

SANKALCHAND PATEL UNIVERSITY

**FACULTY OF MEDICINE
BACHELOR OF MEDICINE AND BACHELOR OF SURGERY
(M.B.B.S.)**

PEDIATRICS

CURRICULUM / SYLLABUS & ASSESSMENT

**(AS PER COMPETENCY BASED MEDICAL EDUCATION
CURRICULUM FOR THE INDIAN MEDICAL GRADUATE-2024,
NATIONAL MEDICAL COMMISSION)**

(In force for students admitted in year (2024-25) and thereafter)

Teaching & Evaluation Scheme for Faculty of Medicine

Semester/Year: Third Year M.B.B.S. Part-II

Program Name: Bachelor of Medicine and Bachelor of Surgery

Effective from Academic Year: 2024-2025

Program Code: MB01

Course Code	Subject Name	Hrs/Week			UA		IA		Total	
		L	P	Total	Max	Min	Max	Min	Max	Min
2PE301	Pediatrics	1	-	1	100	40	-	-	100	100
2PE302	Pediatrics Practical	-	18	18	100	40	-	-	100	
2PE303	Pediatrics IA Theory	-	-	-	-	-	100	40	200	100
2PE304	Pediatrics IA Practical	-	-	-	-	-	100	40		

PEDIATRICS

GOALS

At end of training on pediatrics, the student should be able to:

- Assess and promote optimal growth, development and nutrition of children and adolescents and identify deviations from normal.
- Recognise and provide emergency and routine ambulatory and First Level Referral Unit care for neonates, infants, children and adolescents and refer as may be appropriate.
- Perform procedures as indicated for children of all ages in the primary care setting.
- Recognise children with special needs and refer appropriately.
- Promote health and prevent diseases in children.
- Participate in National Programmes related to child health and in conformation with the Integrated Management of Neonatal and Childhood Illnesses (IMNCI) Strategy
- Communicate appropriately and effectively.
- Describe the normal Growth and Development during fetal life, Neonatal period, Childhood and Adolescence and the deviations thereof.
- Describe the common Pediatric disorders and emergencies in terms of Epidemiology, Etiopathogenesis, Clinical manifestations, Diagnosis and also describe the rational therapy and rehabilitation services.

- Workout age related requirements of calories, nutrients, fluids, dosages of drugs etc. in health and disease.
- Describe preventive strategies for common infectious disorders, Malnutrition, Genetic and Metabolic disorders, Poisonings, Accidents and Child abuse.
- Outline national programs related to child health including Immunisation programs.
- Take detailed Pediatric and Neonatal history and conduct an appropriate physical examination of children and neonates, make clinical diagnosis,
- conduct common Bedside investigative procedures, interpret common laboratory investigations, plan and institute therapy.
- Take anthropometric measurements, resuscitate newborn, prepare oral rehydration solution, perform tuberculin test, administer vaccines available under current National programs, perform venesection, start intravenous fluids and provide nasogastric feeding.
- Demonstrate knowledge about all steps of the diagnostic procedures such as lumbar puncture, liver and kidney biopsy, bone marrow aspiration, pleural and ascitic tap.
- Distinguish between normal Newborn babies and those requiring special care and institute early care to all newborn babies including care of preterm and low birth weight babies, provide correct guidance and counselling about Breast feeding and Complementary feeding.
- Provide ambulatory care to all not so sick children, identify indications for specialised/ inpatient care and ensure timely referral to those who require hospitalisation

Pediatrics syllabus (with NMC competency number)

Topic 1: Normal Growth and Development

PE1.1 Define the terminologies Growth and development and describe the factors affecting normal growth.

PE1.2 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 and Perform Anthropometric measurements, document in growth-charts and interpret.

PE1.3 Define development and Describe the normal developmental milestones with respect to motor, behaviour, social, adaptive and language. Discuss the factors affecting development and describe the assessment methods of development.

Topic2: Common problems related to Growth

PE2.1 Discuss the etio-pathogenesis, clinical features, assessment and management of a child who fails to thrive

PE2.2 Counselling the parent of a child with failure to thrive.

PE2.3 Discuss the etio-pathogenesis, clinical features and management of a child with short stature. Assessment of a child with short stature.

