Bachelor of Medicine & Bachelor of Surgery (MBBS) Curriculum in Bangladesh

Bangladesh Medical & Dental Council (BM&DC)
203, Shaheed Sayed Nazrul Islam Sarani (86, Bijoy Nagar), Dhaka-1000
www.bmdc.org.bd

December-2021

Medicine &Allied Subjects

Departmental Objectives

At the end of clinical postings in Medicine, the under graduate medical students will be able to:

- acquire appropriate knowledge, attitude and skill to become an effective doctor for the society
- elicit an appropriate clinical history, and physical findings, identify the clinical problems based on these and identify the means of solving the problems
- Plan relevant investigations considering socioeconomic perspective
- outline the principles of management of various diseases considering the patient's socio-economic circumstances
- diagnose and manage medical and pediatric emergencies
- diagnose and manage common psychiatric disorders
- recognize& provide competent initial care and refer complicated cases to secondary and tertiary care centers at appropriate time
- perform common clinical procedures
- possess knowledge to consider the ethical and social implications of his/ her decision
- demonstrate the art of medicine involving communication, empathy and reassurance with patients
- develop an interest in care for all patients and evaluate each patient as a person in society
- have an open attitude to the newer developments in medicine to keep abreast of new knowledge
- learn how to adapt new ideas in situations where necessary
- learn to keep the clinical records for future references
- make them oriented to carry out clinical research in future

List of competencies to acquire

At the end of the course of Medicine the undergraduate medical students will be able to:

1. Gather a history and perform a physical examination
2. Prioritize a differential diagnosis following a clinical encounter
3. Recommend and interpret common diagnosis and screening tests
4. Enter and discuss orders and prescriptions
5. Document a clinical encounter in patient record
6. Provide an oral presentation of clinical encounter
7. Form clinical questions and retrieve evidence to advance patient care
8. Give or receive a patient handover to transition care responsibility
9. Collaborate as a member of an inter-professional team
10. Recognize a patient requiring urgent or emergent care and initiative evaluation and management
11. Obtain informed consent for test and/or procedures
12. Perform general procedures of a physician
13. Understand preventive perspective of disease
14. Identify system failures and contribute to a culture of safety and improvement

Distribution of teaching - learning hours

Subject	Lecture (in hours)				Small group teaching (in hours)	Departmental integrated teaching of Medicine & Allied Subjects (in hours)	Phase IV common integrated teaching (in hours)	Clinical/Bedside teaching (in weeks)			Total weeks	Block posting (in weeks)	Formative examination (in days)		Summative examination (in days)	
	2nd Phase	3rd Phase	4th Phase	Total	PBL, Practical demonstration, Instrumental demonstration, Skill lab, Tutorial & etc.			2nd Phase	3rd Phase	4th Phase						
Internal medicine	22	25	90	137	199 hours	(10 topics ×2 hours) = 20 hours	(42 topics × 3 hours) = 126 hours	14	06+ 2 (OPD)	12	34	04 wks	Preparatory leave-10 days	Exam time-15days	Preparatory leave-10 days	Exam time-30days
Psychiatry	02	-	18	20				-	02	02	04					
Dermatology	-	-	17	17				-	02	02	04					
Pediatrics	04	20	22	46				04	-	06	10					
Physical Medicine	-	-	04	04				02	-	-	02					
Emergency	-	-	-	-				-	02	-	02					
Total	28	45	151	224	199	20	126 hours	20	14	22	56	04 wks	25 days		40 days	
Grand Total	**443 hours**						**126 hours**	**60 weeks**					**65 days**			
Time for integrated teaching, examination preparatory leave and formative & summative assessment is common for all subjects of the phase																
Preventive aspects of all diseases will be given due importance in teaching learning considering public health context of the country and others parts of the world.																
Related behavioral, professional & ethical issues will be discussed in all clinical and other teaching learning sessions																

Medicine & Allied Subjects: hour distribution for Clinical/Bedside teaching in 2nd, 3rd & 4th phases in details

Subject	Clinical/Bedside & Ambulatory care teaching (in hours)						Total hours (in three phases)	Total weeks {(2nd phase wks + 3rd phase wks + 4th phase wks = Total three phases wks) × (6 days × 4 or 2 hours)}
	2nd Phase		3rd Phase		4th Phase			
	Indoor clinical/ bedside teaching & Ambulatory care teaching		Indoor clinical/ bedside teaching & Ambulatory care teaching		Indoor clinical/ bedside teaching & Ambulatory care teaching			
	Morning	Evening	Morning	Evening	Morning	Evening		
	Indoor/ OPD/ Emergency/ Out reached center	Indoor/ Emergency	Indoor/ OPD/ Emergency/ Out reached center	Indoor/ Emergency	Indoor/ OPD/ Emergency/ Out reached center	Indoor/ Emergency		
	20 weeks		14 weeks		22 weeks			
Internal medicine	168 h (14w)	168 h (14w)	96 h (8w)	96 h (8w)	144 h (12w)	144 h (12w)	816 h	{14+(6+2)+12}= **34 w**× (6 days × 4 hrs)
Psychiatry	-	-	24 h (2w)	24 h (2w)	24 h (2w)	24 h (2w)	96 h	(0+2+2)= **04 w**× (6 days × 4 hrs)
Dermatology	-	-	24 h (2w)	24 h (2w)	24 h (2w)	24 h (2w)	96 h	(0+2+2)= **04 w**× (6 days × 4 hrs)
Pediatrics	48 h (4w)	48 h (4w)	-	-	72 h (6w)	72 h (6w)	240 h	(4+0+6)= **10 w** × (6 days × 4 hrs)
Physical Medicine	24 h (2w)	-	-	-	-	-	24 h	(2+0+0)= **02 w** × (6days × 2hrs)
Emergency	-	-	24 h (2w)	24 h (2w)	-	-	48 h	(0+2+0)= **02 w** × (6days × 4hrs)
Total	**240 hrs**	**216 hrs**	**168 hrs**	**168 hrs**	**264 hrs**	**264 hrs**	**1320 hrs**	**56 weeks**

Teaching-learning methods, teaching aids and evaluation

Teaching Methods				Teaching aids	In course evaluation
Large group	**Small group**	**Self learning**	**Others**		
Lecture Integrated Teaching	Bed side clinical teaching in ward, emergency room, OPD, Clinical teaching in CCU/ ICU. Clinical case presentation. Demonstration of Xray, CTscan ,MRI ,ECG ,Instruments, Photos, Data etc. Practice in medical skill centre Practical Demonstration Writing case problem Practical Skills (Video)	Self-directed learning, assignment, self test/assessment	Integrated teaching, With other dept.	Laptop, Computer, OHP/ Multimedia presentation, Slide Projectors, Video, Slide, Dummy (Manikins), Model, Real patients, attendants, Simulation, Charts e.g. growth chart, IMCI Chart, Others e.g. ECG machine, X-ray, photographs, Black board, White board, Flow chart, X-rays, ECG Reports, Samples, Audio, Instrument, Photographs Reading materials o Modules &national guidelines on different childhood /adult illnesses o Study guide o Books, journals	Item Examination Card final (written), Term Examination Term final (written, OSPE, oral+ practical+ clinical)

Related Equipments:

Stethoscope, BP Machine, Hammer, Fluid bags, Blood bags, I.V sets & cannula, Transfusion sets, Feeding tubes (Ryles tube , Catheter, airway, X-rays, ECG, Appliances, Water seal drainage bottle ESR tube. LP needle, BM needle, Tongue depressor etc. face mask, nonrebreather (NRB) mask, nasal cannula, pulse oxymeter, DOTs medicine strip (for TB, leprosy), glassslide, wood's lamp, ORS packet ,micro burette, manikin, Thermometer, ORS packet, MUAC tap (padeatric and adult)

Final Professional Examination:

Marks distribution:

Total marks – 500 (Summative)

- Written = 200
  - MCQ: MTF-20+SBA-20,
  - SAQ -105+SEQ-35(SAQ-75%, SEQ-25%)
  - Formative assessment -20
- Oral and Clinical= 250
  - Oral -150
  - Clinical=100
- OSPE = 50

Learning Objectives and Course Contents in Medicine

Learning Objectives	Contents	Teaching Hours
Students will be able to: • value Doctor-Patients relationship • define, differentiate, diagnose diseases • demonstrate clinical skills required for history taking, physical care and laboratory tests, care for diagnosing a disease stepwise and participate in the management plan of a patient under doctor supervision • differentiate clinically (History & Physical examination) one DD from other. • participate in patient education and counseling	**Introduction to Medicine (to be covered in 3rd year classes)** Overview of Medicine as a discipline and subject Learning Clinical Approach 1. Doctor- Patient Relationship, Medical Ethics, Patient's safety. 2. Communication Skills 3. Behavioural Science Approach to common symptoms of disease: • General concept of Pain, chest pain and abdominal pain • Fever • Dyspnoea • Cough, expectoration, and Haemoptysis • Anorexia, Nausea, Vomiting, Weight loss and Weight gain • Haematemesis, Melaena, Haematochezia • Diarrhea, Dysentery and Constipation • Edema and Ascites • Jaundice • Syncope and Seizures • Fainting and Palpitations • Headache and Vertigo • Paralysis, movement disorders & disorders of gait • Coma and other disturbances of consciousness • Common urinary symptoms including anuria, oliguria, nocturia, polyuria, incontinence and enuresis • Anaemia and Bleeding • Enlargement of Lymphnodes, Liver and Spleen • Joint pain, neck pain and back ache	L- 22 hrs. 4 hrs(1x4) 2 h for medicine 2h for psychiatry 20 hrs.(1x20)

Learning Objectives	Contents	Teaching Hours
The students will be able to : • define nutrition and its importance • describe normal requirement of nutrients for maintaining health at various periods of human life including healthy adult, pregnancy, infancy, childhood and adolescence • classify nutritional disorders • define protein energy malnutrition and explain its associated factors, precipitating factors • list the clinical features, describe treatment of protein-energy malnutrition • list and recognize the clinical features, provide treatment and advise for prevention and treatment of vitamin deficiency diseases • list and recognize the clinical features, provide treatment and advise to be given for prevention and treatment of deficiency diseases • list and recognize the clinical features, provide treatment and advice to be given for prevention of obesity • apply basic principles of nutrition in clinical medicine	3rd phase (4th year) –Lecture-25 hrs **Clinical Medicine: Nutritional Factors in diseases** **CORE :** • Energy yielding nutrients • Protein energy malnutrition in adult • The vitamins- deficiency **Additional** • Nutrition of patients in hospital • Obesity ***Lectures to be covered on*** 1.Nutrients and vitamin deficiency 2.Obesity	L - 2hrs.

The students will be able to :
 	
• list the clinical features, describe principles treatment and advise for prevention of heat hyperpyrexia, heat syncope and heat exhaustion and hypothermia
• list the clinical features, describe principles of treatment and advise for prevention of pollution related to :
  • Arsenic problem
  • Lead poisoning
  • Environmental radiation
	Climatic and environmental factors in disease
	
	CORE :
	
	• Disorders related to temperature
	• Disorders related to pollution
	• Drowning, electrocution and radiation hazards
	• Health hazards due to climate change
		L –2 hr.

Learning Objectives	Contents	Teaching Hours
The students will be able to: • diagnose infectious diseases. • explain principles of management of infection • describe general principles and rational use of antibiotics and other chemotherapy against infectious and parasitic diseases • list the clinical features, describe principles of treatment and advise for prevention of common infectious and tropical diseases.	**Diseases due to infections** **CORE :** • Approach to infectious diseases-diagnostic and therapeutic principles • General principles and rational use of antibiotics • Enteric fever • Acute Diarrhoeal Disorders • Cholera & food poisoning • Amoebiasis, Giardiasis • Tetanus • Influenza and infectious mononucleosis • Malaria • Kala-azar • Filariasis • **Helminthic diseases** ▪ Nematodes ▪ Cestodes ▪ Trematodes • HIV and infections in the immunocompromised conditions • Rabies • Herpes simplex & herpes zoster • Chickenpox • Viral haemorrhagic fever: dengue • Anthrax • Brucellosis • Covid -19,Influenza,MARS,SARS	L-14 hrs.

Learning Objectives	Contents	Teaching Hours
The student will be able to define, describe prevalence, aetiologic factors, pathophysiology, pathology, investigations and principles of treatment of the common problems in haematology.	**Diseases of the blood** **CORE:** • Anemia • Leukaemia • Lymphoma • Multiple myeloma • Bleeding disorders • Coagulation disorders **Additional:** • Transfusion medicine • Bone marrow transplantation	L - 7hrs.
The students will be able to: • describe applied anatomy and physiology & explain lung function tests; • describe prevalence, aetiologic factors, pathophysiology, pathology, investigations and principles of treatment of common respiratory diseases.	4^{th} phase(5^{th} year)- Lecture 90 hrs **Diseases of the respiratory system** **CORE :** • Applied anatomy and physiology • Investigations for respiratory diseases • Upper respiratory tract infections • Pneumonias • Tuberculosis: 1(Pulmonary) • Tuberculosis:2 (Extra-pulmonary) • Lung abscess and bronchiectasis • Diseases of the pleura: Pleurisy, Pleural effusion & empyema, Pneumothorax • Chronic Obstructive lung diseases and corpulmonale • Bronchial asthma & pulmonary eosinophilia • Acute and chronic respiratory failure • Neoplasm of the lung **Additional:** • Common occupational lung disease with DPLD	L - 10hrs.

