidance clinic in children with behavioural problems and the referral criteria
- PE5.11 Visit to Child Guidance Clinic and observe functioning

Topic: Adolescent Health & common problems related to Adolescent Health **Number of competencies:**

- PE6.1 Define Adolescence and stages of adolescence
- PE6.2 Describe the physical, physiological and psychological changes during adolescence (Puberty)
- PE6.3 Discuss the general health problems during adolescence
- PE6.4 Describe adolescent sexuality and common problems related to it K KH N Lecture, Small group discussion Written/ Viva voce Psychiatry
- PE6.5 Explain the Adolescent Nutrition and common nutritional problems
- PE6.6 Discuss the common Adolescent eating disorders (Anorexia Nervosa, Bulimia)
- PE6.7 Describe the common mental health problems during adolescence
- PE6.8 Respecting patient privacy and maintaining confidentiality while dealing with adolescence
- PE6.9 Perform routine Adolescent Health check up including eliciting history, performing examination including SMR (Sexual Maturity Rating), growth assessments (using Growth charts) and systemic exam including thyroid and Breast exam and the HEADSS screening
- PE6.10 Discuss the objectives and functions of AFHS (Adolescent Friendly Health Services) and the referral criteria
- PE6.11 Visit to the Adolescent Clinic
- PE6.12 Enumerate the importance of obesity and other NCD in adolescents
- PE6.13 Enumerate the prevalence and the importance of recognition of sexual drug abuse in adolescents and children

Topic: To promote and support optimal Breast feeding for Infants

- PE7.1 Awareness on the cultural beliefs and practices of breast feeding
- PE7.2 Explain the physiology of lactation
- PE7.3 Describe the composition and types of breast milk and discuss the differences between cow's milk and Human milk
- PE7.4 Discuss the advantages of breast milk
- PE7.5 Observe the correct technique of breast feeding and distinguish wrong techniques
- PE7.6 Enumerate the baby friendly hospital initiatives K
- PE7.7 Perform breast examination and identify common problems during lactation such as retracted nipples, cracked nipples, breast engorgement, breast abscess
- PE7.8 Educate mothers on ante natal breast care and prepare mothers for lactation
- PE7.9 Educate and counsel mothers for best practices in Breast feeding
- PE7.10 Respects patient privacy
- PE7.11 Participate in Breast Feeding Week Celebration

Topic: Complementary Feeding

- PE8.1 Define the term Complementary Feeding
- PE8.2 Discuss the principles, the initiation, attributes, frequency, techniques and hygiene related to Complementary Feeding including IYCF
- PE8.3 Enumerate the common complimentary foods
- PE8.4 Elicit history on the Complementary Feeding habits
- PE8.5 Counsel and educate mothers on the best practices in Complimentary Feeding

Topic: Normal nutrition, assessment and monitoring

- PE9.1 Describe the age related nutritional needs of infants, children and adolescents including micronutrients and vitamins
- PE9.2 Describe the tools and methods for assessment and classification of nutritional status of infants, children and adolescents
- PE9.3 Explains the Calorific value of common Indian foods
- PE9.4 Elicit document and present an appropriate nutritional history and perform a dietary recall Skills lab
- PE9.5 Calculate the age related calorie requirement in Health and Disease and identify gap
- PE9.6 Assess and classify the nutrition status of infants, children and adolescents and recognize deviations
- PE9.7 Plan an appropriate diet in health and disease

Topic: Provide nutritional support, assessment and monitoring for common nutritional problems

PE10.1 Define and describe the etio-pathogenesis, classify including WHO classification, clinical features, complication and management of Severe Acute Malnourishment (SAM) and Moderate Acute

Malnutrition (MAM)

PE10.2 Outline the clinical approach to a child with SAM and MAM

PE10.3 Assessment of a patient with SAM and MAM, diagnosis, classification and planning management including hospital and community based intervention, rehabilitation and prevention

PE10.4 Identify children with under nutrition as per IMNCI criteria and plan referral

PE10.5 Counsel parents of children with SAM and MAM

PE10.6 Enumerate the role of locally prepared therapeutic diets and ready to use therapeutic diets

Topic: Obesity in children

PE11.1 Describe the common etiology, clinical features and management of obesity in children

PE11.2 Discuss the risk approach for obesity and discuss the prevention strategies

PE11.3 Assessment of a child with obesity with regard to eliciting history including physical activity, charting and dietary recall

PE11.4 Examination including calculation of BMI, measurement of waist hip ratio, identifying external markers like acanthosis, striae, pseudogynaecomastia etc

PE11.5 Calculate BMI, document in BMI chart and interpret

PE11.6 Discuss criteria for referral

Topic: Micronutrients in Health and disease-1 (Vitamins ADEK, B Complex and C)

PE12.1 Discuss the RDA, dietary sources of Vitamin A and their role in Health and disease

PE12.2 Describe the causes, clinical features, diagnosis and management of Deficiency / excess of Vitamin A

PE12.3 Identify the clinical features of dietary deficiency / excess of Vitamin A

PE12.4 Diagnose patients with Vitamin A deficiency, classify and plan management

PE12.5 Discuss the Vitamin A prophylaxis program and their recommendations

PE12.6 Discuss the RDA, dietary sources of Vitamin D and their role in health and disease

PE12.7 Describe the causes, clinical features, diagnosis and management of Deficiency / excess of Vitamin D (Rickets and Hypervitaminosis D)

PE12.8 Identify the clinical features of dietary deficiency of Vitamin D

PE12.9 Assess patients with Vitamin D deficiency, diagnose, classify and plan management

PE12.10 Discuss the role of screening for Vitamin D deficiency

PE12.11 Discuss the RDA, dietary sources of Vitamin E and their role in health and disease

PE12.12 Describe the causes, clinical features, diagnosis and management of deficiency of Vitamin E

PE12.13 Discuss the RDA, dietary sources of Vitamin K and their role in health and disease

PE12.14 Describe the causes, clinical features, diagnosis management and

PE12.15 Discuss the RDA, dietary sources of Vitamin B and their role in health and disease

PE12.16 Describe the causes, clinical features, diagnosis and management of deficiency of B complex Vitamins