Topic 3: Common problems related to Development-1 (Developmental delay, Cerebral palsy)

PE3.1 Define developmental delay. Describe the causes of developmental delay and disability including intellectual disability in children

PE3.2 Explain the approach to a child with developmental delay

PE3.3 Counsel a parent of a child with developmental delay

PE3.4 Visit a Child Developmental Unit and observe its functioning

Topic 4: Common problems related to Development-2

PE4.1 Describe the etiology, clinical features, diagnosis and management of a child with Attention Deficit Hyperactivity Disorder (ADHD)

PE4.2 Describe the etiology, clinical features, diagnosis and management of a child with Autism

Topic 5: Common problems related to behavior

PE5.1 Describe the clinical features, diagnosis and management of Feeding problems

PE5.2 Describe the clinical features, diagnosis and management of Breath Holding spells

PE5.3 Describe the clinical features, diagnosis and management of temper tantrums and Pica

PE5.4 Explain the etiology, clinical features and management of Enuresis

Topic 6: Adolescent Health & common problems related to Adolescent Health

PE6.1 Define Adolescence and Describe the stages of adolescence

PE6.2 Describe the physical, physiological and psychological changes during adolescence (Puberty)

PE6.3 Describe the general health problems during adolescence

PE6.4 Describe adolescent sexuality and common problems related to it

PE6.5 Describe the common Adolescent eating disorders (Anorexia Nervosa, Bulimia)

PE6.6 Describe the common mental health problems during adolescence

PE6.7 Respecting patient privacy and maintaining confidentiality while dealing with adolescence

PE6.8 Perform routine Adolescent Health check up including eliciting history, Bedside clinics Skills station performing examination including SMR (Sex Maturity Rating), growth assessments (using Growthcharts) and systemic exam including thyroid and Breast exam and the HEADSS screening

PE6.9 Explain the objectives and functions of AFHS (Adolescent Friendly Health Services) and the referral criteria

PE6.10 Visit to the Adolescent Clinic

PE6.11 Enumerate the importance of obesity and other NCD in adolescents

PE6.12 Enumerate the prevalence and importance of recognition of sexual abuse and drug abuse in adolescents and children

Topic 7: To promote and support optimal Breast feeding for Infants

PE7.1 Awareness on the cultural beliefs and practices of breastfeeding and explain physiology of lactation

PE7.2 Describe the composition and types of breast milk and discuss the differences between cow's milk and Human milk

PE7.3 Describe the advantages of breast milk

PE7.4 Observe the correct technique of breastfeeding and distinguish right Bedside clinics, Skills lab Skill assessment 3 from wrong techniques

PE7.5 Enumerate the baby friendly hospital initiatives

PE7.6 Describe the principles of IYCF (Infant and Young Child Feeding)

PE7.7 Participate in World Breastfeeding Week (WBW) celebration at your institute

PE7.8 Describe the structure and functioning of human milk bank and visit the nearest human milk bank

Topic 8: Complementary Feeding Number of competencies :

PE8.1 Define the term Complementary Feeding

PE8.2 Explain the principles, the initiation, attributes, frequency, techniques

PE8.3 Enumerate the common complementary foods

PE8.4 Elicit history on the Complementary Feeding habits

PE8.5 Counsel and educate mothers on the best practices in Complementary Feeding

Topic 9: Normal nutrition, assessment and monitoring

PE9.1 Describe 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 Explain the Calorific value of common Indian foods

PE9.4 Elicit document and present an appropriate nutritional history and perform a dietary recall

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 10: 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 Malnutrition (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 Counsel parents of children with SAM and MAM

PE10.5 Enumerate the role of locally prepared therapeutic diets and ready to use therapeutic diets

PE10.6 Explain the Adolescent Nutrition and common nutritional problems

Topic 11: Obesity in children Number

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

PE11.2 Describe 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
Standardized patients

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

Topic 12: Micronutrients in Health and disease-1

PE12.1 Describe the RDA, dietary sources of Vitamin A, its metabolism.