Learning Objectives	Contents	Teaching Hours
The student will be able to : • describe applied anatomy, applied physiology and investigations for the diseases of cardiovascular system • describe etiology, pathophysiology, clinical features, investigations and treatment of Ischemic heart disease • describe etiology, pathophysiology, clinical features, investigations and treatment of acute rheumatic fever & rheumatic heart diseases • describe etiology, pathophysiology, clinical features, investigations and treatment of valvular diseases • describe etiology, pathophysiology, clinical features, investigations, treatment and complications of infective endocarditis • describe etiology, pathophysiology, clinical features, investigations, treatment and complications of systemic hypertension • define and describe cardiac arrhythmias	**Diseases of the cardiovascular system** **CORE :** • Applied anatomy and physiology and investigations • Ischemic heart disease ▫ Angina pectoris ▫ Myocardial infarction ▫ Sudden (cardiac) death • Rheumatic fever • Valvular diseases of heart ▫ Mitral stenosis & regurgitation ▫ Aortic stenosis & regurgitation ▫ Tricuspid & pulmonary valve diseases • Infective endocarditis • Hypertension • Cardiac arrhythmias (common) Sinus rhythms Atrial tachyarrhythmias Ventricular tachyarrhythymias Cardiac arrest Anti arrhythmic drugs • Heart block and pacemakers. • Heart failure – acute and chronic • Acute and chronic pericarditis, pericardial effusion, & cardiac tamponade **Additional :** • Peripheral arterial diseases • Common congenital heart diseases in child and adult • Venous Thrombosis and Pulmonary Thromboembolism	L – 10 hrs .

Learning Objectives	Contents	Teaching Hours
• describe congenital heart diseases • define, describe patho-physiology, types, clinical features, investigation and treatment of heart failure • define, describe patho-physiology, causes, clinical features, and treatment of acute circulatory failure • describe etiology, pathophysiology, clinical features, investigations, treatment and complications of diseases of the pericardium	Congenital heart diseases ▪ ASD ▪ VSD ▪ PDA ▪ TOF ▪ Coarctation of Aorta Acute circulatory failure Diseases of pericardium ▪ Acute pericarditis ▪ Pericardial effusion Cardiac tamponade Cardiomyopathies	
The student will be able to • define, describe the etiology, pathophysiology, investigation, complications and management. of peptic ulcer disease • define, describe the etiology, pathophysiology, investigation and management. of gastrointestinal haemorrhage • describe Investigations of the alimentary tract. • define, describe the causes, pathophysiology, investigation and management. of gastro-oesophageal reflux disease • define, describe the etiology, pathophysiology, investigation and management of dysphagia. • define & describe the etiology pathophysiology, investigation and management of malabsorption disorders • define& describe the etiology, pathophysiology, investigation and management of Inflammatory bowel disease - Crohn's disease, Ulcerative colitis. • define & describe the etiology, pathophysiology, investigation and management of acute pancreatitis • define & describe the etiology, pathophysiology, investigation and management of functional disorders of GIT • define & describe the etiology, pathophysiology, investigation, complications and management of acute and chronic liver disease	**Diseases of the Gastro-intestinal and Hepato-billiary system**s **CORE :** • Applied physiology and investigation of the alimentary tract. • Stomatitis and Mouth Ulcers • Peptic Ulcer disease and non-ulcer dyspepsia • Malabsorbption syndrome • Irritable bowel syndrome • Inflammatory bowel disease • Acute viral hepatitis • Chronic Liver Diseases and its complications • Acute and chronic Pancreatitis **Additional:** • Dysphagia • Hepatotoxicity of drugs • Carcinoma of stomach/colon,Hepatocellular carcinoma	L – 10 hrs.

Learning Objectives	Contents	Teaching Hours
The students will be able to • define, diagnose, investigate and treat different nephrological diseases • make differential diagnosis • mention basic/ initial treatment • name the conditions for referral & follow-up care • describe preventive measures • explain the reasons for gender differences & issues, e.g. UTI in males & females • describe the special dietary modulations & Nutrition • outline of RRT • mention indications for RRT • list the special renal medicines & their interactions with commonly used medicines • describe nephrotoxicity of drugs • list indication for Renal biopsy and patient preparation • provide patient education about renal disorders • list the common disorders with renal sequel e.g., malaria, diabetes, hypertension, pregnancy • explain appropriate use of therapeutic tools • use interpretation of charts & lab data • orientation& care of modified anatomy & physiology, e.g. A-V Fistula, renal allograft.	**Nephrology & Urinary System** **CORE :** • Nephritic &Nephrotic Illness • UTI/ Pyelonephritis • ARF/Acute Kidney Injury • Chronic Kidney Disease • Renal manifestations of systemic diseases **Additional:** • Adult polycystic kidney disease	7 hrs.

Learning Objectives	Contents	Teaching Hours
Student should be able to: • identify syndromes of CNS & PNS diseases • identify signs of CNS & PNS diseases • identify clinical syndromes of brain, spinal cord & peripheral nerve. disorders • plan investigations in neurological disease • identify Vascular neuralgic syndromes. • define where? & What? is the lesion • describe the risk factors for CVD's • performacute management & Subsequent management. • identify complicating, management • value the importance of rehabilitation / return of function • identify clinical syndrome of meningeal infection • plan immediate and subsequent investigations including confirmation of diagnosis. • provide give empiric therapy or clinical judgement. • provide Diagnosis & exclusion • identify& treats complications. • able to make a D/D of coma & differentiate structural cause of diseases from others • plan investigations in a suspected V. encephalitis. • describe general management of patient with fever, coma & convulsion. • state the specific Diagnosis of encephalitis & treatment • identify acute & chronic syndromes of P.N.S. • identify emergencies and manage • make D/D • describe management & Rehabilitation	**Neurology** • Concept of neurological diagnosis including investigations • Cerebrovascular diseases(I &II) • Headache • Meningitis: viral, bacterial and tuberculous • Encephalitis • Peripheral neuropathy • Disorder of cranial nerves	9 hrs.

Learning Objectives	Contents	Teaching Hours
Student should be able to: • identify a seizure & elicit history from an eyewitness. • identify common clinical syndrome of Epilepsy • plan management • advise to the patient and attendants. • identify syndrome of EP system • mention etiologic agent(s) • plan investigations • decide for initial and subsequent treatment. • provide explanation, motivation and rehabilitation advises to patient. • identify common syndromes of motor system disease. • plan investigations • identify primary muscle diseases and differentiate from primary neurologic diseases • identify clinical syndrome of Neuromascularjunctional defect. • plan investigations in a suspected muscle diseases • provide treatment for myasthenia gravis. • advises& genetic conselling for muscular dystrophy.	• Epilepsy • Extrapyramidal diseases • Common compressive and non compressive spinal cord syndromes • Myasthenia gravis • Myopathies and skeletal muscle disease	

Learning Objectives	Contents	Teaching Hours
The students will be able to : • describe causes, clinical features and management of fluid and electrolyte disorders including ❑ Hyponatremia ❑ Hypernatremia ❑ Hyperkalemia ❑ Hypokalemia • describe causes, clinical features and management of disorders of acid-base balance in particular relevance to vomiting, diagnoses of uremia and diabetic ketoacidois.	**Water and electrolytes and acid-base homeostasis** CORE : • Disorders due to Sodium and Potassium imbalance • Disorders of acid-base balance	L – 4 hrs.
The student will be able to : • describe applied anatomy, physiology and investigations of endocrine disorders • describe epidemiology, etiology, pathophysiology, clinical features, complications, investigation, treatment and management of diabetes mellitus • describe epidemiology, etiology, pathophysiology, clinical features, complications, investigation, treatment and management of disorders of thyroid including ❑ Hyperthyroidism ❑ Hypothyroidism ❑ Solitary thyroid nodule ❑ Parathyroid disorders and calcium metabolism • describe epidemiology, etiology, pathophysiology, clinical features, complications, investigation, treatment and management disorders of adrenal gland including ❑ Cushing's syndrome ❑ Addison's disease • describe epidemiology, etiology, pathophysiology, clinical features, complications, investigation, treatment and management of disorders of hypothalamus and pituitary gland including ❑ Acromegaly, Sheehan's syndrome	**Endocrine and Metabolic diseases** CORE : • Diabetes mellitus(I & II) • Thyrotoxicosis • Hypothyroidism. • Cushing's syndrome and Addisons disease. • Hypo- and Hyperparathyroidism • Calcium and Vitamin –D related disorders ***Additional*** • Acromegaly and Sheehan's syndrome	L – 8 hrs.

Learning Objectives	Contents	Teaching Hours
The students will be able to: • classify diseases of the connective tissues, joints and bones • mention the epidemiology, etiology, pathology, clinical features, complications, investigation, treatment and management of Inflammatory joint diseases . • mention epidemiology, etiology, pathogenesis, clinical features, investigation, diagnosis, treatment and management of osteoarthritis. • mention the epidemiology, etiology, pathogenesis, clinical features, investigation, diagnosis, treatment and management of connective tissue diseases including systemic lupus erythematosus& systemic sclerosis • mention the epidemiology, etiology, clinical features, investigation, diagnosis, treatment and management of gout • mention the causes, clinical features, investigations, treatment and management of back disorders including low back pain & spondylosis	**Connective tissue Disorder** **CORE :** • Rheumatoid arthritis • Degenerative joint diseases • Gout • Ankylosing spondylitis and other spondyloarthropathies. • The collagen vascular diseases including systemic lupus erythematosus, systemic sclerosis • Osteoporosis	L - 7 hrs.

Learning Objectives	Contents	Teaching Hours
The students will be able to : • take history of elderly patients • perform physical examination • perform mental status examination • evaluate functional capacity of the elderly • interpret the report of laboratory examinations & imaging • state the general principles of treating the elderly.	**Geriatric medicine** **CORE :** • General Principles of treating the elderly/senior citizen • Health problems of the elderly/ senior citizen • Four Geriatric Giants – Acute confusional State, Falls, Incontinence and Frailty. • Healthy aging • Rehabilitation and Physical medicine.	L – 3 hrs.
The students will be able to describe medical genetics including ❑ Genes and chromosomes ❑ Mutation ❑ Genes in individual ❑ Genes in families ❑ Disorders of multifactorial causation ❑ Chromosomal aberrations The student will be able to describe the techniques of Medical genetics including ❑ Cyto genetics ❑ Biochemical genetics ❑ Molecular genetics ❑ Prenatal diagnosis ❑ Neoplasia : chromosomal & DNA analysis	**Genetic Disorders** **CORE :** • General concept of genetic diseases and management of genetic disorder • Single gene disorder • Clinical aspects of medical biotechnology • Chromosal disorder (Down, Turner, klinefelters)	L -2 hrs.

Learning Objectives	Contents	Teaching Hours
The students will be able to describe basic facts of immunology including • Immunoglobulins& antibodies • Cellular immunity • Autoimmunity The students will be able to describe aetiology, pathogenesis, pathology, clinical features, investigations and treatment of • Immunologic deficiency diseases • Autoimmune disease • Allergic disease	**Immunologic disorders** **CORE :** • Immunologic deficiency diseases • Auto immunity, Allergy & hypersensitivity and immunogenetics& transplantation • Immunosuppressive drugs	3 hrs.
The students will be able to describe : • prevention and early detection of common cancers • primary cancer treatment including ❑ Surgery and radiation ❑ Chemotherapy ❑ Adjuvent therapy • evaluation of tumour response including ❑ Tumour size ❑ Tumour markers ❑ General well being and performance status • role of nuclear medicine in diagnosis and treatment in Medical conditions.	**Oncology, Principles** **CORE :** • General principles of diagnosis and management of neoplastic diseases • Palliative care	4 hr.

Learning Objectives	Contents	Teaching Hours
The students will be able to describe : • initial evaluation of the patient with poisoning or drug overdose • general principles of management including ❑ Care of unconscious patient ❑ Respiratory support ❑ Cardiovascular support ❑ Special problems such as hypothermia, hypertension, arrhythmia, convulsions • management of common specific poisonings including ❑ organophosphorus compound ❑ sedative and hypnotic,(benzodiazepines) ❑ detergents, kerosene, pesticides etc. ❑ datura, methylalcohol • acute and chronic effects of alcohol and their management • venomous stings, insect bites, poisonous snakes and insects .	**Poisoning and drug overdose** **CORE :** • Initial evaluation of the patient with poisoning or drug overdose and general principles of management • Treatment of common specific poisonings a) Organophosphorous compounds b) Sedatives and Hypnotics c) Household Poisons • Venomous stings, insect bites, poisonous snakes and insects. **Additional:** • Acute and chronic effects of alcohol and Methanol and their management • Copper sulphate, Paracetamol, Kerosene etc	6 hrs.
The students will be able to describe : • general principles of intensive care • acute disturbances of haemodynamic function including Shock • aetiology, pathogenesis, clinical features, investigations, and management in acute medical emergency	**Emergency medicine** **CORE :** • Cardiac Arrest – ALS, BLS • Acute pulmonary oedema and severe acute asthma • Hypertensive emergencies • Diabetic ketoacidosis and hypoglycaemia • Status epileptics • Acute myocardial infarction, shock and anaphylaxis • Upper G.I bleeding and hepatic coma • Diagnosis and management of comatose patient	5 hrs.
	Environmental disease & heat illness **Global warming & Health hazards**	2 hrs