PE12.17 Identify the clinical features of Vitamin B complex deficiency

PE12.18 Diagnose patients with Vitamin B complex deficiency and plan management

PE12.19 Discuss the RDA , dietary sources of Vitamin C and their role in Health and disease

PE12.20 Describe the causes, clinical features, diagnosis and management of deficiency of Vitamin C (scurvy)

PE12.21 Identify the clinical features of Vitamin C deficiency

Topic: Micronutrients in Health and disease -2: Iron, Iodine, Calcium And Magnesium

PE13.1 Discuss the RDA, dietary sources of Iron and their role in health and disease

PE13.2 Describe the causes, diagnosis and management of Fe deficiency

PE13.3 Identify the clinical features of dietary deficiency of Iron and make a diagnosis

PE13.4 Interpret hemogram and Iron Panel

PE13.5 Propose a management plan for Fe deficiency anaemia

PE13.6 Discuss the National anaemia control program and its recommendations

PE13.7 Discuss the RDA , dietary sources of Iodine and their role in Health and disease

PE13.8 Describe the causes, diagnosis and management of deficiency of Iodine

PE13.9 Identify the clinical features of Iodine deficiency disorders

PE13.10 Discuss the National Goiter Control program and their recommendations

PE13.11 Discuss the RDA, dietary sources of Calcium and their role in health and disease

PE13.12 Describe the causes, clinical features, diagnosis and management of Ca Deficiency

PE13.13 Discuss the RDA, dietary sources of Magnesium and their role in health and disease

PE13.14 Describe the causes, clinical features, diagnosis and management of Magnesium Deficiency

Topic: Toxic elements and free radicals and oxygen toxicity

PE14.1 Discuss the risk factors, clinical features, diagnosis and management of Lead Poisoning

PE14.2 Discuss the risk factors, clinical features, diagnosis and management of Kerosene ingestion

PE14.3 Discuss the risk factors, clinical features, diagnosis and management of Organophosphorous poisoning
PE14.4 Discuss the risk factors, clinical features, diagnosis and management of paracetamol poisoning
PE14.5 Discuss the risk factors, clinical features, diagnosis and management of Oxygen toxicity

Topic: Fluid and electrolyte balance

PE15.1 Discuss the fluid and electrolyte requirement in health and disease
PE15.2 Discuss the clinical features and complications of fluid and electrolyte imbalance and outline the management
PE15.3 Calculate the fluid and electrolyte requirement in health
PE15.4 Interpret electrolyte report
PE15.5 Calculate fluid and electrolyte imbalance
PE15.6 Demonstrate the steps of inserting an IV cannula in a model
PE15.7 Demonstrate the steps of inserting an interosseous line in a mannequin

Topic: Integrated Management of Neonatal and Childhood Illnesses (IMNCI) Guideline

PE16.1 Explain the components of Integrated Management of Neonatal and Childhood Illnesses (IMNCI) guidelines and method of Risk Stratification
PE16.2 Assess children <2 months using IMNCI Guidelines
PE16.3 Assess children >2 to 5 years using IMNCI guidelines and Stratify Risk

Topic: The National Health programs

PE17.1 State the vision and outline the goals, strategies and plan of action of NHM and other important national programs pertaining to maternal and child health including RMNCH A+, RBSK, RKSK, JSSK mission Indradhanush and ICDS
PE17.2 Analyse the outcomes and appraise the monitoring and evaluation of NHM

Topic: The National Health Programs: RCH

PE18.1 List and explain the components, plan, outcome of Reproductive Child Health (RCH) program and appraise its monitoring and evaluation
PE18.2 Explain preventive interventions for child survival and safe motherhood
PE18.3 Conduct Antenatal examination of women independently and apply at-risk approach in antenatal care
PE18.4 Provide intra-natal care and conduct a normal delivery in a simulated environment
PE18.5 Provide intra-natal care and observe the conduct of a normal Delivery

- PE18.6 Perform Postnatal assessment of newborn and mother, provide advice on breast feeding, weaning and on family planning
- PE18.7 Educate and counsel caregivers of children
- PE18.8 Observe the implementation of the program by visiting the Rural Health Centre

Topic: National Programs, RCH - Universal Immunizations program

- PE19.1 Explain the components of the Universal Immunization Program and the National Immunization Program
- PE19.2 Explain the epidemiology of Vaccine preventable diseases
- PE19.3 Vaccine description with regard to classification of vaccines, strain used, dose, route, schedule, risks, benefits and side effects, indications and contraindications
- PE19.4 Define cold chain and discuss the methods of safe storage and handling of vaccines
- PE19.5 Discuss immunization in special situations – HIV positive children, immunodeficiency, pre-term, organ transplants, those who received blood and blood products, splenectomised children, adolescents, travellers
- PE19.6 Assess patient for fitness for immunization and prescribe an age appropriate immunization schedule
- PE19.7 Educate and counsel a patient for immunization
- PE19.8 Demonstrate willingness to participate in the National and sub national immunisation days
- PE19.9 Describe the components of safe vaccine practice – Patient education/ counselling; adverse events following immunization, safe injection practices, documentation and Medico-legal implications
- PE19.10 Observe the handling and storing of vaccines
- PE19.11 Document Immunization in an immunization record
- PE19.12 Observe the administration of UIP vaccines
- PE19.13 Demonstrate the correct administration of different vaccines in a mannequin
- PE19.14 Practice Infection control measures and appropriate handling of the sharps
- PE19.15 Explain the term implied consent in Immunization services
- PE19.16 Enumerate available newer vaccines and their indications including pentavalent pneumococcal, rotavirus, JE, typhoid IPV & HPV

Topic: Care of the Normal New born, and high risk new born

- PE20.1 define the common neonatal nomenclatures including the classification and describe the characteristics of a Normal Term Neonate and High Risk Neonates
- PE20.2 Explain the care of a normal neonate
- PE20.3 Perform Neonatal resuscitation in a manikin
- PE20.4 Assessment of a normal neonate
- PE20.5 Counsel / educate mothers on the care of neonates
- PE20.6 Explain the follow up care for neonates including Breast Feeding, Temperature maintenance, immunization, importance of growth monitoring and red flags