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

PE12.3 Describe the causes, clinical features, diagnosis and management of Deficiency/excess of Vitamin D (Rickets and Hypervitaminosis D)

PE12.4 Describe the causes, clinical features, diagnosis and management of deficiency of Vitamin E

PE12.5 Describe the RDA, dietary sources of Vitamin K and their role in health and disease

PE12.6 Describe the causes, clinical features, diagnosis, management and prevention of deficiency of Vitamin K

PE12.7 Describe the causes, clinical features, diagnosis and management of deficiency of B complex Vitamins

PE12.8 Describe the RDA, dietary sources of Vitamin C and their role in Health and disease, clinical features of deficiency and management

Topic 13: Micronutrients in Health and disease -2: Iron, Iodine, Calcium, Magnesium

PE13.1 Describe the RDA, dietary sources of Iron and their role in health and disease, clinical features of iron deficiency, and management

PE13.2 Describe the RDA, dietary sources of Iron and their role in health and disease, clinical features of iron deficiency, and management Describe the National anaemia control program and its recommendations

PE13.3 Describe the RDA, dietary sources of Iodine and their role in Health and disease, deficiency, and Goiter control program

PE13.4 Describe the RDA, dietary sources of Calcium and Magnesium and their role in health and disease, clinical features and management of deficiency states.

Topic 14: Poisoning

PE14.1 Explain the risk factors, clinical features, diagnosis and management of Kerosene ingestion

PE14.2 Explain the risk factors, clinical features, diagnosis and management of Organophosphorus poisoning

PE14.3 Describe the risk factors, clinical features, diagnosis and management of paracetamol poisoning

Topic 15: Fluid and electrolyte balance

PE15.1 Describe the fluid and electrolyte requirement in health and disease

PE15.2 Interpret electrolyte report and describe the management of sodium and potassium imbalance

PE15.3 Demonstrate the steps of inserting an IV cannula in a model

PE15.4 Demonstrate the steps of inserting an interosseous line in a mannequin

Topic 16: 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 months to 5 years using IMNCI guidelines and stratify

PE16.4 Identify children with undernutrition as per IMNCI criteria and plan

PE16.5 Identify and stratify risk in a sick neonate using IMNCI guidelines

PE16.6 Apply the IMNCI guidelines in risk stratification of children with diarrheal dehydration and refer Book

Topic 17: The National Health programs, NHM

PE17.1 Describe 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 RCH, RMNCH A+, RBSK, RKSK, JSSK mission Indradhanush and ICDS

Topic 18: National Programs, RCH - Universal Immunizations program

PE18.1 Explain the components of the universal immunization programme and the national immunization programme

PE18.2 Explain the epidemiology of Vaccine preventable diseases

PE18.3 Describe Vaccine with regards to classification of vaccines, strain used, dose, route, schedule, risks, benefits and side effects, indications and Contraindications

PE18.4. Define cold-chain and discuss the methods of safe storage and handling of vaccines

PE18.5 Describe immunization in special situations – HIV positive children, immunodeficiency, pre-term, organ transplants, those who received blood and blood products, splenectomised children, adolescents, travellers.

PE18.6 Assess patient for fitness for immunization and prescribe an age- appropriate immunization schedule

PE18.7 Educate and counsel apparent for immunization

PE18.8 Describe the components of safe vaccine practice – Patient education/ counselling; adverse events following immunization, safe injection practices, documentation and Medico-legal implications

PE18.9 Observe the handling and storing of vaccines

PE18.10 Document Immunization in an immunization record

PE18.11 Observe the administration of UIP vaccines

PE18.12 Demonstrate the correct administration of different vaccines

PE18.13 Explain the term implied consent in Immunization services

PE18.14 Enumerate available newer vaccines and their indications including pentavalent pneumococcal, rotavirus, JE, Hepatitis A, Influenza, COVID, typhoid, IPV & HPV

Topic 19: Care of the Normal New born, and High risk New born

PE19.1 Define the common neonatal nomenclatures including the classification new born and describe the characteristics of a Normal

Term Neonate and High-Risk Neonates, Explain the care of a normal neonate

PE19.2 Perform Neonatal resuscitation on a manikin

PE19.3 Assessment of a normal neonate. Explain the follow up care for neonates including Breast Feeding, Temperature maintenance, immunization, importance of growth monitoring and red flags

PE19.4 Describe the etiology, clinical features and management of Birth asphyxia

PE19.5 7 Describe the etiology, clinical features and management of Respiratory distress in New-born including meconium aspiration and transient tachypnoea of newborn

PE19.6 Explain the etiology, clinical features and management of Birth injuries

PE19. 7 Explain the etiology, clinical features and management of Hemorrhagic disease of Newborn

PE19.8 Describe the clinical characteristics, complications and management of Low birth weight (preterm and Small for gestation)

PE19.9 Describe the temperature regulation in neonates, clinical features and management of Neonatal Hypothermia