Learning Objectives	Contents	Teaching Hours
The students should be able to : • use a humane approach during history taking and performing a physical examination • examine all organs/systems in adults and children including neonates • arrive at a logical working diagnosis after clinical examination (General & Systemic) • order appropriate investigations keeping in mind their relevance (need based) and cost effectiveness • plan and institute a line of treatment which is need based, cost effective and appropriate for common ailments taking into consideration : ❑ patients ❑ disease ❑ socio-economic status ❑ institutional / government guidelines • recognise situations which call for urgent or early treatment at secondary and tertiary centres and make a prompt referral of such patients after giving first aid or emergency treatment • assess and manage fluid / electrolyte and acid-base balance • interpret abnormal biochemical laboratory values of common disease • interpret skiagram of common diseases • identify irrational prescriptions and explain their irrationality • interpret serological tests such as VDRL, ASO, Widal, HIV, Rheumatoid factor • demonstrate interpersonal and communication skills befitting a physician in order to discuss the illness and its outcome with patient and family • write a complete case record with all necessary details	**Clinical Methods in the Practice of Medicine** **CORE :** • History Taking • Physical Examination • Investigations • Diagnosis • Principles of treatment • Interpersonal skills • Communication skills • Doctor - Patient relationship • Ethical Behaviour • Patient's Safety • Referral services • Medical Certificate • Common Clinical Procedures ❑ Injections ❑ IV infusion and transfusion ❑ FIRST AID ❑ Intubation ❑ CPR ❑ Hyperpyrexia ❑ ECG ❑ Skin Sensitivity Test	W-14 weeks (3^{rd} year) See Appendix-1 W – 6 weeks (4^{th} year) See Appendix-2 W - 12weeks (5^{th} year) See Appendix-3 Opd-2 weeks

Learning Objectives	Contents	Teaching Hours
• write a proper discharge summary with all relevant information • write an appropriate referral note to secondary or tertiary centres or to the physicians with all necessary details • assess the need for and issue proper medical certificates to patients for various purposes • record and interpret an ECG and be able to identify common abnormalities like myocardial infarction, arrhythmias • start I.V. line and infusion • performe venous cut down • give intradermal / SC / IM / IV / injections • insert and manage a C.V.P. line • conduct CPR (Cardiopulmonary resuscitation) and first aid in new born/ children including endotracheal intubation. • introduce a nasogastric tube • manage hyperpyrexia	**Procedural skill** **CORE** • Lumbar puncture • Bone marrow aspiration • Thoracocentesis / paracentesis • Oxygen Therapy • Oropharygeal suction • Shock management • Brochodilator inhalation technique, nebulization • Urethral Catheterisation **Additional** • Administration of Enema • Postural drainage • Dialysis • Electro convulsive therapy	
Attitude : The student should: 1. develop a proper attitude towards patients, colleagues and the staff. 2. demonstrate empathy and humane approach towards patients, relatives and attendants. 3. maintain ethical behaviour in all aspects of medical practice. 4. develop a holistic attitude towards medicine taking in social and cultural factors in each case 5. obtain informed consent for any examination / procedure 6. appreciate patients right to privacy 7. adopt universal precautions for self protection against HIV and hepatitis and counsel patients 8. be motivated to perform skin sensitivity tests for drugs and serum	Attitudes to be supervised by clinical teachers.	

Appendix -1

Clinical Teaching

2nd Phase **1st Round** **14 Weeks**

Learning Objectives	Contents	Teaching Hours
The student will be able to : • narrate the role of ward duties in learning clinical medicine. • develop interpersonal and communication skills befitting a physician in order to discuss illness and its outcome with patient and family • elicit different components of history and understand its importance – particulars of the patient, the presenting symptoms, the history of the present illness, H/O previous illness, Family history, Personal & Social history, Drug history, & allergy, menstrual history (in female) • record and analyze symptoms of presentation **History taking** The student will be able to ask patients about : • cough- nature, relation with chest pain, time of the day, any particular condition aggravates or relieves: • shortness of breath- onset, duration, relation with exertion, episodic or not etc. • haemoptysis- amount, is it rusty or fresh blood • sputum- amount, colour, odour, associated with wheezing.	**Introduction to clinical ward duties and approach to a patient** ❑ Art of Medicine ❑ Doctor patient relationship ❑ Different component of history ❑ Symptom analysis in relation to diseases of different systems: • Respiratory System ❑ Shortness of breath ❑ Haemoptysis ❑ Cough ❑ Sputum ❑ Chest pain ❑ Fever	

Learning Objectives	Contents	Teaching Hours
• The student will be able to ask patients about symptoms mentioned in contents in detail e.g. site, nature, aggravating or relieving factor of chest pain. • The student will be able to elicit informations related to the symptoms of presentation e.g. frequency of bowel, nature of stool, amount, blood in stool, tenesmus etc. if complaining of diarrhoea. The student will be able to ask patients about : • H/O vaccination, transfusion • Chronology of development of symptoms with different parameters.	**<u>CVS</u>** • Palpitation • Chest pain • Leg oedema • Shortness of breath **<u>GIT</u>** • Abdominal pain • Haematemesis and Melaena • Loss of appetite • Diarrhoea & Constipation • Haematochezia • Nausea, Vomiting • Weight loss • Difficulty in swallowing **Hepatobiliary** • Jaundice • Abdominal swelling • Impaired consciousness **<u>Rheumatology</u>** • Multiple joint pain • Monoarticular joint pain	

Learning Objectives	Contents	Teaching Hours
The student will be able to: • ask the patient about the symptoms e.g. seizure – duration, interval between attack, any injury during attack, sphincter disturbance, aura, • define fit, syncope, hemiplegia, monoplegia, paraplegia etc. The student will be able to: • ask the patients about the presenting symptom • define – oliguria, anuria, polyuria, dysuria Students will be able to take relevant history, related to disorders of Haemopoetic system The student will be able to : • take detail history about fever and different tropical & infection diseases, animal bite diseases, animal bite like snakebite, dog bite.	**Nervous System** • Loss of consciousness • Fit or convulsion • Syncope • Paralysis • Headache • Vertigo **Urinary System** • Puffiness of face • Oliguria & anuria, Polyuria • Dysuria • Incontinence • Nocturnal enuresis • Loin pain • Pus per urethra **Endocrine System** • Swelling of neck • Weight gain • Weight loss **Haemopoetic system** • Pallor • Bleeding **Other** • Tropical and infections diseases	

Learning Objectives	Contents	Teaching Hours
The student will be able to • perform general physical examination and observe record and interpret findings.	**General examination** • Appearance ⇐Facies • Built • Nutrition • Hydration status • Decubitus • Anthropometric measurement • Anaemia, Jaundice, Cyanosis • Clubbing, Koilonychia, leukonychia • Oedema, Dehydration, Pulse, BP, Temperature, Respiration • JVP • Lymph node • Thyroid, salivary gland • Skin, Hair, Nail • Skin (Petichae, purpura, echymosis, bruise, haematoma, rashes), pigmentation etc • Hair distribution • Nail • Breast • Eye – Proptosis	

Learning Objectives	Contents	Teaching Hours
Students will be able to : • record pulse e.g. radial pulse and peripheral pulse and observe Jugular Venous Pressure • record Blood Pressure • inspect chest shape, symmetry, movement, type of breathing • palpate apex beat, trachea, thrill • percuss cardiac outline, liver dullness and areas of resonance • auscultate the heart sounds, murmur, pericardial rub Students will be able to : • inspect the chest, palpate trachea, chest for expansion, vocal fremitus • percuss the lungs. • auscultate for breath sounds, rhonchi, creps, pleural rub.	**Systemic examination** **CVS** • Pulse, BP, JVP • Pericardium ❑ Inspection ❑ Palpation ❑ Percussion ❑ Auscultation of heart ❑ Auscultation of lung base • Related G/E of CVS e.g. clubbing, cyanosis,edema. **Respiratory System** • Respiration rate /Type • Inspection • Palpation • Percussion, Auscultation • Examination of sputum • Lung function test • Pleural fluid aspiration	

Learning Objectives	Contents	Teaching Hours
Students will be able to: • assess levels of consciousness • identify the facial expression • examine cranial nerves Students will be able to: • examine motor system • examine sensory system • observe different types of gait • elicit signs of meningeal irritation • perform SLR test • observe lumbar puncture • examine Fundus by ophthalmoscope	**<u>Nervous System</u>** • Higher mental function ❑ Co-operation ❑ Appearance ❑ Level of consciousness ❑ GCS ❑ Memory ❑ Speech ❑ Orientation of time, space, person ❑ Hallucination, Delusion, Illusion • Cranial nerves. (1^{st} -12^{th}) • Motor function • Sensory function • Gait • Signs of meningeal irritation • Examination of peripheral nerves • Involuntary movement **CSF Study** **<u>Ophthalmoscopy</u>** • Ophthalmoscope	

Learning Objectives	Contents	Teaching Hours
Students will be able to: • assess joints and muscles by inspection, palpation • test range of movement • test muscle around joints • assess posture Students will be able to: • inspect oral cavity, orpharynx. • palpate abdomen e.g. Liver, spleen, kidney • demonstrate fluid thrill, shifting dullness • perform PR examination • observe aspiration of peritoneal fluid Students will be able to: • detect general signs of renal disease • perform bimanual palpation of kidney, renal tenderness • examinational gthitalia • examine urine for sugar, albumin. • prepare and read blood film (eg. Malarial parasite) The student will be able to do: physical examination and certain minor procedures e.g. blood film, ESR, Hb%, Urine – albumia, Sugar, Stool ME.	**Rheumatology** • Joints ⇐ (Look & feel) • Inspection • Palpation • Movement Muscle • Wasting • Swelling Skeleton • Survey **GIT** • Inspection of oral cavity & oropharynx • Abdomen Inspection / Palpation • Test for ascites • Percussion/ auscultation ❑ Per-rectal examination ❑ Examination of stool, vomitus, groin, genitalia, perianal region ❑ Aspiration of peritoneal fluid **Urinary system** • Kidneys • Bladder • Uretheral orifice • Urine analysis **Haemopoetic system** **Tropical and infectious illness** **Animal bite – snakebite, dog bite**	

Annex - 1

Department of Medicine CARD - 1
_____ Medical College (3rd Year)

Clinical Registration No. _____

Name : _____

Roll No. _____ Batch _____

Medicine unit : _____

Professor : _____

Grading
A = 75 - 100
B = 60 - 74
C = 50 - 59
D = 40 - 49
E = 00 - 39

Duration of Placement (1st Round) from _____ to _____

No.	Items	Marks Obtained	Signature of teacher
1.	Procedure of History taking and writing and questions related to elaboration of different systems.		
2.	General examination and questions related to general examination.		
3.	Systemic examination of the Alimentary system and related questions.		
4.	Systemic examination of the Respiratory system and related questions.		
5.	Systemic examination of the Cardiovascular system and related questions.		
6.	Systemic examination of the Renal system and related questions.		
7.	Systemic examination of the Nervous system and related questions.		
8.	Examination of the haemopoietic system and related questions.		
9.	Examination of the musculoskeletal system and related questions.		
10.	Miscellaneous e.g. examination of the hands, lower limbs, neck etc.		

Total attendance _____ days, out of _____ days

Marks obtained in all items (%) _____ & in Card final Examination _____

Comment_____

_____

Professor
Department of Medicine

Registrar
Department of Medicine

Appendix -2

Clinical Teaching

3rd Phase 2nd Round 6 Weeks

Learning Objectives	Contents	Teaching Hours
Continue to develop skills in history taking & physical examination. Students will be able to: • interpret the findings in terms of diseases, possible causes, make a differential diagnosis & plan investigations.	**Approach to Sign & Symptom** **<u>GIT & HBS</u>** • Ascites • Hepatosplenomegaly • Oral ulcer • Abdominal swelling • Abdominal pain • Vomiting &diarroehea • Haematemesis, melaena • Jaundice **<u>CVS</u>** • Respiratory distress • Chest pain • Jugular Venous Pulse (JVP) • Hypertension • Abnormal heart sound & murmur • Pulse **<u>Respiratory System</u>** • Haemoptysis • Cough • Pleural effusion • Pneumothorax • Collapse, Consolidation, Fibrosis • Breath sound • Sputum analysis	

Learning Objectives	Contents	Teaching Hours
Students will be able to: • interpret the findings in terms of diseases, possible causes, to make a differential diagnosis & plan investigations. Students will be able to: • be acquainted with instruments commonly used for medical procedure observe the doctors performing the procedures	<u>Urinary System</u> Approach to patient with : • Oliguria, polyuria, anuria • Anasarca • Urine analysis <u>Nervous System</u> • Unconscious patient • Hemiplegia, monoplegia, paraplegia • Upper Motor Neuron Lesion (UML) • Lower Motor Neuron Lesion (LML) • Cerebellar sign • Extrapyramidali sign • Involuntary movement • Vertigo & Headache <u>Haematology</u> Approach to patient with : • Bleeding disorder • Anaemia • Lymphadenopathy <u>Rheumatology</u> Approach to patient with • polyarthiritis • oligoarthiritis <u>Clinical skills</u> • Lumbar puncture • Bone marrow aspiration • Aspiration of serous fluid/ synovial fluid • Ryles tube • Catheterization • I/V fluid, IV Canula • Stomach wash	

Annex - 2

Department of Medicine

Card - II
(4th Year)

Grading
A = 75 - 100
B = 60 - 74
C = 50 - 59
D = 40 - 49
E = 00 - 39

Name of the student: _____

Roll No. _____

Medicine unit: _____

Name of Professor: _____

Duration of Placement (2nd Round) from _____ to _____

Total attendance _____ days, out of _____ days

No.	Items	Marks obtained	Signature of Teacher
1.	Review of clinical methods (interpret the findings in terms of diseases, possible causes, to make a differential diagnosis & plan investigations)		
2.	Respiratory diseases (interpret the findings in terms of diseases, possible causes, to make a differential diagnosis & plan investigations)		
3.	Cardiovascular diseases (interpret the findings in terms of diseases, possible causes, to make a differential diagnosis & plan investigations)		
4.	Alimentary & Hepatobiliary disorders (interpret the findings in terms of diseases, possible causes, to make a differential diagnosis & plan investigations)		
5.	Renal diseases (interpret the findings in terms of diseases, possible causes, to make a differential diagnosis & plan investigations0		
6.	Endocrine disorders (interpret the findings in terms of diseases, possible causes, to make a differential diagnosis & plan investigations)		