PE20.7 Discuss the etiology, clinical features and management of Birth asphyxia

PE20.8 Discuss the etiology, clinical features and management of respiratory distress in New born including meconium aspiration and transient tachypnoea of newborn

PE20.9 Discuss the etiology, clinical features and management of Birth injuries

PE20.10 Discuss the etiology, clinical features and management of Hemorrhagic disease of new born

PE20.11 Discuss the clinical characteristics, complications and management of Low birth weight (preterm and small for gestation)

PE20.12 Discuss the temperature regulation in neonates, clinical features and management of Neonatal Hypothermia

PE20.13 Discuss the temperature regulation in neonates, clinical features and management of Neonatal Hypoglycemia

PE20.14 Discuss the etiology, clinical features and management of Neonatal hypocalcemia

PE20.15 Discuss the etiology, clinical features and management of Neonatal seizures

PE20.16 Discuss the etiology, clinical features and management of Neonatal Sepsis

PE20.17 Discuss the etiology, clinical features and management of Perinatal infections

PE20.18 Identify and stratify risk in a sick neonate using IMNCI guidelines

PE20.19 Discuss the etiology, clinical features and management of Neonatal hyperbilirubinemia discussion

PE20.20 Identify clinical presentations of common surgical conditions in the new born including TEF, esophageal atresia, anal atresia, cleft lip and palate, congenital diaphragmatic hernia and causes of acute abdomen

Topic: Genito-Urinary system

PE21.1 Enumerate the etio-pathogenesis, clinical features, complications and management of Urinary Tract infection in children

PE21.2 Enumerate the etio-pathogenesis, clinical features, complications and management of acute post-streptococcal Glomerular Nephritis in children

PE21.3 Discuss the approach and referral criteria to a child with Proteinuria

PE21.4 Discuss the approach and referral criteria to a child with Hematuria

PE21.5 Enumerate the etio-pathogenesis, clinical features, complications and management of Acute Renal Failure in children

PE21.6 Enumerate the etio-pathogenesis, clinical features, complications and management of Chronic Renal Failure in Children

PE21.7 Enumerate the etio-pathogenesis, clinical features, complications and management of Wilms Tumor

PE21.8 Elicit, document and present a history pertaining to diseases of the Genitourinary tract

PE21.9 Identify external markers for Kidney disease, like Failing to thrive, hypertension, pallor, Ichthyosis, anasarca

PE21.10 Analyse symptom and interpret the physical findings and arrive at an appropriate provisional / differential diagnosis

PE21.11 Perform and interpret the common analytes in a Urine examination

PE21.12 Interpret report of Plain X Ray of KUB

PE21.13 Enumerate the indications for and Interpret the written report of Ultra sonogram of KUB

PE21.14 Recognize common surgical conditions of the abdomen and genitourinary system and enumerate the indications for referral including acute and subacute intestinal obstruction, appendicitis, pancreatitis, perforation intussusception, Phimosis, undescended testis, Chordee, hypospadias, Torsion testis, hernia Hydrocele, Vulval Synechiae
PE21.15 Discuss and enumerate the referral criteria for children with genitourinary disorder
PE21.16 Counsel / educate a patient for referral appropriately
PE21.17 Describe the etiopathogenesis, grading, clinical features and management of hypertension in children

Topic: Approach to and recognition of a child with possible Rheumatologic problem

PE22.1 Enumerate the common Rheumatological problems in children. Discuss the clinical approach to recognition and referral of a child with Rheumatological problem
PE22.2 Counsel a patient with Chronic illness
PE22.3 Describe the diagnosis and management of common vasculitic disorders including Henoch Schonlein Purpura, Kawasaki Disease, SLE, JIA

Topic: Cardiovascular system- Heart Diseases

PE23.1 Discuss the Hemodynamic changes, clinical presentation, complications and management of Acyanotic Heart Diseases –VSD, ASD and PDA
PE23.2 Discuss the Hemodynamic changes, clinical presentation, complications and management of Cyanotic Heart Diseases – Fallot's Physiology
PE23.3 Discuss the etio-pathogenesis, clinical presentation and management of cardiac failure in infant and children
PE23.4 Discuss the etio-pathogenesis, clinical presentation and management of Acute Rheumatic Fever in children
PE23.5 Discuss the clinical features, complications, diagnosis, management and prevention of Acute Rheumatic Fever
PE23.6 Discuss the etio-pathogenesis, clinical features and management of Infective endocarditis in children
PE23.7 Elicit appropriate history for a cardiac disease, analyse the symptoms e.g. breathlessness, chest pain, tachycardia, feeding difficulty, failing to thrive, reduced urinary output, swelling, syncope, cyanotic spells, Suck rest cycle, frontal swelling in infants.
Document and present
PE23.8 Identify external markers of a cardiac disease e.g. Cyanosis, Clubbing, dependent edema, dental caries, arthritis, erythema rash, chorea, subcutaneous nodules, Osler's node, Janeway lesions and document
PE23.9 Record pulse, blood pressure, temperature and respiratory rate and interpret as per the age
PE23.10 Perform independently examination of the cardiovascular system – look for precordial bulge, pulsations in the precordium, JVP and its significance in children and

infants, relevance of percussion in Pediatric examination, Auscultation and other system examination and document

PE23.11 Develop a treatment plan and prescribe appropriate drugs including fluids in cardiac diseases, anti -failure drugs, and inotropic agents

PE23.12 Interpret a chest X ray and recognize Cardiomegaly

PE23.13 Choose and Interpret blood reports in Cardiac illness

PE23.14 Interpret Pediatric ECG

PE23.15 Use the ECHO reports in management of cases

PE23.16 Discuss the indications and limitations of Cardiac catheterization

PE23.17 Enumerate some common cardiac surgeries like BT shunt, Potts and Waterston's and corrective surgeries

PE23.18 Demonstrate empathy while dealing with children with cardiac diseases in every patient encounter

Topic: Diarrhoeal diseases and Dehydration

PE24.1 Discuss the etio-pathogenesis, classification, clinical presentation and management of diarrheal diseases in children

PE24.2 Discuss the classification and clinical presentation of various types of diarrheal dehydration

PE24.3 Discuss the physiological basis of ORT, types of ORS and the composition of various types of ORS

PE24.4 Discuss the types of fluid used in Paediatric diarrheal diseases and their composition