PE19.10 Describe the temperature regulation in neonates, clinical features and management of Neonatal Hypoglycemia

PE19.11 Explain the etiology, clinical features and management of Neonatal hypocalcemia

PE19.12 Describe the etiology, clinical features and management of Neonatal seizures

PE19.13 Explain the etiology, clinical features and management of Neonatal Sepsis

PE19.14 Describe the etiology, clinical features and management of Perinatal infections

PE19.15 Describe the etiology, clinical features and management of Neonatal hyperbilirubinemia

PE19.16 Identify clinical presentations of common surgical conditions in the newborn including TEF, esophageal atresia, anal atresia, cleft lip and palate, congenital diaphragmatic hernia and causes of acute abdomen

PE19.17 Describe the risk factors, clinical features, diagnosis and management of Oxygen toxicity

Topic 20: Genito-Urinary system

PE20.1 Enumerate the etio-pathogenesis, clinical features, complications and management of Urinary Tract infection in children

PE20.2 Enumerate the etio-pathogenesis, clinical features, complications and management of Acute Post-Streptococcal Glomerulonephritis in Children

PE20.3 Describe the approach and referral criteria to a child with Proteinuria

PE20.4 Describe the approach and referral criteria to a child with Hematuria

PE20.5 Enumerate the etio-pathogenesis, clinical features, complications and management of Acute Renal Failure in children

PE20.6 Enumerate the etio-pathogenesis, clinical features, complications and management of Chronic Renal Failure in Children

PE20.7 Enumerate the etio-pathogenesis, clinical features, complications and management of Wilms Tumor

PE20.8 Perform and interpret the common analytes in a Urine examination

PE20.9 Interpretation of Plain XRay of KUB

PE21.1 Enumerate the common Rheumatological problems in children. Discuss the clinical approach to recognition and referral of a child with Rheumatological problem

PE21.2 Describe the etiopathogenesis, diagnosis and management of Henoch Schoenlein Purpura.

PE21.3 Describe the etiopathogenesis, diagnosis and management of Kawasaki Disease

PE21.4 Describe the etiopathogenesis, diagnosis and management of SLE

PE21.5 Describe the etiopathogenesis, diagnosis and management of JIA

Topic 22: Cardiovascular system- Heart Diseases Number of competencies: (11) Number of competencies that require certification:(NIL)

PE22.1 Describe the Hemodynamic changes, clinical presentation, complications and management of Acyanotic Heart Diseases

PE22.2 Describe the Hemodynamic changes, clinical presentation, complications and management of Cyanotic Heart Diseases

PE22.3 Explain the etio-pathogenesis, clinical presentation and management of cardiac failure in infant and children

PE22.4 Explain the etio-pathogenesis, clinical presentation and management of Acute Rheumatic Fever in children

PE22.5 Describe the etio-pathogenesis, clinical features and management of Infective endocarditis in children

PE22.6 Describe the etiopathogenesis, grading, clinical features and management of hypertension in children

PE22.7 Record pulse, blood pressure, temperature and respiratory rate and interpret as per the age

PE22.8 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

PE22.9 Interpret a chest X-ray and recognize cardiomegaly

PE22.10 Interpret Pediatric ECG

PE22.11 Demonstrate empathy while dealing with children with cardiac diseases in every patient encounter

Topic 23: GIT and Hepatobiliary system

PE 23.1 Define vomiting, discuss causes, evaluation & management of vomiting in children

PE23.2 Define constipation discuss causes, evaluation & management of constipation in children

PE23.3 Discuss the causes, evaluation and management of abdominal pain in children

PE23.4 Define diarrhea (acute diarrhea, chronic diarrhea, persistent diarrhea). Discuss etiology, risk factors, clinical features, complications, investigations and treatment (according to WHO guidelines) of acute gastroenteritis

PE23.5 Discuss the causes, clinical presentation and management of dysentery in children

PE23.6 Discuss the physiological basis of ORT, types of ORS and the composition of various types of ORS. Discuss composition of fluids used in management of diarrhea. Discuss the role of antibiotics, antispasmodics, anti-secretory drugs, probiotics, anti-emetics in acute diarrheal diseases

PE23.7 Elicit history pertaining to diarrheal diseases. Assess for signs & symptoms of dehydration, shock, prerenal AKI, electrolyte disturbances, document and present.