7.	Haemopoietic disorders (interpret the findings in terms of diseases, possible causes, to make a differential diagnosis & plan investigations)		
8.	Diseases of Nervous system (interpret the findings in terms of diseases, possible causes, to make a differential diagnosis & plan investigations)		
9.	Infectious diseases (interpret the findings in terms of diseases, possible causes, to make a differential diagnosis & plan investigations)		
10.	Common Laboratory investigations		
11.	Basic knowledge on X-ray & ECG		

Marks Obtained:
Comments:

Professor
Department of Medicine

Registrar
Department of Medicine

Appendix -3

Clinical Teaching

4th Phase **3rd Round** **12 Weeks**

Learning Objectives	Contents	Teaching Hours
Students will be able to : • take detailed history from a patient • carry out detailed general and systemic clinical examination • present long cases on different body system including Respiratory System Cardiovascular System Gastro-intestinal System Endocrine System Urinary System Haematology system Nervous System Rheumatology Infections • plan appropriate investigations • plan appropriate treatment of common medical conditions	**Review of history taking & clinical examinations (3rd year, 4th year)** ***Case discussion*** ❑ Long cases <u>Respiratory System</u> ❑ COPD ❑ Bronchogenic carcinoma ❑ Pneumonia ***CVS*** ❑ CCF ❑ CHD ❑ IHD ❑ VHD ❑ Rheumatic heart disease ❑ Hypertension ❑ Pericardial diseases	

Learning Objectives	Contents	Teaching Hours
Students will be able to: • evaluate the patients by follow up and monitoring • assist in managing critically ill patients • interpret various common investigation reports – ECG, X-rays, Biochemical tests, etc. • assist doctors in counselling patients and their families about treatment, follow up and prevention.	***GIT*** • Haematemesis&mealena • PUD • V. Hepatits • CLD • Carcinoma of Liver • Pancreatitis • Heapatic failure ***Endocrine*** • Hyperthyroidism • Hypothyroidism • DM ***Rheumatology*** • Rheumatoid arthritis • Seronegative arthritis • Osteoarthritis • Gout ***Urinary*** • Glomerulonephritis • Nephrotic Syndrome • Acute Kidney Injury • Chronic Kidney Disease • Urinary Tract Infection ***Haematology*** • Anaemia • Leukaemia • Bleeding diathesis	

Learning Objectives	Contents	Teaching Hours
Students will be able to: • demonstrate in-depth skills, in history taking, clinical examination, diagnosis and management of NS diseases & infectious diseases.	**Nervous System** • CVD • Multiple Sclerosis • Myasthenia Gravis • Parkinsonism • Peripheral neuropathy • GBS • Cranial neuropathy **Infection** • Enteric fever • Malaria • Kala Azar • Filarisis • Amoeabiasis • Tetanus • Rabies • Poisoning • Snake bite • Tuberculosis • Diarroehea & Dysentery • Shock • Dengue	

Learning Objectives	Contents	Teaching Hours
Students will be able to: • present short cases on different body system	**Short Cases :** ❑ Hepato or Splenomegaly or both ❑ Pleural effusion ❑ Pneumothorax ❑ Consolidation ❑ Collapse ❑ Fibrosis ❑ Hemiplegia ❑ Paraplegia ❑ Facial nerve palsy (UMN + LMN) ❑ Ascites ❑ Lymphadenopathy ❑ Thyroid ❑ Examination of knee ❑ Examination of precordium ❑ Auscultation of lung	
Students will be able to: • demonstrate certain skills • carry out certain procedures e.g. lumbar puncture under supervision, IM injection, IV injection, Infusion	**Clinical skills :** • Bone Marrow aspiration • Aspiration of serous fluid ❑ Pleural ❑ Peritoneal ❑ Pericardial • Foley's catheterization • Intercostal tube • I/V canula • Lumbar puncture • Venesection • CPR	

Learning Objectives	Contents	Teaching Hours
Students will be able to : • interpret routine examination findings for Blood, Stool, Urine • interpret FBS, GTT and HbA1C • interpret certain specific laboratory tests e.g. Liver Function Tests etc. Students will be able to: • interpret common radiological findings on plain skiagrams of chest, skull, sinuses, neck, abdomen, pelvis, upper and lower extremities	**Interpretation of Laboratory Data** • **General :** ❑ Blood for R/E ❑ Urine for R/E ❑ Stool for R/E ❑ FBS / GTT • **Specific :** ❑ Liver function test (LFT) ❑ Thyroid function test (TFT) ❑ Kidney function test ❑ Pulmonary function tests (PFT) ❑ Test for malabsorption ❑ Test for rheumatology ❑ Test for neurology ❑ Cardiac function test ❑ Haematological test ❑ Test for certain infectious diseases, e.g. Widal test. • **Radiology :** ❑ X-ray chest ❑ X-ray • Bones • Skull • Joints ❑ X-ray abdomen	

Learning Objectives	Contents	Teaching Hours
Students will be able to: • interpret findings on certain contrast X-rays e.g. Barium Meal etc. • establish a good-student patient relationship • communicate with patients in understanding manner. • observe and assist in terminal care • observe in care of death & dying patient	• Contrast X-rays : ❑ Barium Meal ❑ Barium Follow through ❑ Barium Enema ❑ ERCP ❑ Myelogram) ❑ IVU. • USG • CT & MRI • Communication Skills • Terminal Care • Care of death and dying	

Note:

1. Each student will be able to get certain number of beds, they will write down their history, physical examination, follow-up, observe the management and follow-up including counselling.
2. Each student will submit a complete case history per week of placement in every assignment in medicine.

Annex - 3

Department of Medicine

Card - III
(5th Year)

Grading
A = 75 - 100
B = 60 - 74
C = 50 - 59
D = 40 - 49
E = 00 - 39

Name of the student : _____

Roll No. _____

Medicine unit : _____

Name of Professor : _____

Duration of Placement (3rdRound) from _____to_____

Total attendance _____days, out of_____days

No.	Items	Marks obtained	Signature of Teacher
1.	Respiratory diseases		
2.	Cardiovascular diseases		
3.	Alimentary &Hepatobiliary disorders		
4.	Renal diseases		
5.	Endocrine disorders		
6.	Bones, joints & connective issue diseases		
7.	Diseases of nervous system		
8.	Haemopoietic disorders		
9.	Interpretation of X-ray		
10.	Interpretation of ECG		
11.	Instrumental uses in clinical practice		
12.	Interpretation of laboratory investigations		

Marks obtained (%):

Professor
Department of Medicine

Registrar
Department of Medicine

Physical Medicine & Rehabilitation

Learning Objectives	Contents	Teaching Hours
Students will be able to: • describe historical aspect, spectrum of physical medicine & rehabilitation • describe rehabilitative management of certain conditions including: ❑ Low back pain and common spinal disorder ❑ Rheumatoid Arthritis and other inflammatory arthritides ❑ Stroke and other common neurological conditions ❑ Arthritis and allied conditions ❑ Degenerative Joint diseases ❑ Cerebral palsy and other paediatrics conditions ❑ Chronic pain and palliative care ❑ Common geriatric disorders ❑ Orthopedic conditions and sports injury ❑ Cardiopulmonary rehabilitative conditions • identify the various modalities of physical therapy • plan to apply physical therapy for certain clinical conditions	**CORE:** • Principles of management and rehabilitation of musculoskeletal and neurological disorders	5th year 5 hours lecture

Appendix-4

Physical Medicine and Rehabilitation
Clinical Attachment (WARD DUTY)
4th Year- 2 weeks

Learning Objectives	Contents	Teaching Hours
Students will be able to: • outline the role and importance of Physical Medicine & Rehabilitation • identify the various modalities of Physical Medicine & Rehabilitation management • plan to apply physical therapy for certain clinical conditions	• Introduction to Physical Medicine & Rehabilitation ❑ History ❑ Background ❑ Spectrum ❑ Visit to Physical Medicine & Rehabilitation Ward • Modalities of Physical Therapy • Management and Rehabilitation of ❑ Neck pain & Back pain ❑ Soft tissue Rheumatism ❑ Painful Conditions of upper & lower extremities ❑ Neurological conditions including Stroke ❑ Spinal cord injuries ❑ Arthritis & allied conditions ❑ Orthopaedic conditions ❑ Cerebral Palsy ❑ Non-surgical & post-operative complications ❑ Cardiopulmonary rehabilitations	2 hr 2 hrs 12 hrs

Annex-4

CARD for Physical Medicine and Rehabilitation

ITEM	MARKS	Signature
Definition, Historical aspects, background, spectrum of Physical Medicine & visit in Physical Medicine ward		
Various modalities of Physical therapy		
Management and Rehabilitation of Neck Pain & Back Pain		
Management and Rehabilitation soft tissue metabolism		
Management and Rehabilitation of painful conditions of upper & lower limbs		
Management and Rehabilitation of stroke and other Neurological conditions		
Management and Rehabilitation of Spinal cord injuries		
Management and Rehabilitation of Arthritis and allied conditions		
Management and Rehabilitation of non surgical orthopaedic & post operative complication		
Management and Rehabilitation of Cerebral Palsy and other paediatric neurological conditions		

Time Schedule
Medicine & Allied Subjects (lecture)

Discipline	2nd phase (In hrs.)	3rd phase (In hrs.)	4th phase (In hrs.)	Total hours
Internal medicine	22	25	90	137
Psychiatry	02	-	18	20
Dermatology	-	-	17	17
Pediatrics	04	20	22	46
Physical Medicine	-	-	04	04
Emergency	-	-	-	-
Total	28hrs	45 hrs	151 hrs	224 hrs

Ward duty
Subjects (weeks)
Time: 9.30-11.30am & 7.00pm- 9.00pm (4 hours)

Phase	Medicine (weeks)	Emergency (weeks)	Pediatrics (weeks)	Psychiatry (weeks)	Skin & VD (weeks)	Physical Medicine (weeks)	Total weeks
2nd	14	-	04	-	-	02	20
3rd	6+2 (OPD)	02	-	02	02	-	14
4th	12	-	06	02	02	-	22
Total	34 wks.	2 wks.	10 wks.	04 wks.	04 wks.	02 wks	56

Note: Teachers for supervising the evening duties must be available

Final professional examination

Assessment of Medicine

Assessment systems and mark distribution

<table>
<tr><th>Components</th><th colspan="3">Marks</th><th>Total Marks</th></tr>
<tr><td>WRITTEN EXAMINATION
Paper – I- Internal Medicine
a) MCQ (Format- 10 multiple true false and 10 single best response)
b) SAQ+ SEQ
c) Marks from formative assessment</td><td colspan="3">20

70
10</td><td rowspan="3">100

100</td></tr>
<tr><td>Paper - II- Internal medicine with allied subjects & Paediatrics
Psychiatry, Dermatology& Veneral disease, Neurology, Poisoning, Infections, Geriatrics, Genetics, Cardiology, Nephrology and Paediatrics</td><td>Int.Me. & Allied</td><td>Paediatrics</td><td>Total</td></tr>
<tr><td>a) MCQ (Format-10 multiple true false and 10 single best response)
b) SAQ+SEQ
c) Marks from formative assessment</td><td>10

35
05</td><td>10

35
05</td><td>20

70
10</td></tr>
<tr><td></td><td colspan="3">Total</td><td>200</td></tr>
<tr><td>OSPE</td><td colspan="3">10 stations x 05</td><td>50</td></tr>
<tr><td colspan="5">Continued (P.T.O)</td></tr>
</table>

ORAL & CLINICAL **<u>8 Examiners in 4 boards</u>**. **Day -1** Board- A- 1 examiner from internal Medicine 1 examiner from internal Medicine Board-B- 1 examiner from Internal Medicine 1 examiner from allied subjects **Day-2** Board- A- 1 examiner from Paediatrics 1 examiner from Paediatrics Board-B- 1 examiner from Skin & VD/Internal medicine 1 examiner from Psychiatry **<u>Examiner will be selected according to seniority</u>** For each board during oral examination Xrays, ECG, photographs, lab data etc. are to be included and 40 marks are to be allotted for this purpose No temp. Chart, slides, specimen in Practical Exam.	**Oral** **40** Marks for Each Board (10 marks for each board for Xray, ECG, lab data, photographs etc and **30** marks for each board for structured oral examination) **Clinical** **a) Day-1:** i) 1 Long case =**20** Marks (IM) ii) 3 Short cases=30 Marks (IM) **b) Day-2:** i) 1 Long case =**20** Marks (Paed) ii) 2 Short case s=20 Marks (1 for Paed)+(1 for Skin & VD/ Psychiatry)	**160** *(Oral- 30 marks x 4 boards) =120* *(Practical-10 marks x 4 boards) =40* **90**
	Grand Total	**500**

There will be separate Answer Script for MCQ. Pass marks 60% in each of written, oral and practical examinations. After aggregating obtained marks of **4** oral boards (comprising of SOE & Practical) students pass or fail will be finalized in oral section.

INTEGRATED TEACHING EXERCISE

- The integrated teaching should be established as a routine
- It should be on selected topics
- It should be started from year 3 M.B.B.S Class
- It should involve teachers of pre-clinical, para-clinical & clinical subjects
- It should be on theoretical, clinical & Paraclinical aspects aided by audio-visual devices
- Programme should be made well ahead of commencement of the course & concerned persons shall be informed in time
- It should be mostly community, Primary Health Care & National Health problems oriented
- It should be held preferably twice a year ,each for two hours between 9 - 11 am
- It should involve all clinical students & teachers and the site, lecture theatre & attendance must be recorded

Some examples of Multi-Disciplinary Integrated Exercise topics are:

Trauma
Cancer
Tuberculosis
C P R
Jaundice
Acid base electrolyte balance / imbalance
Death and dying
- Medical ethics
- Maternal and child health

Diabetes Mellitus

Departments:
MEDICINE + SURGERY + OBGYNE

Day : Thursday
Time : 09.00 – 11.00 a.m.
Frequency : Once in a month

WARD PLACEMENT

- To introduce uniform card system and feasible card in all the medical colleges
- To prepare a central card for different components of medicine incorporating teachers of all medical colleges on priority basis
- Each card will carry 100 marks, 10% of the card marks will be added to the summative assessment
- 52 weeks- 100 mark.