PE24.5 Discuss the role of antibiotics, antispasmodics, anti-secretory drugs, probiotics, anti-emetics in acute diarrheal diseases

PE24.6 Discuss the causes, clinical presentation and management of persistent diarrhoea in children

PE24.7 Discuss the causes, clinical presentation and management of chronic diarrhoea in children

PE24.8 Discuss the causes, clinical presentation and management of dysentery in children

PE24.9 Elicit, document and present history pertaining to diarrheal diseases

PE24.10 Assess for signs of dehydration, document and present S

PE24.11 Apply the IMNCI guidelines in risk stratification of children with diarrheal dehydration and refer

PE24.12 Perform and interpret stool examination including Hanging Drop

PE24.13 Interpret RFT and electrolyte report

PE24.14 Plan fluid management as per the WHO criteria

PE24.15 Perform NG tube insertion in a manikin

PE24.16 Perform IV cannulation in a model S

PE24.17 Perform Interosseous insertion model

Topic: Malabsorption

PE25.1 Discuss the etio-pathogenesis, clinical presentation and management of Malabsorption in Children and its causes including celiac disease

Topic: Acute and chronic liver disorders

PE26.1 Discuss the etio-pathogenesis, clinical features and management of acute hepatitis in children

PE26.2 Discuss the etio-pathogenesis, clinical features and management of Fulminant Hepatic Failure in children

PE26.3 Discuss the etio-pathogenesis, clinical features and management of chronic liver diseases in children

PE26.4 Discuss the etio-pathogenesis, clinical features and management of Portal Hypertension in children

PE26.5 Elicit document and present the history related to diseases of Gastrointestinal system

PE26.6 Identify external markers for GI and Liver disorders e.g.. Jaundice, Pallor, Gynaecomastia, Spider angioma, Palmar erythema, Ichthyosis, Caput medusa, Clubbing, Failing to thrive, Vitamin A and D deficiency

PE26.7 Perform examination of the abdomen, demonstrate organomegaly, ascites etc.

PE26.8 Analyse symptoms and interpret physical signs to make a provisional/ differential diagnosis

PE26.9 Interpret Liver Function Tests, viral markers, ultra sonogram report

PE26.10 Demonstrate the technique of liver biopsy in a Perform Liver Biopsy in a simulated environment

PE26.11 Enumerate the indications for Upper GI endoscopy

PE26.12 Discuss the prevention of Hep B infection – Universal precautions and Immunisation

PE26.13 Counsel and educate patients and their family appropriately on liver Disease

Topic: Pediatric Emergencies – Common Pediatric Emergencies

PE27.1 List the common causes of morbidity and mortality in the under five children

PE27.2 Describe the etio-pathogenesis, clinical approach and management of cardiorespiratory arrest in children

PE27.3 Describe the etio-pathogenesis of respiratory distress in children

PE27.4 Describe the clinical approach and management of respiratory distress in children

PE27.5 Describe the etio-pathogenesis, clinical approach and management of Shock in children

PE27.6 Describe the etio-pathogenesis, clinical approach and management of Status epilepticus

PE27.7 Describe the etio-pathogenesis, clinical approach and management of an unconscious child

PE27.8 Discuss the common types, clinical presentations and management of poisoning in children

PE27.9 Discuss oxygen therapy, in Pediatric emergencies and modes of administration

PE27.10 Observe the various methods of administering Oxygen

PE27.11 Explain the need and process of triage of sick children brought to health facility

PE27.12 Enumerate emergency signs and priority signs

PE27.13 List the sequential approach of assessment of emergency and priority signs

PE27.14 Assess emergency signs and prioritize

PE27.15 Assess airway and breathing; recognise signs of severe respiratory distress. Check for cyanosis, severe chest indrawing, grunting

PE27.16 Assess airway and breathing. Demonstrate the method of Positioning of an infant & child to open airway in a simulated environment

PE27.17 Assess airway and breathing: administer oxygen using correct technique and appropriate flow rate

PE27.18 Assess airway and breathing: perform assisted ventilation by Bag and mask in a simulated environment lab

PE27.19 Check for signs of shock i.e. pulse, Blood pressure, CRT

PE27.20 Secure an IV access in a simulated environment

PE27.21 Choose the type of fluid and calculate the fluid requirement in shock

PE27.22 Assess level of consciousness & provide emergency treatment to a child with convulsions/ coma

- Position an unconscious child
- Position a child with suspected trauma
- Administer IV/per rectal Diazepam for a convulsing child in a simulated environment

PE27.23 Assess for signs of severe dehydration

PE27.24 Monitoring and maintaining temperature: define hypothermia. Describe the clinical features, complications and management of Hypothermia

PE27.25 Describe the advantages and correct method of keeping an infant warm by skin to skin contact

PE27.26 Describe the environmental measures to maintain temperature

PE27.27 Assess for hypothermia and maintain temperature

PE27.28 Provide BLS for children in manikin

PE27.29 Discuss the common causes, clinical presentation, medico-legal implications of abuse

PE27.30 Demonstrate confidentiality with regard to abuse

PE27.31 Assess child for signs of abuse

PE27.32 Counsel parents of dangerously ill / terminally ill child to break a bad news

PE27.33 Obtain Informed Consent

PE27.34 Willing to be a part of the ER team

PE27.35 Attends to emergency calls promptly

Topic: Respiratory system

PE28.1 Discuss the etio-pathogenesis, clinical features and management of Naso pharyngitis

PE28.2 Discuss the etio-pathogenesis of Pharyngo Tonsillitis

PE28.3 Discuss the clinical features and management of Pharyngo Tonsillitis

PE28.4 Discuss the etio-pathogenesis, clinical features and management of Acute Otitis Media (AOM)

PE28.5 Discuss the etio-pathogenesis, clinical features and management of Epiglottitis

PE28.6 Discuss the etio-pathogenesis, clinical features and management of Acute laryngo-trachea-bronchitis

PE28.7 Discuss the etiology, clinical features and management of Stridor in children

PE28.8 Discuss the types, clinical presentation, and management of foreign body aspiration in infants and children

PE28.9 Elicit, document and present age appropriate history of a child with upper respiratory problem including Stridor