PE23.8 Perform and interpret stool examination including Hanging Drop, Interpret RFT and electrolyte report In the context of diarrhea

PE23.9 Perform NG tube insertion in a manikin

PE23.10 Perform IV cannulation in a model

PE23.11 Perform Interosseous insertion model

PE23.12 Discuss the etio-pathogenesis, clinical presentation and management of Malabsorption in Children and its causes including celiac disease

PE23.13 Discuss the etio-pathogenesis, clinical features and management of acute hepatitis in children

PE23.14 Discuss the etio-pathogenesis, clinical features and management of Fulminant Hepatic Failure in children

PE23.15 Discuss the etio-pathogenesis, clinical features and management of chronic liver diseases in children

PE23.16 Discuss the etio-pathogenesis, clinical features and management of Portal Hypertension in children

PE23.17 Elicit, document and present the history related to diseases of Gastrointestinal system

PE23.18 Identify external markers for GI and Liver disorders e.g. Jaundice, Pallor, Gynecomastia, Spider angioma, Palmar erythema, Ichthyosis, Caput medusa, Clubbing, failing to thrive, Vitamin A and D deficiency

PE23.19 Perform examination of the abdomen, demonstrate organomegaly, ascites etc.

PE23.20 Interpret Liver Function Tests, viral markers, ultrasound report

PE23.21 Enumerate the indications for Upper GI endoscopy

Topic: 24 Pediatric Emergencies – Common Pediatric Emergencies

PE24.1 Describe the etio-pathogenesis, clinical approach and management of cardio-respiratory arrest in children

PE24.2 Describe the etio-pathogenesis and management of respiratory distress in children

PE24.3 Describe the etio-pathogenesis, clinical approach and management of Shock in children

PE24.4 Describe the etio-pathogenesis, clinical approach and management of Status epilepticus

PE24.5 Describe the etio-pathogenesis, clinical approach and management of an unconscious child

PE24.6 Explain oxygen therapy, in Pediatric emergencies and modes of administration

PE24.7 Observe the various methods of administering Oxygen

PE24.8 Assess airway and breathing: recognise signs of severe respiratory distress. Check for cyanosis, severe chest indrawing, Grunting

PE24.9 Assess airway and breathing. Demonstrate the method of positioning of an infant & child to open airway in a Simulated environment

PE24.10 Assess airway and breathing: administer oxygen using correct Technique and appropriate flow rate

PE24.11 Assess airway and breathing perform assisted ventilation by Bag and mask in a simulated environment

PE24.12 Check for signs of shock i.e. pulse, Blood pressure, CRT

PE24.13 Secure an IV access in a simulated environment

PE24.14 Choose the type of fluid and calculate the fluid requirement in shock

PE24.15 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.

PE24.16 Assess for signs of severe dehydration

PE24.17 Monitoring and maintaining temperature: define hypothermia. Describe the clinical features, complications and management of Hypothermia

PE24.18 Describe the advantages and correct method of keeping an infant warm by skin- to- skin contact

PE24.19 Describe the environmental measures to maintain temperature

PE24.20 Assess for hypothermia and maintain temperature

PE24.21 Provide BLS for children in manikin

PE24.22 Counsel parents of dangerously ill/ terminally ill child to break a bad

PE24.23 Obtain Informed Consent

Topic 25: Respiratory system

PE25.1 Describe the etio-pathogenesis, clinical features and management of Acute Otitis Media (AOM)

PE25.2 Describe the etio-pathogenesis, clinical features and management of Epiglottitis

PE25.3 Explain the etio-pathogenesis, clinical features and management of Acute laryngo- tracheo-bronchitis

PE25.4 Describe the etiology, clinical features and management of Stridor in Children

PE25.5 Describe the types, clinical presentation, and management of foreign body aspiration in infants and children

PE25.6 Describe the etio-pathogenesis, diagnosis, clinical features, management and prevention of lower respiratory infections including bronchiolitis, wheeze associated LRTI Pneumonia and empyema

Topic 26: Anemia and other Hemato-oncologic disorders in children

PE26.1 Explain the etio-pathogenesis, clinical features, classification and approach to a child with anaemia

PE26.2 Describe the etio-pathogenesis, clinical features and management of Iron Deficiency anaemia

PE26.3 Describe the etiopathogenesis, clinical features and management of VITB12, Folate deficiency anaemia

PE 26.4 Explain 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

PE26.5 Describe the National Anaemia Control Program

PE26.6 Describe the cause of thrombocytopenia in children: describe the clinical features and management of Idiopathic Thrombocytopenic Purpura(ITP)