OPPORTUNITY FOR COMMUNITY ORIENTATION

- Teaching - learning sessions will be organised in inpatient departments in different wards e.g. Internal medicine, Paediatrics, Psychiatry, Dermatology, etc., outpatient departments, emergency room, infections diseases hospital
- The patients attending the different areas will mostly represent the community
- Medical college hospitals cover a good area of community health problems
- Attempt can be made to motivate students for meeting health needs of people
- For further attitudinal shift to serve people, field site training in 3rd 4th year and a short stay (1-2 weeks) during internship in Thana Health Complex will be of much help

BLOCK POSTING

Time	: Total 4 weeks	
Break up	: Internal medicine	12days
	Paediatrics	6 days
	Psychiatry	3 days
	Dermatology	3days

BLOCK POSTING is a most important part of clinical teaching. It is a preparation to step in internship training. It is full time training

WORKING HOURS

- 09.00 am. – 02.30 pm (Compulsory for all)
- 02.30 pm. – 08.30 pm.(Roaster duty time)

Teaching / learning schedule: to be arranged locally
The duties of the students during block posting will include:

a. small group teaching,
b. ward round
c. roaster duty during morning and evening hours

Every student will have a separate log book for his attendance, performance etc.
Log book to be attached with the formative assessment

SKIN & VD

Course Objectives:

At the end of the course students will be able to:

- take appropriate history from the patients of skin & VD
- perform the dermatological examination properly
- select and interpret relevant investigations
- diagnose and manage the most common skin and venereal diseases prevalent in Bangladesh
- deal with dermatological and venereological emergencies
- identify problematic patients that require specialised care and refer them appropriately
- communicate effectively with patients, relatives and colleagues regarding complications, prognosis and others
- participate in the related national disease control programs of skin & VD
- conduct relevant research

List of Competencies to acquire :

- Taking appropriate history from patients of skin & VD
- Performing proper dermatological examination of the said patients
- Performing the relevant investigations and interpreting the results
- Diagnosing common skin & VD cases
- Managing common skin & VD cases
- Counselling the cases of skin & VD
- Referring the complicated cases timely & to the appropriate authority for better management

Learning Objectives and Course Contents in SKIN & VD (lectures)

Learning Objectives	Contents	Teaching Hours
Students will be able to: • describe the structure and functions of the skin as an organ • mention the symptoms of skin diseases & their causes • mention the cutaneous lesions & their causes • describe the etiology, pathogenesis & clinical features of common skin and venereal diseases • mention the differential diagnosis of each disease with differentiating features • request and interpret investigations like gram staining/ AFB / skin scraping for fungus microscopy & culture/VDRL/ TPHA/ skin biopsy • diagnose and manage common skin and venereal diseases	**CORE:** • Structure and functions of the skin • Cutaneous Signs /Symptoms • Scabies and Pediculosis • Atopic Dermatitis & Contact and Seborrhoeic dermatitis • Superficial fungal infections • Pyoderma • Bullous diseases (Pemphigus) • Cutaneous manifestations of systemic diseases • Viral disease (Herpes) • Syphilis & Genital ulcers • AIDS • Gonorrhoea, Non-Gonococcal Urethritis • Psoriasis • Acne • Skin Tuberculosis • Urticaria • Pigmentary diseases (Vitiligo), Alopecia	1 hour 1 hour 1 hour 1 hour 1 hour 1 hour 1 hour 1 hour 1 hour 1 hour 1 hour 1 hour 1 hour 1 hour 1 hour 1 hour 1 hour **Total: 17 hours**

CARD for Skin & Venereal Diseases

ITEM	MARKS	Signature
Procedure of dermatological history taking and writing		
Examination of the integumentary system (skin, hair, nail & mucosa)		
Symptomatology of skin (generalised & localised pruritus)		
Symptomatology of skin (generalised & localised pigmentation)		
Maculo-papular lesions (Scabies, Pediculosis, Eczema)		
Scaly lesions (Psoriasis, SD, Dermatophytosis, Pityriais, Rosea)		
Pyogenic lesions (Impetigo centagiosa, Bullus Impetigo, SSSS)		
Vesicobullous lesions (Herpes, Pemphigus, Pemphigoid, STS)		
Acne		
TB, Leprosy		
Drug reactions & urticaria		
Urethral/vaginal discharge (Gonorrhoea & NGU)		
Genital ulcer (Syphilis & Chancroid)		
AIDS		

Skin & Venereal Diseases
Clinical Attachment (WARD DUTY)

Total 96 hours (24 Days) in 3rd Phase (2 wks) & 4th Phase (2wks)

Learning Objectives	Contents	Teaching Hours
Students will be able to: • take appropriate history from the patients of skin & VD • perform the dermatological examination properly • select and interpret relevant investigations • describe Aetiology & clinical features of common skin and venereal diseases • diagnose and manage the most common skin and venereal diseases prevalent in Bangladesh • deal with dermatological and venereological emergencies • acquaint with universal precautions, syndromic management, counselling of STD/ AIDS Cases.	**Dermatology** **CORE:** • Structure and function of the skin • Cutaneous symptom- generalized pruritus • Cutaneous symptom- G. hyperpigmentation • Cutaneous symptom- hypopigmentation • Types & causes of cutaneous lesions • Scabies and Pediculosis • Atopic Dermatitis • Seborrhoeic Dermatitis & other Dermatitis • Contact Dermatitis • Fungal infections-Dermatophytosis & Candidiasis • Acne • Psoriasis • Parapsoriasis & Pityriasis Rosea • Erythroderma • Viral Diseases (Herpes simplex, Herpes zoster, wart, molluscumcontagiosum) • Leprosy • Bacterial infections of the skin(impetigo contagiosa, B impetigo, SSSS) • Filariasis	4 hours 4 hours 2 hours 2 hours 2 hours 4 hours 2 hours 2 hours 4 hours 4 hours 4 hours 2 hours 2 hours 4 hours 2 hours 4 hour 2 hour

Learning Objectives	Contents	Hours/days
Students will be able to • describe the clinical feature, management. • Interpret result of patch test/ prick test / tuberculin test. • perform gram staining/ bubo aspiration • request& interpret tests like VDRL/ TPHA/ ELISA/ Western blot/ CFT for chlamydia.	**<u>Additional:</u>** • Drug Reactions • Urticaria & angioedema • Skin tuberculosis • Genodermatoses (Ichthyosis, Neurofibromatosis, etc.) • Melanocytic & non melanocytic nevi • Skin tumours • Bullous diseases (Pemphigus, Dermatitis herpetiformis) • Systemic diseases and the skin • Chronic arsenicosis • Hair (AA, Telogen effluvium, Anagen effluvium, Androgenetic alopecia) • Hypertrichosis & Hirsutism • Nail diseases-(fungal infection, LP, Psoriasis) • Mucous membrane diseases (Aphthous ulcer, stomatitis/glossitis) **<u>Venereology</u>** **CORE** • Basics of STI (definition & classification) • Syphilis • Chancroid & other genital ulcers • Gonorrhoea & Nonspecific Urethritis • AIDS • Syndromic management of STI	2 hours 2 hours 2 hours 4 hours 2 hours 2 hours 4 hours 4 hours 2 hours 4 hours 2 hours 2 hours 2 hours 2 hour 2 hour 2 hour 2 hours 2 hours 2 hours

While taking history and examining a patient the following steps should be followed by students:

Greetings to the patient
Introduction of self as a medical student
Explanation to the patient what is to be done
Use of understandable language of patient
Seeking permission and co-operation
Adequate exposure in lighted area having maintaining privacy
Giving thanks to the patient at the end of examination
Adopting correct procedure by use of appropriate instrument while doing procedure.

Instructions for Item Cards:

Students should complete the cards during clinical attachment
Teacher should sign the card against the item completed
At the end of the attachment the card must be submitted to the Head of the department for countersigning.

Psychiatry

Course Objectives

After completion of the course a medical student will be able to:

- comprehend the concept of mental health care and be aware of the role of the medical doctor in detecting common mental disorder in the community
- provide appropriate management to patients in the community
- comprehend the historical concept of psychiatry and its gradual development.
- comprehend normal and abnormal human behaviour in terms of personality, memory, intelligence, and learning.
- classify psychiatric disorders, recognise clinical manifestation of common psychiatric syndrome during clinical assessment and plan their appropriate management.
- deal psychiatric emergencies in hospital and community.
- diagnose and manage common psychiatric disorders
- develop communication skill and doctor patient relationship

Learning Objectives and Course Contents in Psychiatry

Learning Objectives	Contents	Teaching Hours 20 hours
Students will be able to : • describe the historical concepts related to psychiatry • describe psychosocial aspects of patients in medical settings • explain the basic concepts related to learning, memory, personality, and intelligence • classify common psychiatric disorders prevalent in Bangladesh • describe the aspects of mental health care to patients at the community level including drug abuse • classify common child psychiatric, neurological, behavioral, and psychosocial disorders prevalent in Bangladesh • recognise clinical manifestation of common psychiatric syndrome during clinical assessment • plan their appropriate management. • provide care to the patients presenting with psychiatric emergencies in hospital • give long term care to patients at the community level provide preventive mental health care especially to high risk groups	**CORE :** • Historical concepts & classification • communication skill and doctor patient relationship • Behavioural Science • Learning, memory, personality, intelligence • Symptommatology • Organic psychiatry: Dementia & Delirium • Substance Abuse &Alcoholosim • Child psychiatry including Autism • Psychosexual Disorders • Psychoparmacology • Behavioral addiction(internet,socialmedia,gaming,pornographyetc) **Clinical Placement:** • Mental state exam • Schizophrenia • Mood Disorders: Depression & Bipolar Mood Disorder (BMD) • Anxiety Disorders: GAD, phobia, obsession, panic dis. • Psychiatric emergencies • Psychotherapy	1 hour 1 hour 1 hour 2 hour 1 hour 1 hour 2 hour 1 hour 1 hour 1 hour 1 hours 2 hours 1 hours 1hour 1 hour 1 hour

CARD for Psychiatry

ITEM	MARKS	Signature
History taking		
Mental State Examination		
Symptomatology		
Schizophrenia		
Mood Disorder – Mania		
Mood Disorder Depression - Suicide & DSH		
Anxiety Disorders (GAD, phobic disorders, OCD, panic disorder, PTSD, ASD)		
Somatoform Disorder (Somatization, Hypochondriasis, body dysmorphic disorders, chronic pain)		
Delirium – Dementia		
Childhood Psychiatric Disorders including Autism		
Substance Abuse Disorder & Alcoholism		
Psychotherapy & ECT		

Learning Objectives and Course Contents in Psychiatry

Psychiatric Diseases

Clinical Attachment (WARD DUTY)

Total 96 hours (12 days in 3rd phase + 12 days in 4th phase) = 24 Days in 3rd & 4th phase

Subject	Learning Objectives	Contents	Teaching Hours
1. Symptomatology in Psychiatry	Students will be able to: • Identify common psychiatric sign, symptoms in patient.	• Mood- anxiety, depression, elation, irritability, anger. • Perceptual symptoms- Hallucination, imagery, illusion. • Thought symptoms- delusion, different types of delusion, obsession, compulsion • Disturbance of thinking process- speech abnormality. • Motor symptoms and signs. • Disturbance of body image self, memory, consciousness. • Attention, concentration • Insight • Different between psychosis and neurosis.	2 hrs 2 hrs
2. History taking & Mental status examination (MSE)	Students will be able to: • Prepare the patient for interview • Starting, continuing and completing interview • Finding out proper information • Proper history taking of a psychiatric patient • Analysis of personality of patient • Identify all points of mental status examination • Carry out neuro psychiatric examination	• History taking • Personality analysis • Mental status examination- appearance and behavior Rapport establishment Speech- rate, rhythm, content, flow mood Suicidal ideation Thoughts Perception Cognitive function- orientation, attention, concentration, memory • Language abilities, contraction, abilities	2 hrs 2 hrs

Subject	Learning Objectives	Contents	Teaching Hours
3. Personality & Personality disorder	Students will be able to: • Understand personality pattern of the patient • Understand different type of personality disorder • Diagnose and manage common personality disorder	• Origin of personality • Classification of abnormal personality • Different personality disorder • Diagnosis and management of personality disorder	2 hrs 2 hrs
4. Reaction to stressful experience	Students will be able to: • Understand the response to stressful events • Identify sign symptom of ASD, PTSD, Adjustment disorder • Diagnose and manage cases of ASD, PTSD, Adjustment disorder • identify special kinds of adjustment	• Response to stressful event • Defense mechanism • ASD- sign symptom, etiology, diagnosis and management • PTSD- sign symptom, etiology, diagnosis and management • Adjustment disorder- sign symptom, etiology, diagnosis and management • Adjustment to physical illness and handicap • Grief • Bereavement • Adjustment to sexual abuse	2hr - 1 hr - 1 hr - 1 hr 2 hr
5.Generalized anxiety disorder (GAD)	Students will be able to: • Identify clinical features and etiology of GAD • Take appropriate history from patient • Perform mental status examination of GAD patient • Diagnose and manage case of GAD	• GAD- sign symptom, etiology, diagnosis and management	- 4 hrs
6. Phobic anxiety disorder	Students will be able to: • Identify clinical features and etiology of Phobic disorder • Diagnose and manage case of Phobic disorder	• Specific phobia • Social phobia • Agoraphobia	2 hrs