PE28.10 Perform otoscopic examination of the ear

PE28.11 Perform throat examination using tongue depressor

PE28.12 Perform examination of the nose

PE28.13 Analyse the clinical symptoms and interpret physical findings and make a provisional / differential diagnosis in a child with ENT symptoms

PE28.14 Develop a treatment plan and document appropriately in a child with upper respiratory symptoms

PE28.15 Stratify risk in children with stridor using IMNCI guidelines

PE28.16 Interpret blood tests relevant to upper respiratory problems

PE28.17 Interpret X-ray of the paranasal sinuses and mastoid; and /or use written report in case of management Interpret CXR in foreign body aspiration and lower respiratory tract infection, understand the significance of thymic shadow in pediatric chest X-rays

PE28.18 Describe the etio-pathogenesis, diagnosis, clinical features, management and prevention of lower respiratory infections including bronchiolitis, wheeze associated LRTI Pneumonia and empyema

PE28.19 Describe the etio-pathogenesis, diagnosis, clinical features, management and prevention of asthma in children

PE28.20 Counsel the child with asthma on the correct use of inhalers in a simulated environment

Topic: Anemia and other Hemato-oncologic disorders in children

PE29.1 Discuss the etio-pathogenesis, clinical features, classification and approach to a child with anaemia

PE29.2 Discuss the etio-pathogenesis, clinical features and management of Iron Deficiency anaemia

PE29.3 Discuss the etiopathogenesis, clinical features and management of VIT B12, Folate deficiency anaemia

PE29.4 Discuss the etio-pathogenesis, clinical features and management of Hemolytic anemia, Thalassemia Major, Sickle cell anaemia, Hereditary spherocytosis, Auto-immune hemolytic anaemia and hemolytic uremic syndrome

PE29.5 Discuss the National Anaemia Control Program

PE29.6 Discuss the cause of thrombocytopenia in children: describe the clinical features and management of Idiopathic Thrombocytopenic Purpura (ITP)

PE29.7 Discuss the etiology, classification, pathogenesis and clinical features of Hemophilia in children

PE29.8 Discuss the etiology, clinical presentation and management of Acute Lymphoblastic Leukemia in children

PE29.9 Discuss the etiology, clinical presentation and management of lymphoma in children
 PE29.10 Elicit, document and present the history related to Hematology
 PE29.11 Identify external markers for hematological disorders e.g.. Jaundice, Pallor, Petechiae purpura, Ecchymosis, Lymphadenopathy, bone tenderness, loss of weight, Mucosal and large joint bleed
 PE29.12 Perform examination of the abdomen, demonstrate organomegaly
 PE29.13 Analyse symptoms and interpret physical signs to make a provisional/ differential diagnosis
 PE29.14 Interpret CBC, LFT
 PE29.15 Perform and interpret peripheral smear
 PE29.16 Discuss the indications for Hemoglobin electrophoresis and interpret report
 PE29.17 Demonstrate performance of bone marrow aspiration in manikin
 PE29.18 Enumerate the referral criteria for Hematological conditions
 PE29.19 Counsel and educate patients about prevention and treatment of anemia
 PE29.20 Enumerate the indications for splenectomy and precautions

Topic: Systemic Pediatrics-Central Nervous system

PE30.1 Discuss the etio-pathogenesis, clinical features , complications, management and prevention of meningitis in children
 PE30.2 Distinguish bacterial, viral and tuberculous meningitis
 PE30.3 Discuss the etio-pathogenesis, classification, clinical features, complication and management of Hydrocephalus in children
 PE30.4 Discuss the etio-pathogenesis, classification, clinical features, and management of Microcephaly in children
 PE30.5 Enumerate the Neural tube defects. Discuss the causes, clinical features, types, and management of Neural Tube defect
 PE30.6 Discuss the etio-pathogenesis, clinical features, and management of Infantile hemiplegia
 PE30.7 Discuss the etio-pathogenesis, clinical features, complications and management of Febrile seizures in children
 PE30.8 Define epilepsy. Discuss the pathogenesis, clinical types, presentation and management of Epilepsy in children
 PE30.9 Define status Epilepticus. Discuss the clinical presentation and management
 PE30.10 Discuss the etio-pathogenesis, clinical features and management of Mental retardation in children
 PE30.11 Discuss the etio-pathogenesis, clinical features and management of children with cerebral palsy
 PE30.12 Enumerate the causes of floppiness in an infant and discuss the clinical features, differential diagnosis and management
 PE30.13 Discuss the etio-pathogenesis, clinical features, management and prevention of Poliomyelitis in children
 PE30.14 Discuss the etio-pathogenesis, clinical features and management of Duchene muscular dystrophy
 PE30.15 Discuss the etio-pathogenesis, clinical features and management of Ataxia in children
 PE30.16 Discuss the approach to and management of a child with headache

PE30.17 Elicit document and present an age appropriate history pertaining to the CNS
PE30.18 Demonstrate the correct method for physical examination of CNS including identification of external markers. Document and present clinical findings
PE30.19 Analyse symptoms and interpret physical findings and propose a provisional / differential diagnosis
PE30.20 Interpret and explain the findings in a CSF analysis
PE30.21 Enumerate the indication and discuss the limitations of EEG, CT, MRI
PE30.22 Interpret the reports of EEG, CT, MRI
PE30.23 Perform in a mannequin lumbar puncture. Discuss the indications, contraindication of the procedure

Topic: Allergic Rhinitis, Atopic Dermatitis, Bronchial Asthma , Urticaria Angioedema

PE31.1 Describe the etio-pathogenesis, management and prevention of Allergic Rhinitis in Children
PE31.2 Recognize the clinical signs of Allergic Rhinitis
PE31.3 Describe the etio-pathogenesis, clinical features and management of Atopic dermatitis in Children
PE31.4 Identify Atopic dermatitis and manage
PE31.5 Discuss the etio-pathogenesis, clinical types, presentations, management and prevention of childhood Asthma
PE31.6 Recognise symptoms and signs of Asthma
PE31.7 Develop a treatment plan for Asthma appropriate to clinical presentation & severity
PE31.8 Enumerate criteria for referral
PE31.9 Interpret CBC and CX Ray in Asthma
PE31.10 Enumerate the indications for PFT
PE31.11 Observe administration of Nebulisation
PE31 12 the etio pathogenesis features, complications and management of Urticaria Angioedema