PE26.7 Explain the etiology, classification, pathogenesis and clinical features of Hemophilia in children

PE26.8 Explain the etiology, clinical presentation and management of Acute Lymphoblastic Leukemia in children

PE26.9 Explain the etiology, clinical presentation and management of lymphoma in children

PE26.11 Interpret CBC, LFT

PE26.10 Perform examination of the abdomen, demonstrate organomegaly

PE26.12 Perform and interpret peripheral smear

PE26.13 Explain the indications for Hemoglobin electrophoresis and interpret

PE26.14 Demonstrate, performance of bone marrow aspiration in manikin

PE26.15 Enumerate the referral criteria for Hematological conditions

PE26.16 Counsel and educate patients about prevention and treatment of anemia

PE26.17 Enumerate the indications for splenectomy and precautions

Topic 27: Systemic Pediatrics-Central Nervous system

PE27.1 Explain the etio-pathogenesis, clinical features, complications, management, and prevention of acute bacterial Meningitis in children

PE27.2 Describe the etio-pathogenesis, clinical features, complications, management and prevention of tuberculous meningitis

PE27.3 Distinguish bacterial, viral and tuberculous meningitis

PE27.4 Explain the etio-pathogenesis, classification, clinical features, complication and management of Hydrocephalus in children

PE27.5 Explain the etio-pathogenesis, clinical features, and management of Infantile hemiplegia

PE27.6 Explain the etio-pathogenesis, clinical features, complications and management of Febrile seizures in children

PE27.7 Define epilepsy. Discuss the pathogenesis, clinical types, presentation and management of Epilepsy in children

PE27.8 Define status Epilepticus. Discuss the clinical presentation and management

PE27.9 Describe the etio-pathogenesis, clinical features and management of Mental retardation in children

PE27.10 Describe the etio-pathogenesis, clinical features and management of children with cerebral palsy

PE27.11 Enumerate the causes of floppiness in an infant and discuss the clinical features, differential diagnosis and management

PE27.12 Explain the etio-pathogenesis, clinical features and management of Duchenne muscular dystrophy

PE27.13 Interpret and explain the findings in a CSF analysis

PE27.14 Perform in a mannequin lumbar puncture. Discuss the indications, contraindication of the procedure

Topic 28: Allergic Rhinitis, Atopic Dermatitis, Bronchial Asthma

PE28.1 Describe the etio-pathogenesis, clinical signs, management and prevention of Allergic Rhinitis in Children

PE28.2 Explain the etio-pathogenesis, clinical types, presentations, management and prevention of childhood Asthma

PE28.3 Develop a treatment plan for Asthma appropriate to clinical presentation & severity

PE28.4 Enumerate the indications for PFT

PE28.5 Observe administration of Nebulization

Topic 29: Chromosomal Abnormalities

PE29.1 Describe the genetic basis, risk factors, clinical features complications, prenatal diagnosis, management and genetic counselling in Down Syndrome.

PE29.2 Interpret normal Karyotype and recognize Trisomy 21
S SH Y Bedside clinics, Skills lab Log book

PE29.3 Counsel parents regarding -1. Present child, 2. Risk in the next pregnancy

PE29.4 Describe the genetic basis, risk factors, clinical features, complications, prenatal diagnosis, management and genetic counselling in Turner's Syndrome

PE29.5 Describe the genetic basis, risk factors, clinical features, complications, prenatal diagnosis, management and genetic counselling in Klinefelter Syndrome

Topic 30: Endocrinology

PE30.1 Describe the etiology (congenital & acquired), clinical features, management of Hypothyroidism in children

PE30.2 Interpret and explain neonatal thyroid screening report

PE30.3 Describe the etiology, clinical types, clinical features, diagnostic criteria, complications and management of Diabetes mellitus in children

PE30.4 Recognize clinical features DKA, Perform and interpret Urine Dip Stick for Sugar & Ketone bodies & refer

PE30.5 Perform genital examination and recognize Ambiguous Genitalia, counsel and refer

PE30.6 Define precocious and delayed Puberty, Perform Sexual Maturity Rating (SMR), Recognize precocious and delayed Puberty and refer

PE30.7 Identify deviations in growth and plan appropriate referral

Topic 31: Vaccine preventable Diseases – Tuberculosis

PE31.1 Describe the epidemiology, clinical features, clinical types, complications of Tuberculosis in Children and Adolescents

PE31.2 Describe the various diagnostic tools for childhood tuberculosis

PE31.3 Describe the various regimens for management of Tuberculosis as per National Guidelines

PE31.4 Describe the preventive strategies adopted and the objectives and outcome of the National Tuberculosis Control Program

PE31.5 Elicit, document and present history of contact with tuberculosis in every patient encounter, Identify BCG scar and interpret a Mantoux test.