Subject	Learning Objectives	Contents	Teaching Hours
7. Panic disorder	Students will be able to: • Identify clinical features and etiology of Panic disorder • Take appropriate history from patient • Perform mental status examination of Panic disorder patient • Diagnose and manage case of Panic disorder	• Panic disorder - sign symptom, etiology, diagnosis and management	2 hrs
8. Obsessive compulsive disorder (OCD)	Students will be able to: • Identify clinical features and etiology of OCD • Take appropriate history from patient • Perform mental status examination of OCD patient • Diagnose and manage case of OCD	• OCD - sign symptom, etiology, diagnosis and management	2 hrs
9. Major depressive disorder (MDD)	Students will be able to: • Identify clinical features and etiology of MDD • Take appropriate history from patient • Perform mental status examination of MDD patient • Diagnose and manage case of MDD	• MDD - sign symptom, etiology, types diagnosis and management	2 hrs 3 hrs
10. Bipolar disorder	Students will be able to: • Identify clinical features and etiology of Bipolar disorder • Take appropriate history from patient • Perform mental status examination of Bipolar disorder patient • Diagnose and manage case of Bipolar disorder	• Bipolar disorder - sign symptom, etiology, types, diagnosis and management	2 hrs 3 hrs

Subject	Learning Objectives	Contents	Teaching Hours
11. Schizophrenia	Students will be able to: • Identify clinical features and etiology of Schizophrenia • Take appropriate history from patient • Perform mental status examination of Schizophrenia patient • Diagnose and manage case of Schizophrenia	• Schizophrenia - sign symptom, etiology, types • Diagnosis and management	- 2 hrs - 4 hrs
12. Dementia	Students will be able to: • Identify clinical features and etiology of Dementia • Take appropriate history from patient • Perform mental status examination of Dementia patient • Diagnose and manage case of Dementia	• Dementia - sign symptom, MMSE, etiology, types, diagnosis and management	4 hrs
13. Movement disorder	Students will be able to: • Identify common movement disorder prevalent in psychiatric patient • Diagnose & manage movement disorder in psychiatric patient	• EPSE • Parkinson's disease • Tics	2 hrs
14. Seizure disorder	Students will be able to: • Understand seizure and pseudo seizure • Differentiate different types of seizures • Identify clinical features and etiology of Seizure disorder • Take appropriate history from patient • Perform mental status examination of Seizure disorder patient • Diagnose and manage case of Seizure disorder • Understand psychiatric aspect of epilepsy	• Seizure disorder- sign symptom, etiology, types, diagnosis and management • Pseudo seizure • Different types of seizure • Preictal, ictal, postictal, interictal disturbance and social aspect of epilepsy	4 hrs

Subject	Learning Objectives	Contents	Teaching Hours
15. Eating disorder	Students will be able to: • Identify clinical features of Eating disorder • Diagnose and manage case of Eating disorder	Sign symptom, etiology, types, diagnosis and management of – • Anorexia • Bulimia nervosa • Eating disorder (NOS)	2 hrs
16. Sleep disorder	Students will be able to: • Identify clinical features and etiology of Sleep disorder • Take appropriate history from patient • Diagnose and manage case of Sleep disorder	Sign symptom, etiology, types, diagnosis and management of – • Insomnia • Narcolepsy • Breathing related sleep disorder • Parasomnias	4 hrs
17. Sexual disorder	Students will be able to: • Identify clinical features and etiology of Sexual disorder • No classification of sexual disorder • Take appropriate history from patient • Diagnose and manage case of Sexual disorder	Sign symptom, etiology, types, diagnosis and management of – • Sexual dysfunction- in case of male and female • Paraphilia • Gender dysphoria	4 hrs
18. Somatoform disorder	Students will be able to: • Identify clinical features and etiology of Somatoform disorder • Take appropriate history from patient • Perform mental status examination of Somatoform disorder patient • Diagnose and manage case of Somatoform disorder	• Somatoform disorder- sign symptom, etiology, types, diagnosis and management	2 hrs
19. Conversion disorder	Students will be able to: • Identify clinical features and etiology of Conversion disorder • Take appropriate history from patient • Perform mental status examination of Conversion disorder patient • Diagnose and manage case of Conversion disorder	• Conversion disorder- sign symptom, etiology, types, diagnosis and management	4 hrs

Subject	Learning Objectives	Contents	Teaching Hours
20. Psychiatric aspect of obstetrics and gynaecology	Students will be able to: • Identify clinical features and etiology of Psychiatric diseases in obstetrics and gynecological cases • Take appropriate history from patient • Perform mental status examination of patients • Diagnose and manage the case	Sign symptom, etiology, types, diagnosis and management of – • Pseudocyesis • Postpartum mental disorders- maternity blue, Postpartum psychosis • Premenstrual syndrome	2 hrs
21. Suicide and deliberate self-harm	Students will be able to: • Identify clinical features and etiology of Suicide / deliberate self-harm • Take appropriate history from patient • Perform mental status examination of Suicide / deliberate self-harm patient • Diagnose and manage case of Suicide/ deliberate self-harm	• Suicide /deliberate self-harm - sign symptom, etiology, types, diagnosis and management • Assessment of suicidal risk • Care of suicidal patient • Motive for deliberate self-harm • Suicide prevention	4 hrs
22. Substance related disorder	Students will be able to: • Identify clinical features and etiology of Substance related disorder • Take appropriate history from patient • Perform mental status examination of Substance related disorder patient Diagnose and manage case of Substance related disorder	• Terminology- intoxication, Abuse, Dependence, Tolerance, Withdrawal state • Sign symptom, etiology, types, diagnosis and management of- Alcohol related disorder Opioid related disorder Benzodiazepine related disorder Cannabis related disorder Amphetamine related disorder Social media related disorder	1 hr 1 hr 1 hr 1hr 1 hr 1 hr 1 hr
23. Psychopharmacology	Students will be able to: • Understand classification, mechanism of action indication, contra indication, adverse effects, dosages, and advises regarding use of psychotropic medicines.	• Class of drugs- Antipsychotic Antidepressant Mood Stabilizer Anxiolytic Hypnotic Psychostimulant	4 hrs

Subject	Learning Objectives	Contents	Teaching Hours
24. Psychological treatment	Students will be able to: • Understand different types of psychological treatment applicable on psychiatric patients	• Types of psychological treatment- counselling Cognitive behavior therapy Supportive psycho therapy Insight oriented psycho therapy Dialectic behavior therapy Family therapy Couple therapy	4 hrs
25. Child psychiatric disorder	Students will be able to: • Identify clinical features and etiology of Child psychiatric disorder • Take appropriate history from patient • Perform mental status examination of patients • Diagnose and manage case of Child psychiatric disorder	• Sign symptom, etiology, types, diagnosis and management of – ASD ADHD Conduct disorder Intellectual disability disorder	4 hrs

Paediatrics

The curriculum in pediatrics, 2002 has been revised and updated in 2012 to emphasize the issues related to child health problems of the country.

The undergraduate medical students need to know these common childhood problems and how to manage these efficiently. This need based revised curriculum will certainly enable them to serve the community.

The contents of the curriculum as well as the skills to be acquired by the students are categorized as "must know", "useful to know", "nice to know" according to their importance at this level. These categories are marked as ∗∗∗, ∗∗ and ∗ respectively. Teachers are requested to follow this guideline while planning their teaching-learning sessions.

Departmental Objective:

To train medical graduates who will be able to manage common childhood problems in the community. Hence, at the end of the course they will be able to −

- manage common pediatric and neonatal problems at hospital and the community level.
- manage acute neonatal and pediatric emergencies efficiently
- identify neonatal and pediatric problems that require secondary and tertiary care and refer them appropriately.
- To diagnosis and manage pediatric emergencies commonly encountered in hospital practice.
- refer appropriately for rehabilitation where necessary
- use growth chart in order to assess the growth of a child to differentiate normal from abnormal.
- provide emergency cardiopulmonary resuscitation to newborns and children
- select and interpret relevant investigations
- perform routine therapeutic procedures
- communicate effectively with the child, parents, relatives and colleagues.
- counsel, explain and guide parents and relatives regarding the illness, the management plan, the possible complications and the prognosis
- participate in the national programmes providing both service and training and preventive activities: IMCI, NNS, EPI and other programmes
- serve the community during disaster and epidemics
- update with latest information related to core paediatric problems
- conduct research
- perform/discharge medico-legal and ethical responsibilities

List of Competencies to acquire:

- communicate and counsel patients, parents and relatives.***
- demonstrate empathy and humane approach towards patients, parents and relatives. ***
- exihibit a proper attitude towards colleagues and other staffs.***
- take relevant history and perform clinical examination to arrive at a working diagnosis***
- perform the anthropometric measurements in order to assess the growth of a child.***

- use and interpret the growth chart to compare the anthropometric values with the standard one.***
- suggest appropriate investigations keeping in mind their relevance and cost effectiveness***
- plan and outline a treatment at primary facilities which is need based, cost effective and evidence based***
- recognize situations which need urgent treatment at secondary and tertiary level hospitals and be able to make a prompt referral with a referral note after giving first aid or emergency treatment at primary health care facilities.***
- use and interpret the Integrated Management of Childhood Illness (IMCI) Chart prepared by WHO***
- prepare and administer oral rehydration therapy (ORT)***
- explain mother about appropriate positioning and attachment in breast feeding & effective suckling**

Students must observe the following skills

- Hand/ forearm washing***
- Cardio-pulmonary resuscitation (CPR)***
- First aid to children and neonates including endotracheal intubation and mouth to mouth breathing.**
- Lumbar puncture***
- Bone marrow aspiration***
- Thoracocentesis/ paracentesis*
- Umbilical catheterization*
- Exchange transfusion*
- Blood and blood products transfusion including mobile transfusion***
- I/V cannulation, collection of samples for routine examination (RE)*
- Use of AMBU bag***
- Administration of an enema*
- Phototherapy**
- Incubator (open and closed) care*
- Oxygen therapy***
- Nebulization***
- Bedside urine for albumin & sugar***
- Capillary blood glucose estimation**
- Preparing balanced diet**
- Performing intradermal / subcutaneous/ intramuscular/intravenous or per rectal injections in children*
- Constructing a vaccination schedule for a child*
- Applying vaccine to children*
- Mantoux test and interpret the result*
- Introduction of nasogastric tube*
- Managing hyperpyrexia or hypothermia and convulsion and other paediatric emergencies*

- Applying otoscope, tongue depressor during examination of the child*
- Writing discharge certificate*

Final Professional Examination:

Marks distribution:

Total marks – 500 (Summative)

Pediatrics -130

Written = 50

- MCQ-MTF (05) + SBA(05)=10
- 2SEQ 20-+ 6SAQ 15 = 35
- Formative assessment = 05

Oral, Practical and Clinical=80

- Oral, Practical =30 +10 =40
- Clinical-1 long case-20
- -1 Short case-10
- OSPE =10.

Components	**Marks**			**Total Marks**
Paper l – Internal Medicine Paper - ll - Medicine with allied and Pediatrics				
	Int Me.& Allied	**Pediatrics**		
Pediatrics MCQ (MTF, 5 + SBA, 5)	10	10	20	100
Total 2 SEQ + 6SAQ Group B1 - 1SEQ 10+3SAQ (2.5X3) Group B2 – 1SEQ10 +3SAQ(2.5X3)	35	35	70	
Formative assessment	05	05	10	
	Total			
OSPE		10		
Oral, Pratical and clinical		30+10+30		
	Total	130 (For Pediatrics)		

Paediatrics

Learning Objectives	Contents	Teaching Hours
At the end of the sessions, students will be able to • define Pediatrics and Primary health care • state the stages of a child's life • describe the current child health status in Bangladesh • describe the major child health problems in the country • describe Millennium Developmental Goals (MDG), particularly MDG 4 • describe the components of essential service package (ESP) and essential newborn care (ENC) • discuss the emergency triage assessment and treatment • state the National Child Health programmes • describe the preventive programmes of pediatrics e.g. Integrated Management of Childhood Illness (IMCI), EPI, National Nutrition Services (NNS), Infant and Young Child Feeding (IYCF), vitamin-A supplementation	**Preventive Paediatrics** **<u>CORE:</u>** • An introduction to Paediatrics& MDG*** • IMCI*** • EPI*** • IYCF*** • IDD** • ENC** • NNS*** • ETAT** • ECD** • Vitamin-A supplementation**	1 hr 2 hrs 1hr Total = 4 hrs

Learning Objectives	Contents	Teaching Hours
At the end of the sessions, students will be able to • describe the procedure for taking care of new-born e.g. maintenance of body temperature, feeding, care of eyes etc. • define perinatal asphyxia, hypoxic ischemic encephalopathy (HIE), describe APGAR Score, causes, management (Newborn resuscitation) & complication of perinatal asphyxia. • state the common causes of respiratory distress in newborn (RDS & meconium aspirates) & clinical presentation and management • define preterm & low birth weight, epidemiology, causes, clinical presentation, complications & management of preterm low birth weight babies. describe the common infections of newborn (neonatal sepsis), their etiology /organism patterns, risk factors and types of neonatal sepsis • describe the clinical presentation of neonatal sepsis, diagnosis (e.g. sepsis screening), treatment and prevention of neonatal sepsis • describe the causes of neonatal jaundice, clinical presentation, complications& management of different types of neonatal Jaundice. • State the causes and clinical presentations of neonatal convulsions and it's diagnosis and treatment • describe the different types of birth injuries & their management	**Neonatology** **<u>CORE:</u>** • Care of a normal newborn*** • Perinatal asphyxia*** • Neonatal resuscitation*** Neonatal seizure** • Birth injuries * • Pre-term/ Low birth weight/ SGA*** • Neonatal infection*** • Respiratory distress in newborn* • Neonatal jaundice***	1hr 1hr 1hr 1hr Total = 4 hrs