Topic: Chromosomal Abnormalities

PE32.1 Discuss the genetic basis, risk factors, complications, prenatal diagnosis, management and genetic counselling in Down's Syndrome
PE32.2 Identify the clinical features of Down's Syndrome
PE32.3 Interpret normal Karyotype and recognize Trisomy 21
PE32.4 Discuss the referral criteria and Multidisciplinary approach to management
PE32.5 Counsel parents regarding 1. Present child 2. Risk in the next pregnancy
PE32.6 Discuss the genetic basis, risk factors, clinical features, complications, prenatal diagnosis, management and genetic counseling in Turner's Syndrome
PE32.7 Identify the clinical features of Turner Syndrome
PE32.8 Interpret normal Karyotype and recognize the Turner Karyotype

- PE32.9 Discuss the referral criteria and multidisciplinary approach to management of Turner Syndrome
- PE32.10 Counsel parents regarding 1. Present child 2. Risk in the next pregnancy
- PE32.11 Discuss the genetic basis, risk factors, complications, prenatal diagnosis, management and genetic counselling in Klinefelter Syndrome
- PE32.12 Identify the clinical features of Klinefelter Syndrome
- PE32.13 Interpret normal Karyotype and recognize the Klinefelter Karyotype

Topic: Endocrinology

- PE33.1 Describe the etio-pathogenesis clinical features, management of Hypothyroidism in children
- PE33.2 Recognize the clinical signs of Hypothyroidism and refer
- PE33.3 Interpret and explain neonatal thyroid screening report
- PE33.4 Discuss the etio-pathogenesis, clinical types, presentations, complication and management of Diabetes mellitus in children
- PE33.5 Interpret Blood sugar reports and explain the diagnostic criteria for Type 1 Diabetes
- PE33.6 Perform and interpret Urine Dip Stick for Sugar
- PE33.7 Perform genital examination and recognize Ambiguous Genitalia and refer appropriately
- PE33.8 Define precocious and delayed Puberty
- PE33.9 Perform Sexual Maturity Rating (SMR) and interpret
- PE33.10 Recognize precocious and delayed Puberty and refer
- PE33.11 Identify deviations in growth and plan appropriate referral

Topic: Vaccine preventable Diseases – Tuberculosis

- PE34.1 Discuss the epidemiology, clinical features, clinical types, complications of Tuberculosis in Children and Adolescents
- PE34.2 Discuss the various diagnostic tools for childhood tuberculosis
- PE34.3 Discuss the various regimens for management of Tuberculosis as per National Guidelines
- PE34.4 Discuss the preventive strategies adopted and the objectives and outcome of the National Tuberculosis Control Program
- PE34.5 Able to elicit, document and present history of contact with tuberculosis in every patient encounter
- PE34.6 Identify a BCG scar
- PE34.7 Interpret a Mantoux test
- PE34.8 Interpret a Chest Radiograph
- PE34.9 Interpret blood tests in the context of laboratory evidence for tuberculosis
- PE34.10 Discuss the various samples for demonstrating the organism e.g. Gastric Aspirate, Sputum, CSF, FNAC
- PE34.11 Perform AFB staining

PE34.12 Enumerate the indications and discuss the limitations of methods of culturing M.Tuberculi

PE34.13 Enumerate the newer diagnostic tools for Tuberculosis including BACTEC CBNAAT and their indications

PE34.14 Enumerate the common causes of fever and discuss the etiopathogenesis, clinical features, complications and management of fever in children

PE34.15 Enumerate the common causes of fever and discuss the etiopathogenesis, clinical features, complications and management of child with exanthematous illnesses like Measles, Mumps, Rubella & Chicken pox

PE34.16 Enumerate the common causes of fever and discuss the etiopathogenesis, clinical features, complications and management of child with Diphtheria, Pertussis, Tetanus.

PE34.17 Enumerate the common causes of fever and discuss the etiopathogenesis, clinical features, complications and management of child with Typhoid

PE34.18 Enumerate the common causes of fever and discuss the etiopathogenesis, clinical features, complications and management of child with Dengue, Chikungunya and other vector born diseases

PE34.19 Enumerate the common causes of fever and discuss the etiopathogenesis, clinical features, complications and management of children with Common Parasitic infections malaria, leishmaniasis, filariasis, helminthic infestations, amebiasis, giardiasis

PE34.20 Enumerate the common causes of fever and discuss the etiopathogenesis, clinical features, complications and management of child with Rickettsial diseases

Topic: The role of the physician in the community

PE35.1 Identify, discuss and defend medicolegal, socio-cultural and ethical issues as they pertain to health care in children (including parental rights and right to refuse treatment)

Integration

Anatomy

AN25.4 Describe embryological basis of: 1) atrial septal defect, 2) ventricular septal defect, 3) Fallot's tetralogy & 4) tracheo-oesophageal fistula

AN25.5 Describe developmental basis of congenital anomalies, transposition of great vessels, dextrocardia, patent ductus arteriosus and coarctation of aorta

AN25.9 Demonstrate surface marking of lines of pleural reflection, Lung borders and fissures, Trachea, Heart borders, Apex beat & surface projection of valves of heart

AN63.2 Describe anatomical basis of congenital

AN64.3 Describe various types of open neural tube defects with its embryological basis

AN74.1 Describe the various modes of inheritance with examples

AN74.2 Draw pedigree charts for the various types of inheritance & give examples of diseases of each mode of inheritance

AN74.4 Describe the genetic basis & clinical features of Achondroplasia, Cystic Fibrosis, Vitamin D resistant rickets, Hemophilia, Duchene's muscular dystrophy & Sickle cell anaemia

AN75.1 Describe the structural and numerical chromosomal aberrations

AN75.2 Explain the terms mosaics and chimeras with example

AN75.3 Describe the genetic basis & clinical features of Prader Willi syndrome, Edward syndrome & Patau syndrome