PE31.6 Interpret blood tests in the context of laboratory evidence for tuberculosis

PE31.7 Describe the various samples for demonstrating the organism e.g. Gastric Aspirate, Sputum, CSF, FNAC

PE31.8 Enumerate the indications, discuss the limitations of methods of culturing M. Tuberculosis and the newer diagnostic tools for Tuberculosis including BACTEC CBNAAT and their indications

PE31.9 Enumerate the common causes of fever and describe the etiopathogenesis, clinical features, complications and management of fever in children

PE31.10 Enumerate the common causes of fever and describe the etiopathogenesis, clinical features, complications and management of child with exanthematous illnesses like Measles, Mumps, Rubella & Chicken pox

PE31.11 Enumerate the common causes of fever and discuss the etiopathogenesis, clinical features, complications and management of child with Diphtheria, Pertussis, Tetanus.

PE31.12 Enumerate the common causes of fever and discuss the etiopathogenesis, clinical features, complications and management of child with Typhoid

PE31.13 Enumerate the common causes of fever and discuss the etiopathogenesis, clinical features, complications and management of child with Dengue, Chikungunya and other vectorborne diseases

PE31.14 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

Topic 32: The role of the physician in the community

PE32.1 Identify, Describe and Defend medicolegal, socio-cultural and ethical issues as they pertain to health care in children (including Parental rights and right to refuse treatment)

**SUMMARY OF TIME ALLOTTED, TEACHING AND LEARNING
METHODS AND STUDENT ASSESSMENT
2024-25 batch**

Year	Lectures	Small group learning (Tutorial, Seminars, Integrated learning) Hours	Clinical posting	Self directed learning	Electives	Total
First Professional Year	00	00	00	00	00	00
Second professional year	00	00	4 week (15hrs/wk) (60hrs)	00	00	60
Third Professional Year -1	20	30	2 week (18 hrs/wk) (36 hrs)	5	00	91
Third Professional Year-2	20	35	4 week (18hrs/wk) 72 hrs	10	2 week	173
AETCOM						
Total						324

Assessment Method

I. Eligibility to appear for Professional examinations

The performance in essential components of training are to be assessed, based on following three components:

a) Attendance

- There shall be a minimum of 75% attendance in theory and 80% attendance in practical/clinical for eligibility to appear for the examinations in that subject.
- Pediatrics subject are taught in more than one phase - the learner must have 75%attendance in theory and 80% attendance in practical in each phase of instruction in that subject.
- There shall be a minimum of 75% attendance in AETCOM and minimum of 75% attendance in electives.

b) Internal Assessment (IA):

- Internal assessment shall be based on day-to-day assessment.
- Pediatrics subject is taught in more than one phase, there shall be IA in every phase in which the subject is taught. Cumulative IA to be used as eligibility criteria. The final cumulative marks are to be used for eligibility.
- It shall relate to different ways in which learners participate in the learning process including assignments, preparation for seminar, clinical case presentation, preparation of clinical case for discussion, clinical case study/problem solving exercise, Quiz, Certification of competencies, log books, SDL skills etc.
- Internal assessment should have both subjective and objective assessment.
- Internal assessment shall not be added to summative assessment. However, internal assessment marks in absolute marks should be displayed under a separate column in a detailed marks card.

- The internal assessment marks will be out of 100 for theory and out of 100 for practical/clinical.
- Learners must secure at least 50% of the total marks (combined in theory and practical/clinical; and minimum 40% in theory and practical separately) for internal assessment in a particular subject in order to be eligible for appearing at the final University examination of that subject.