Learning Objectives	Contents	Teaching Hours
At the end of the sessions the students will be able to • define Infant and young child feeding (IYCF) • describe IYCF global & national perspectives and IYCF recommendations • describe the effective breast feeding; exclusive breast feeding (including colostrum) • describe advantages of breastfeeding and hazards of artificial feeding • describe anatomy of breast and physiology of lactation • describe techniques of breastfeeding: position and attachment & effective suckling • counsel for breast feeding & complimentary feeding • describe the baby friendly hospital initiatives • describe breast milk substitute (BMS) code • describe maternal nutrition & drugs in breastfed mother • describe guiding principle of complementary feeding & advantage of complementary feeding, age specific appropriate food	**Infant and young child feeding (IYCF)** **CORE:** • Breast feeding*** • Complementary feeding***	1 hr 1hr Total = 2 hrs

Learning Objectives	Contents	Teaching Hours
At the end of the sessions the students will be able to • define growth and development • describe normal growth and development of a child • describe factors influencing growth and development • state the principles of development • describe early childhood development (ECD) and its importance • describe ways of assessing growth and development of a child • describe growth chart • define failure to thrive and state it's causes and management	**Growth and Development, ECD** **CORE:** • Growth & Development*** Failure to thrive** • Early childhood development*	1 hr 1hr Total = 2hrs
At the end of the sessions the students will be able to • define and classify protein energy malnutrition (PEM) • define severe acute malnutrition (SAM) • state the risk factors of protein energy malnutrition • describe the clinical presentation, complications & management of a child with severe acute malnutrition • describe the various types of vitamin deficiency disorders & their management • describe micro nutrients and their importance in malnutrition/child health • list the causes of obesity, consequences & management of obesity	**Nutritional Disorders** **CORE:** • PEM, SAM & CMAM*** • Vitamin deficiencies (Xerophthalmia, Rickets, Scurvy)*** • Micro nutrient deficiencies (Iron, Zinc, Calcium)** • Obesity*	1 hr 1 hr Total = 2 hrs

Learning Objectives	Contents	Teaching Hours
At the end of the sessions the students will be able to • list the common infectious diseases of children in Bangladesh • discuss the aetiology, clinical presentation, complications, treatment & prevention of vaccine preventable disease. • discuss the pathogenesis, clinical presentation, diagnosis & treatment of enteric fever • discuss the aetiology, clinical presentations of dengue fever and the complications • describe the management of a case of dengue haemorrhagic fever (DHF) and dengue shock syndrome (DSS) • describe the aetio-pathology, clinical presentation, complications and management of kala-azar • describe the aetio-pathology, clinical presentation, complications and management of malaria • describe national programme for eradication of kala-azar and malaria	**Infectious Diseases** **CORE:** • Tetanus** • Diphtheria** • Pertussis*** • Tuberculosis*** • • Measles** • Mumps** • Poliomyelitis*** • Enteric fever*** • Dengue*** • Malaria*** • Kala-azar***	1 hr 1hr 1hr 1hr 1hr 1hr 1hr Total = 7 hrs

Learning Objectives	Contents	Teaching Hours
At the end of the sessions the students will be able to • define diarrhoea, it's aetio-pathogenesis, classification, clinical presentation, complications of diarrhoea • define persistent diarrhoea and dysentery • assess dehydration & to offer appropriate management (Plan A, B,C) • select relevant investigations and their interpretation • describe the composition of ORS, Cholera Saline, Ringer's solution. • describe prevention of diarrhoea • describe helminthiasis and their management	**Gastrointestinal disorders** **CORE:** • Diarrhoeal disorders & management*** – Acute watery diarrhoea*** – Dysentery*** – Persistent diarrhoea*** • Abdominal Pain &Helminthiasis**	1 hr 1 hr Total = 2 hrs
At the end of the sessions the students will be able to • state the common respiratory illnesses of children • describe aetiology, clinical presentation, complication& management of pneumonia • describe aetiology, clinical presentation, complication& management of bronchiolitis • state the common causes of respiratory distress • differentiate asthma, pneumonia and bronchiolitis • define childhood asthma & describe the presentation & management of asthma. • describe the common differential diagnoses of stridor in children • describe the management of a case of acute laryngotracheobronchitis	**Respiratory Disorders** **CORE:** • ARI*** • Pneumonia*** • Bronchiolitis*** • Childhood Asthma*** • Croup and other causes of stridor And their management**	1 hr 1hr 1hr Total = 3 hrs

Learning Objectives	Contents	Teaching Hours
At the end of the sessions the students will be able to • list the common causes of anaemia in children • classifyanaemia. • describe the risk factors, clinical presentation & management of iron deficiency anaemia. • describe the pathogenesis, clinical & laboratory features and management of congenital haemolyticanaemia (CHA) • differentiate the laboratory features of these 2 diseases • counsel the parents about the prognosis of CHA. • describe the cause/ differential diagnoses of bleeding disorder. • describe the etiopathogenesis, clinical presentations, laboratory features and management of ITP, hemophilia, von Willebrand disease and aplastic anaemia	**Haematological Disorders** **CORE:** • Iron deficiency anaemia*** • ITP *** • Haemophilia*** • Congenital haemolyticanaemia *** • Hypoplasticanaemia/ aplastic anaemia**	1hr 1 hr Total = 2 hrs

Learning Objectives	Contents	Teaching Hours
At the end of the sessions the students will be able to • list the common causes of generalized swelling and haematuria among children • define and classify nephrotic syndrome • describe the aetio-pathology, cardinal features, complication, diagnosis, treatment and prognosis of nephrotic syndrome. • describeaetio-pathogenesis of acute glomerulonephritis, clinical presentation, complication & management of acute glomerulonephritis. • identify & describe management of a child with hypertensive encephalopathy & acute LVF • differentiate nephrotic syndrome from acute glomerulonephritis • describe the aetiology, risk factors, pathogenesis, cardinal features, complications, laboratory findings & management of UTI in children • counsel the parent for prevention of UTI • describe the causes, clinical presentation, complication & management of acute renal failure • describe the fluid & electrolytes homeostasis and acid base homeostasis • name common fluid, electrolytes and describe acid base imbalance.	**Renal disorder** **CORE:** • Nephrotic syndrome*** • Acute glomerulonephritis*** Acute Renal Failure** Fluid & Electrolytes & acid base balance*** • Urinary Tract Infection***	1 hr 1 hr 1hr Total = 3hrs

Learning Objectives	Contents	Teaching Hours
At the end of the sessions the students will be able to • state the different causes of jaundice • describe the clinico-pathological consequences of hepatotrophic viruses • describe the aetiopathogenesis, clinical presentation and complications of acute hepatitis • describe the stigmata of chronic liver diseases (CLD)/ cirrhosis of liver • list the relevant investigations for a child with liver disease e.g. acute hepatitis or chronic liver disease etc and their interpretation. • describe the treatment of a child with acute hepatitis or chronic liver diseases • describe the clinical presentation & management of hepatic coma. • list the common causes of haematemesis in children • describe the aetio-pathogenesis, clinical presentation of a case of portal hypertension. • outline the management of a case of hematemesis and malaena	**Diseases of Liver** **CORE:** • Viral hepatitis *** • Fulminant hepatic failure*** • Hepatic coma/ hepatic encephalopathy*** • Portal hypertension ** • Chronic liver disease eg. cirrhosis**	1 hr 1 hr Total = 2 hrs

Learning Objectives	Contents	Teaching Hours
At the end of the sessions the students will be able to • classify congenital heart diseases • describe the haemodynamics, clinical presentation, complication & management of common congenital heart diseases e.g. ASD, VSD, TOF & PDA. • describe aetio- pathogenesis of acute rheumatic fever • describe the clinical presentation, diagnosis, & management of acute rheumatic fever and rheumatic carditis. • describe the prevention of acute rheumatic fever • describe the causes, clinical presentation & management of heart failure in infant & children	**Disease of Cardio-vascular system** **CORE:** • Congenital heart disease (ASD, VSD, TOF & PDA)*** • Rheumatic fever & Rheumatic heart disease*** • Heart failure in infancy & childhood***	2 hrs 1 hr Total = 3 hrs

Learning Objectives	Contents	Teaching Hours

At the end of the sessions the students will be able to
• describe causes of convulsions in children
• describe the criteria of diagnosis & management of febrile convulsion
• describe the aetio-pathogenesis, clinical presentation & management & prognosis of acute pyogenic and viral meningitis
• describe the aetio-pathogenesis, clinical presentation & management & prognosis of encephalitis
• describe the pathogenesis, clinical staging, management & prognosis of tubercular meningitis.
• describe the CSF findings of acute bacterial, tubercular and viral meningitis
• define and classify epilepsy
• describe the clinical presentation, management & prognosis of epilepsy
• define and list the differential diagnoses of acute flaccid paralysis (AFP).
• describe the clinical presentation, management & complication of GuillainBarre syndrome (GBS), poliomyelitis and transverse myelitis
• differentiate GBS, polio and transverse myelitis
• describe causes of mental retardation, it's management, counseling & rehabilitation
• define cerebral palsy & describe its causes, types, clinical feature, management, counseling & rehabilitation
	Disease of Nervous system
	CORE:
	• Febrile convulsion ***
	• Epilepsy**
	• Meningitis & Encephalitis
	• Mental retardation **
	• Cerebral palsy**
	• Acute Flaccid Paralysis (AFP)***
	  • GuillainBarre syndrome
	  • Transverse myelitis
	  • Polio myelitis
		1hr
		1hr
		Total = 2 hrs

Learning Objectives	Contents	Teaching Hours
At the end of the sessions the students will be able to • Enumerate common childhood malignancies • define and classify leukaemia • describe the clinical presentation and diagnosis of acute leukaemia • describe the blood & bone marrow features of acute leukemia • describe the treatment of acute leukaemia • classify lymphoma	**Malignant diseases** **CORE:** • Leukaemia*** • Lymphoma & other tumours*	1 hr
At the end of the sessions the students will be able to • describe the causes of short stature • describe the aetiopathology, clinical presentation, diagnosis & management of hypothyroidism • classify diabetes mellitus & describe the clinical presentation, diagnosis & management of type I (IDDM) Diabetes Mellitus • classify the chromosomal disorders • describe clinical presentation, management and prognosis of Down syndrome • counsel parents about the prognosis of the diseases mentioned above	**Endocrine and Chromosomal Disorders** **CORE:** • Short stature *** • Hypothyroidism*** • Diabetes Mellitus * • Down syndrome***	1 hr 1hr Total = 2 hrs

Learning Objectives	Contents	Teaching Hours
At the end of the sessions the students will be able to • list the common causes of pain and swelling of joints • classify juvenile idiopathic arthritis (JIA) • describe clinical manifestations and complications of JIA. • describe relevant investigation and interpretation • enumerate the different treatment options of JIA • classify myopathy • describe the clinical features and diagnosis of pseudo hypertrophic muscular dystrophy/ Duchene muscular dystrophy (DMD) • describe the relevant investigations and their interpretation • describe the management including counseling & rehabilitation of pseudo hypertrophic muscular dystrophy (DMD)	**Connective Tissue & Musculo-skeletal Disorders** **CORE:** • Juvenile idiopathic arthritis (JIA)*** • Myopathy • Pseudohypertrophic muscular dystrophy**	1 hr
At the end of the sessions the students will be able to • list the common accidents and emergencies of children • describe the principles and management of poisoning • describe the clinical presentation, complications and management of kerosene poisoning • describe the clinical presentation, complications and management of organophosphorus poisoning • describe the aetio-pathogenesis, clinical presentation and management of snake bite • describe the pathogenesis and clinical presentation of drowning (salt and fresh water drowning)	**Accidental poisoning & Drowning** **CORE:** • Kerosene*** • Organophosphorus compound*** • Snake bite** • Drowning**	1 hr 1hr Total = 2 hrs

Learning Objectives	Contents	Teaching Hours
At the end of the sessions the students will be able to • state the common behavioral disorders of children • describe the risk factors & management of nocturnal enuresis • differentiate true seizure from pseudo-seizure • describe causes, early identification management & counseling of autism spectrum disorder (ASD) • describe child abuse and neglect	**Paediatric Psychological and Psychiatric disorder** **CORE:** • Childhood behavioural disorders** • Autism spectrum disorder (ASD)*** • Somatoform disorder** • Enuresis*	1 hr
At the end of the sessions the students will be able to • describe the steps of communication /counseling • counsel a parent or care giver regarding any illness	**Communication & Counseling** **CORE:** • Counseling	1 hr

Pediatrics
Teaching/ Learning Methods & Aids

Teaching methods	Aids
Lectures: • Large group teaching & lectures • Small Group teaching: (Clinical) ▪ Bedside teaching ▪ Case demonstration & practice ▪ Practical Skills (Video) • Field Site training : (with Community Medicine) • Integrated Teaching • Self-directed learning	OHP/ Multimedia presentation, Video, Slide • Patients • Simulated Patients • Dummy (Manikins) • Charts e.g. growth chart, IMCI Chart • Reading materials o Modules & national guidelines on different childhood illnesses o Study guide o Books, journals • Others e.g. ECG, Instruments, X-ray, photographs