AN75.4 Describe genetic basis of variation; polymorphism and mutation

AN75.5 Describe the principles of genetic counselling

Physiology

PY11.6 Describe physiology of Infancy

PY11.9 Interpret growth charts

PY11.10 Interpret anthropometric assessment of infants

Biochemistry

BI5.3 Describe the digestion and absorption of dietary proteins

BI5.4 Describe common disorders associated with protein metabolism

BI7.3 Describe gene mutations and basic mechanism of regulation of gene expression

BI7.4 Describe applications of recombinant DNA technology, PCR in the diagnosis and treatment of diseases with genetic basis

BI8.1 Discuss the importance of various dietary components and explain importance of dietary fiber

BI8.2 Describe the types and causes of protein energy malnutrition and its Effects

BI8.5 Summarize the nutritional importance of commonly used items of food including fruits and vegetables. (macro-molecules & its importance)

BI10.5 Describe antigens and concepts involved in vaccine development

Pathology

PA12.2 Describe the pathogenesis of disorders caused by protein calorie malnutrition and starvation

PA21.2 Classify and describe the etiology, pathogenesis and pathology of vascular and platelet disorders including ITP and hemophilias

PA28.12 Define, classify and describe the genetics, inheritance etiology, pathogenesis, pathology, laboratory, urinary findings, distinguishing features, progression and complications of cystic disease of the kidney

PA28.14 Classify and describe the etiology, genetics, pathogenesis, pathology, presenting features, progression and spread of renal tumors

PA31 4 Enumerate and etiology

PA31.4 describe the etiology, hormonal dependency and pathogenesis of gynecomastia

PA35.2 Classify and describe the etiology, genetics, pathogenesis, pathology, presentation sequelae and complications of CNS tumors

Microbiology

MI1.8 Describe the mechanisms of immunity and response of the host Lecture Pediatrics Pathology immune system to infections

MI3.1 Enumerate the microbial agents causing diarrhea and dysentery. Describe the epidemiology, morphology, pathogenesis, clinical features, and diagnostic modalities of these agents

MI3.2 Identify the common etiologic agents of diarrhea and dysentery

MI5.1 Describe the etiopathogenesis, clinical course and discuss the laboratory diagnosis of meningitis

MI5.2 Describe the etiopathogenesis, clinical course and discuss the laboratory diagnosis of encephalitis

MI5.3 Identify the microbial agents causing meningitis

Pharmacology

PH1.12 Calculate the dosage of drugs using appropriate formulae for an individual patient, including children, elderly and patient with renal dysfunction

PH1.43 Describe and discuss the rational use of antimicrobials including antibiotic stewardship program

PH1.56 Describe basic aspects of Geriatric and Pediatric pharmacology

PH2 4 Demonstrate the correct method of calculation of drug dosage in patients including those used in special situations

Community Medicine

CM3.3 Describe the aetiology and basis of water borne diseases /jaundice/hepatitis/ diarrheal diseases

CM5.1 Describe the common sources of various nutrients and special nutritional requirements according to age, sex, activity, physiological conditions

CM5.2 Describe and demonstrate the correct method of performing a nutritional assessment of individuals, families and the community by using the appropriate method

CM5.3 Define and describe common nutrition related health disorders (including macro-PEM, Micro-iron, Zn, iodine, Vit. A), their control and management.

CM5.4 Plan and recommend a suitable diet for the individuals and families based on local availability of foods and economic status, etc in a simulated environment

CM5.5 Describe the methods of nutritional surveillance, principles of nutritional education and rehabilitation in the context of sociocultural factors

CM5.6 Enumerate and discuss the National Nutrition Policy, important national nutritional Programs including the Integrated Child Development Services Scheme (ICDS) etc

CM5.8 Describe and discuss the importance and methods of food fortification and effects of additives and adulteration

CM6.1 Formulate a research question for a study

CM6.2 Describe and discuss the principles and demonstrate the methods of collection, classification, analysis, interpretation and presentation of statistical data

CM6.3 Describe, discuss and demonstrate the application of elementary statistical methods including test of significance in various study designs

CM6.4 Enumerate, discuss and demonstrate common sampling techniques, simple statistical methods, frequency distribution, measures of central tendency and dispersion

CM8 Describe and discuss the epidemiological and control measures Viva General Medicine Microbiology including the use of essential laboratory tests at the primary care level for communicable diseases

CM8.3 Enumerate and describe disease specific National Health Programs including their prevention and treatment of a case

CM8.4 Describe the principles and enumerate the measures to control a disease epidemic

CM8.5 Describe and discuss the principles of planning, implementing and evaluating control measures for disease at community level bearing in mind the public health importance of the disease

CM9.2 Define, calculate and interpret demographic indices including birth rate, death rate

CM10.1 Describe the current status of Reproductive, maternal, newborn and Child Health

CM10.2 Enumerate and describe the methods of screening high risk groups and common health problems

CM10.3 Describe local customs and practices during pregnancy, childbirth, lactation and child feeding practices

CM10.4 Describe the reproductive, maternal, newborn & child health (RMCH); child survival and safe motherhood interventions

CM10.5 Describe Universal Immunization Program; Integrated Management of Neonatal and Childhood Illness (IMNCI) and other existing Programs

Forensic Medicine & Toxicology

FM1.9 Describe the importance of documentation in medical practice in regard to medicolegal examinations, Medical Certificates and medicolegal reports especially

– maintenance of patient case records, discharge summary, prescribed registers to be maintained in Health Centres.