- **Internal examination**

Second professional year

PHASE	At the end of 4 week clinical posting		
Second year	Theory examination	Ward ending examination	Total marks
	NA	50	50

3rd Professional year Part I

Phase	At the end of 2 week clinical posting		
3 rd year part 1	Theory examination	Ward ending examination	Total marks
	100	100	200

3rd Professional year Part II

Phase		theory	practical	Total marks
3 rd year part 2	At the end of clinical posting	NA	100	200
	At the end of first term	100	100	200
	At the end of second term	100	100	200
	Prelims	100	100	200

Internal Marks Distribution

Phase	practical	theory
Phase 2	20	----
Phase 3 – I	40	50
Phase 3 – II	40	50
Total	100	100

Remedial measures: A student whose has deficiency(s) in any of the 3 criteria that are required to be eligible to appear in university examination, should be put into remedial process as below:

- *During the course:* If Internal assessment (IA) or attendance is less or/and certifiable competencies not achieved and marked in log book in quarterly/ six monthly monitoring, the students/parents must be intimated about the possibility of being detained much before the final university examination, so that there is sufficient time for remedial measures.
- These students should be provided remedial measures as and when needed to improve IA.
- Any certifiable competency/ IA marks deficiency should be attended with planned teaching/tests for them.
- Student should complete the remedial measures and it should be documented.
- In spite of all above measures, if student is still not meeting the criteria to be eligible for regular exam he shall be offered remedial for the same batch supplementary exam. For attendance, he will be allowed remedial measures ONLY IF attendance is more than 60% for each component.
- At the end of phase: If Internal assessment (IA) or attendance is less or/and certifiable competencies not achieved and marked in log book at the end of regular classes in a phase, the student is detained to appear in regular university examination of that batch.

- Remedial classes can be planned for students missing regular classes on genuine grounds, thus ensuring that all certifiable competencies are achieved.
- Students who have less than 75% attendance in theory and 80% attendance in practical cannot appear for University examination, however; they may appear for Supplementary examination provided they attend the remedial classes organized between University and Supplementary exam. Students who have attendance 60% or above shall be eligible for such remedial classes.

II. University Examination

- University examinations are to be designed with a view to ascertain whether the candidate has acquired the necessary knowledge, minimal level of skills, ethical and professional values with clear concepts of the fundamentals which are necessary for him to function effectively and appropriately as a physician of the first contact.
- **Phase III Part 2 / National Exit Test (NExT)** as per NExT regulations- (Final Professional) examination shall be at the end of 17th / 18th month of that training, in the subjects of General Medicine, General Surgery, Obstetrics & Gynecology, Pediatrics, and allied subjects as per NExT Regulations.

TABLE SHOWING SCHEME FOR CALCULATION OF UNIVERSITY EXAMINATION MARKS

Evolution parameter	Maximum marks	Passing marks
Written-Theory paper	100	40
Practical/oral	100	40

- **Criteria for passing in a subject:** A candidate shall obtain a cumulative 50% marks in University conducted examination including theory and practical and not less than 40% separately in Theory and in Practical in order to be declared as passed in that subject.
- Pattern of the prelim examinations should be similar to the university examination

Format of question paper for theory examination of prelim and university

Seat No.: _____

PR No. _____

SANKALCHAND PATEL UNIVERSITY
MBBS – 3rd YEAR PART-1 – EXAMINATION - Jan.-Feb. 2025

Subject Code:

Date: __ / __ / 2025

Subject Name: Pediatrics

Time: 3 Hrs. Total Marks: 100

Instructions:

1. Use separate answer book for each section.
2. Attempt all questions.
3. Do not write anything on blank portion of the question paper. If written, then such act will be considered as an attempt to resort to unfair means.
4. Draw diagrams wherever necessary.
5. Figures to the right indicate marks.
6. Use Blue/Black Ball point pen only.

SECTION-A

Q.1	Answer the following structured/case based long questions.(any 1 out of 2)	1x10=10
Q.2	Answer the following short questions(any 6 out of 7) (One question on AETCOM is compulsory)	6x5=30
Q.3	Answer the following short questions in one or two sentences (any 5 out of 6)	5x2=10

SECTION -B

Q.4	Answer the following structured/case based long questions.(any 1 out of 2)	1x10=10
Q.5	Answer the following short questions(any 6 out of 7)	6x5=30
Q.6	Answer the following MCQs Multiple choice question (total 10 MCQs of one mark each) Write the question number and appropriate single option in the given separate answer sheet. Student will not be allotted marks if he/she overwrites , strikes or puts white ink on the answer once written.	10x1=10

Practical examination pattern

No	Type of exercise	Marks
Practical 1	Major (long) case	60
Practical 2	Table viva	40
	Total	100

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