- maintenance of medico-legal register like accident register.
- documents of issuance of wound certificate
- documents of issuance of drunkenness certificate.
- documents of issuance of sickness and fitness certificate.
- documents for issuance of death certificate.
- documents of Medical Certification of Cause of Death – Form Number 4 and 4A
- documents for estimation of age by physical, dental and radiological examination and issuance of certificate

FM2.27 Define and discuss infanticide, foeticide and stillbirth

FM2.28 Describe and discuss signs of intrauterine death, signs of live birth, viability of foetus, age determination of foetus, DOAP session of ossification centres, Hydrostatic test, Sudden infants death syndrome and Munchausen's syndrome by proxy

FM3.29 Describe and discuss child abuse and battered baby syndrome

Dermatology, Venereology & Leprosy

DR5.1 Describe the etiology, microbiology, pathogenesis, natural history, clinical features, presentations and complications of scabies

DR5.2 Identify and differentiate scabies from other lesions

DR5.3 Enumerate and describe the pharmacology, administration and adverse reaction of pharmacotherapies for scabies

DR6.1 Describe the etiology, pathogenesis and diagnostic features of pediculosis

DR6.2 Identify and differentiate pediculosis from other skin lesions

DR7.1 Describe the etiology, microbiology, pathogenesis, clinical presentations and diagnostic features of dermatophytes

DR8.1 Describe the etiology, microbiology, pathogenesis, clinical presentations and diagnostic features of common viral infections of the skin

DR17.1 Enumerate and identify the cutaneous findings in vitamin A deficiency

DR17.2 Enumerate and describe the various skin changes in Vitamin B complex deficiency

DR17.3 Enumerate and describe the various changes in Vitamin C deficiency

DR17.4 Enumerate and describe the various changes in Zinc deficiency

Anesthesiology

AS2.1 Enumerate the indications, describe the steps and demonstrate in a simulated environment basic life support in adults children and neonates

Psychiatry

PS14.1 Enumerate and describe the magnitude and etiology of psychiatric disorders occurring in childhood and adolescence

PS14.2 Enumerate, elicit, describe and document clinical features in patients with psychiatric disorders occurring in childhood and adolescence

PS14.3 Describe the treatment of stress related disorders including behavioural, psychosocial and pharmacologic therapy

PS14.4 Demonstrate family education in a patient with psychiatric disorders occurring in childhood and adolescence in a simulated environment

PS14.5 Enumerate and describe the pharmacologic basis and side effects of drugs used in psychiatric disorders occurring in childhood and adolescence

PS15.1 Describe the aetiology and magnitude of mental retardation

PS15.2 Describe and discuss intelligence quotient and its measurement

PS15.3 Elicit and document a history and clinical examination and choose appropriate investigations in a patient with mental retardation

PS15.4 Describe the psychosocial interventions and treatment used in mental retardation

General Medicine

IM23.1 Discuss and describe the methods of nutritional assessment in an adult and calculation of caloric requirements during illnesses

IM23.2 Discuss and describe the causes and consequences of protein malnutrition in the hospital

IM23.3 Discuss and describe the aetiology, causes, clinical manifestations, complications, diagnosis and management of common vitamin deficiencies

IM23.4 Enumerate the indications for enteral and parenteral nutrition in critically ill patients

Obstetrics & Gynecology

OG1.2 Define and discuss perinatal mortality and morbidity including perinatal and neonatal mortality and morbidity audit

OG18.1 Describe and discuss the assessment of maturity of the newborn, diagnosis of birth asphyxia, principles of resuscitation, common problems

OG18.2 Demonstrate the steps of neonatal resuscitation in a simulated environment

OG18.3 Describe and discuss the diagnosis of birth asphyxia

OG18.4 Describe the principles of resuscitation of the newborn and enumerate the common problems encountered

Physical Medicine & Rehabilitation

PM3.1 Describe and discuss the clinical features, types, evaluation, diagnosis and management of cerebral palsy

PM3.2 Recognize, describe and discuss the spectrum of multiple disability : cognitive, motor, visual and hearing in cerebral palsy

PM3.3 Recognize, describe and discuss the role of special education in children with learning disabilities

PM3.4 Demonstrate spasticity, rigidity and dystonia in children with cerebral palsy

PM3.5 Enumerate the indications and describe the therapies for spasticity including medications, serial casts, nerve blocks, botulinum toxin injections

PM3.6 Enumerate the indications and describe prevention of joint subluxations and contractures by proper positioning, and use of special chairs, and appliances

PM3.7 Enumerate the first aid measures to be used in patients with seizures

SUMMARY OF TIME ALLOTTED, TEACHING AND LEARNING METHODS AND
STUDENT ASSESSMENT

TIME ALLOTTED

Year	Lectures (Hours)	Small Group Learning (Tutorials, Seminar, Integrated Learning) (Hours)	Clinical Postings(Hours)	Self Directed Learning(Hours)	Total(Hours)
First Professional Year	00	00	00	00	00
Second Professional Year	00	00	2 Weeks (30 Hrs) (15 Hrs/wk)	00	30
Third Professional Year Part 1	20	30	4 Weeks (72 Hrs) (18 Hrs/wk)	5	127
Third Professional Year Part 2	20	35	4 weeks (72 Hrs) (18 Hrs/wk)	10	137

To be noted:

- The number of hours mentioned above is rough guidelines that can be modified to suit the specific requirements of a medical college.
- It is recommended that didactic teaching be restricted to less than one third of the total time allotted for that discipline.
- Greater emphasis is to be laid on hands-on training, symposia, seminars, small group discussions, problem-oriented and problem-based discussions and self- directed learning.
- Students must be encouraged to take active part in and shared responsibility for their learning.

INTERNAL EXAM:

2nd Year MBBS

PHASE	At the end of 2 weeks clinical posting		
	Theory	Practical	Total Marks
Second year	50	50	100

3rd Year MBBS Part 1

PHASE	I-Exam (At the end of 1 st Term)			II-Exam (At the end of 2 nd Term)		
	Theory	Practical	Total Marks	Theory	Practical	Total Marks
Third year Part 1	50	50	100	50	50	100

3rd Year MBBS Part I: 2 (Including Prelim)

PHASE	I-Exam (At the end of 1 st Term)			II-Exam (At the end of 2 nd Term)			Prelims (Before External Exams)		
	Theory	Practical	Total Marks	Theory	Practical	Total Marks	Theory	Practical	Total Marks
Third year Part 2	50	50	100	50	50	100	100	100	200

UNIVERSITY EXAMINATIONS

TABLE SHOWING SCHEME FOR CALCULATION OF UNIVERSITY
EXAMINATION MARKS

Name of the subject	Evolution parameter	Maximum marks	Passing marks
Paediatrics	Written - Theory		
	Paper	100	50
	Practical/Oral	100	50

- Mandatory 50% marks in theory and practical (practical = practical/ clinical + viva)
[theory=theory paper(s) only]
- Internal assessment marks are **not to be added** to marks of the University examinations and should be **shown separately** in the grade card.
- As per proposed GMER 2019, the University examinations will be held in the month of January for third phase Part 2.