ACADEMIC CALENDAR – PAEDIATRICS

<table>
<tr><td rowspan="2">LECTURE</td><td colspan="3">2nd Phase</td><td>3rd Phase</td><td colspan="2">4th Phase / Final Phase</td></tr>
<tr><td colspan="3">4 hours
INTRODUCTION
PREVENTIVE
PAEDIATRICS</td><td>20 hours
IYCF, Growth & development, Nutritional disorders, Infectious diseases, Childhood tuberculosis, Respiratory disorders, Gastrointestinal disorders, Accidental poisoning</td><td colspan="2">26 hours
Neonatology, Hematologic disorders, Renal disorders, Disease of liver, Disease of cardiovascular system, Diseases of nervous system, Malignant diseases, Endocrine and chromosomal disorders, Connective tissue & musculoskeletal disorders, , Paediatric Psychological and Psychiatric disorders, Communication and counseling</td></tr>
<tr><td rowspan="15">CLINICAL</td><td colspan="3">4 weeks</td><td></td><td colspan="2">6 weeks</td></tr>
<tr><td colspan="2">2 WEEKS</td><td>2 WEEKS</td><td rowspan="14">No clinical placement in 4th year</td><td colspan="2">INDOOR PLACEMENT</td></tr>
<tr><td>Day</td><td>IMCI</td><td>Neonatology</td><td>Morning (2 hours)</td><td>Evening (2 hours)</td></tr>
<tr><td>1</td><td>IMCI</td><td>History writing</td><td rowspan="14">1st Week
D1-2 : Introduction + history taking
D3 : IMCI
D4-5 : Cough & difficult breathing, diarrhea
D6 : Presentation & discussion
2nd Week
D1 : Bleeding disorder
D2 : Pallor
D3-4 : Fever, Leukaemia
D5 : Accidental poisoning
D6 : Presentation & discussion
3rd Week
D1- 2: PEM
D3-4: Hepatosplenomegaly
D5 : Lymphadenopathy
D6 : Presentation & discussion
4th Week
D1- 3: Scanty urine, ARF, NS/AGN
D4 : RF & RHD
D5 : Joint swelling
D6 : Presentation & discussion
5th Week
D1-4 : Neonatology
D5 : IYCF
D6 : Presentation & discussion
6th Week
D1-2: Convulsion
D3 : Developmental Assessment
D4- 5: OSCE
D6- : Feedback</td><td rowspan="14">Self-directed learning
Self-directed learning
Self-directed learning

Self-directed learning
Self-directed learning
Self-directed learning
Self-directed learning

Self-directed learning
Self-directed learning
Self-directed learning
Self-directed learning

Self-directed learning
Self-directed learning
Self-directed learning
Self-directed learning

Self-directed learning
Self-directed learning
Self-directed learning

Self-directed learning
Self-directed learning</td></tr>
<tr><td>2</td><td>IMCI</td><td rowspan="3">Clinical examination of
i. Newborn
ii. Child</td></tr>
<tr><td>3</td><td>IMCI</td></tr>
<tr><td>4</td><td>IMCI</td></tr>
<tr><td>5</td><td>IMCI</td><td rowspan="5">Common neonatal problems:
• Perinatal asphyxia
• Low birth weight
• Neonatal sepsis
• Neonatal Jaundice
• Neonatal convulsion</td></tr>
<tr><td>6</td><td>IMCI</td></tr>
<tr><td>7</td><td>IMCI</td></tr>
<tr><td>8</td><td>IMCI</td></tr>
<tr><td>9</td><td>IMCI</td></tr>
<tr><td>10</td><td>IMCI</td><td>IYCF</td></tr>
<tr><td>11</td><td>Assessment</td><td>Assessment</td></tr>
<tr><td>12</td><td>Feedback</td><td>Feedback</td></tr>
</table>

PLAN FOR ACADEMIC CALENDAR – PAEDIATRICS

Annex-

FIRST PROF.	SECOND PROF.	THIRD PROF.	FINALPROF.

6m	6m	6m	6m	6m	6m	6m	6m	6m	6m
			4 LECTURE		20 LECTURE		22 LECTURE		
			Introduction to Pediatrics, MDG -1 IMCI-2 National programmes-1		IYCF-2 (breast feeding-1, complementary feeding-1) Growth & development-2 Protein energy malnutrition, SAM, CMAM- 1 Other Nutritional disorders -1 Infectious diseases -7 Respiratory disorders- 3 Gastrointestinal disorders -2 Accidental Poisoning -- 2		Neonatology – 4 Haematologic disorders – 2 Renal disorders – 3 Disease of liver – 3 Disease of cardiovascular system – 2 Disease of nervous system – 2 Malignant disease – 1 Endocrine and chromosomal disorders – 2 Musculoskeletal disorders -- 1 Pediatric psychological and psychiatric disorders – 1 Communication and counseling -- 1		
			CLINICAL				CLINICAL		
			4 WEEKS				6 WEEKS		10 days for block teaching
0	Yr -1		3^{rd}	Yr -2	4^{th}	Yr -3	5^{th}	Yr -4	Yr -5

Photograph

Name : ……

Session :…… …….Batch :..... Roll Number :……..

Group : Phase II :……..…..Phase IV……

Period of attachment :

Phase II : ……Phase IV :…….

Contact address with phone No :

NOTE:

- Students must complete the activities shown on the card during the clinical attachment in Paediatrics.
- Card will be signed by registrar grade and above.
- At the end of the attachment the card must be submitted and signed by the Head of Department. The card will be retained by the Department.
- During 2nd round, students have to write down history, to perform physical examination, to observe the management and follow-up including counseling in two of their allocated beds.
- Each student will submit five complete case history.
- At the end of each phase formative assessment will take place and marks of formative assessment will be added to the summative assessment.
- Ward duties will start from 09:30 am to 11:30 am & from 06:00 pm to 08:00 pm (total 04 hours) in each day.

Summative assessment of Paediatrics

Assessment system and mark distribution:

Components	Marks
Formative assessment	5
Paper – II Paediatrics Written (Group B1 and B2) MCQ (Single based answer + Multiple True False) SEQ (2) + SAQ (6)	 10(5+ 5) 35
OSPE	10(5+5)
Oral & Practical	40(30+10)
Clinical: 1 Long case 1 Short case	 20 10
Grand Total	**130**

Pass mark will be 60% in each written, oral, practical & clinical examination

Prerequisite for appearing in Final Professional examination for Paediatrics

After successful completion of Lectures, clinical placement, Integrated teaching & Block posting students will appear in final professional examination. Eligibility for final professional examination is subjected to

- 75% attendance in Lectures and integrated teaching.
- 75% attendance in Clinical placement and block posting.
- 60% marks in Formative assessment.

1st Round (2nd Phase MBBS)
Duration – 4 weeks (96 hours)

Learning Objectives:

The student will be able to describe

- describe the definition of paediatrics
- Who is a child? Stages of a child's life
- The current child health statistics e.g. NMR, IMR, under 5 mortality etc.
- Definition and important components of MDG and SDG
- IMCI strategy, the principles of integrated care, IMCI case management process
- Major health problem in paediatrics
- Develop interpersonal and communication skills benefiting a physician in order to discuss illness and its outcome with patient and family.
- Different components of paediatric history – particulars of the patient, presenting symptoms, history of the present illness, history of past illness, birth history, feeding history, immunization history, developmental history, treatment history, family history, personal & social history etc.
- Perform clinical examination and will be able to elicit different signs.
- National child health programme- IMCI, IYCF, EPI,CNCP,ETAT etc.

Time Management :

2nd Phase = 4 weeks
6 days / week, 24 days in Total
32 hours in morning
32 hours in evening
16 hours in Outpatient Department
16 hours in Emergency Department

Duration of Placement (1st Round) from ……..to ……...
Total attendance ……days, out of ……..days

SL	Date	Topic(morning) 9.30- 11.30 am	Teacher's initial	Topic (Evening) 6 - 8 pm	Teacher's initial
1		• Introduction to Paediatrics. • Introduction of IMCI. • Introduction of IMCI student's hand book • Introduction of IMCIWall Chart, case recording form • Reading on introduction of • General danger signs, cough or difficult breathing		• Reading on Introduction, General danger sign, cough & difficult breathing • Practice on relevant cases	
2		• Video exercise on general danger sign, cough & difficult breathing • Case demonstration • Clinical practice by the students (up to cough & difficult breathing) • Reading on diarrhea		• Reading on diarrhea • Practice on relevant cases	
3		• Video exercise on diarrhea & dehydration • Case demonstration on diarrhoea • Clinical practice by the students upto diarrhoea • Reading on fever and measles		• Reading on fever and Measles • Practice on relevant cases	
4		• Video exercise on fever & measles • Case demonstration on fever &measles • Clinical practice by the students upto fever & measles • Readingon ear problem & checking nutritional status: malnutrition & anaemia		• Reading on ear problem & checking nutritional status: malnutrition & anaemia • Practice on relevant cases up to fever	
5		• Video on ear problem, malnutrition &anaemia • Demonstration of WHO growth charts • Case demonstration on		• Reading on immunization status, assessing the child's feeding up to other problems • Practice on relevant cases	

		malnutrition • Reading on immunization status, assessing the child's feeding up to other problems			
6		• Clinical practice on full assessment by the student • Drill on fast breathing • Reading Identify treatment & treat the child		• Reading on identify treatment & treat the child	
7		• Reading on counseling & follow-up • Introduction of backside of case recording form • Clinical practice on full assessment by the students including the backside		• Reading on counseling & follow-up • Practice on relevant cases	
8		• Role play on treat the child, demonstration & practice by students • Reading on sick young infant • Introduction of case recording form of sick young infant		• Reading on sick young Infant	
9		• Video on sick young infant &feeding assessment • (Positioning &attachment) • Case demonstration • on sick young infant • Clinical practice by the student on sick young infant		• Practice on full • assessment of the students includ back side	
10		• Demonstration on feeding assessment (Positioning& attachment) • Clinical practice by the students on feeding assessment(Positioning & attachment)in the postnatal ward • Drill on weight for age • Review & feed back		• Reading on infant& young child and early childhood development • Review	
11		• Newborn Resuscitation		• History Taking	
12		• Low Birth weight		• General Examination	
13		• Neonatal Jaundice		• Examination of GIT	

14		• Examination of Respiratory System		• Examination of CVS	
15		• Examination of Nervous System		• Practice on relevant cases	
16		• Examination of Musculo Skeletal System		• Practice on relevant cases	
17		• Assessment by OSPE+ MCQ+SAQ			
18		• Feedback with all faculty members			

Marks Obtained (%):

Comment:

GRADING
A = 75-100%
B = 60-74%
C = 50-59%
D = 40-49%
E = 00-39%

Professor
Department of Paediatrics

Registrar
Department of Paediatrics

2nd Round (4th Phase MBBS)
Duration – 06 weeks (144 hours)

Learning Objectives:

At the end of round students will be able to-

- develop skills in history taking & physical examination.
- identify sign & symptom of different systems.
- Interpret the findings in terms of diseases, make differential diagnosis & an laboratory investigations.
- Identify instruments commonly used for medical procedures and observe the doctor performing the procedures.
- assess the growth and development of the child and early childhood development(ECD).
- know different nutritional disorders.
- Know the infectious diseases.
- know common neonatal problems.
- diagnose and manage diseases of different systems given below:
  Alimentary tract, Liver, Biliary tract and pancreatic disease
  Cardiovascular disease
  Respiratory Disease
  Kidney and Genito-urinary disease
  Neurological diseases

Blood disorders
Musculoskeletal and connective tissue disorders
Endocrine and metabolic diseases
Genetic and chromosomal diseases
Accidental poisoning and Drowning
Paediatric psychiatric and psychological disorders

- To know communication skills and counseling patients

Time Management :

4th Phase = 6 weeks
6 days / week, 36 days in Total
48 hours in morning
48 hours in evening
24 hours in Outpatient Department
24 hours in Emergency Department

Duration of Placement (2nd Round) from ……..to ……...
Total attendance ……days, out of ……..days

A. History writing :

SL	Case	Date	Supervisor

B. Case Management to be observed

Serial Number	Case Management to be observed	Date	Signature of the teacher
1.	Nutritional: PEM (MAM, SAM), Xerophthalmia ,Rickets		
2.	Cardiovascular: Ventricular septal defect, TOF,HF		
3.	Respiratory: Pneumonia, bronchiolitis, asthma		
4.	Gastrointestinal: diarrhea, hepatitis, chronic liver disease		
5.	Renal: NS, AGN		
6.	Nervous system: Febrile convulsion, meningitis, encephalitis		
7.	Infection: Enteric fever, UTI, Dengue fever, malaria, TB,Kala-azar		
8.	Hematology: ITP, Hemophilia, Thalassemia, Aplastic anemia		
9.	Rheumatology: Rheumatic fever, JIA, HSP, SLE		
10.	Endocrine: Congenital hypothyroidism, DM		
11.	Genetic: Down syndrome, Turner syndrome		
12.	Malignancy: ALL, Lymphoma		
13.	Neonatal: Perinatal asphyxia, LBW, Sepsis, neonatal jaundice		
14.	Accidental poisoning: OPC poisoning, Kerosene poisoning, Corrosive poisoning, Drowning, Snake bite.		

C. Events to be observed:

SL	Events name	Date	Signature
1.	Lumber Puncture		
2.	Bone Marrow Aspiration		
3.	Insertion of Intravenous Line		
4.	Naso-gastric tube introduction		
5.	Per rectal diazepam		
6.	Breast feeding (Positioning & attachment)		
7.	Tepid sponging		
8.	Mantoux test/BCG		

9.	Blood Transfusion/Mobile transfusion		
10.	Collection of blood samples		
11.	Pulse/Temp/Resp recording		
12.	B.P. recording		
13.	Collection of throat swab		
14.	Collection of urine/stool		
15.	Aspiration of Fluid-pleural/abdominal		
16.	Use of Pulse Oxymeter, ambu bag		
17.	Enema Simplex		
18.	Nebulization		
19.	Use of glucometer		
20.	CPR		

D. Clinical classes to attend:

SL No.	Date	Topic	Signature of the teacher	Signature of evening teacher
01		Introduction		
02		History taking		
03		IMCI, IYCF		
04		Developmental Assessment And Growth chart		
05		A child with malnutrition		
06		A child with malnutrition		
07		Diarrhoea in children		
08		A Child with cough & difficult breathing		
09		A Child with cough & difficult breathing		
10		Recurrent wheeze in children		
11		Approach to child with fever and rash		
12		An approach to child with jaundice		
13		A Child with lymphadenopathy		
14		A Child with fever, pallor & hepatosplenomegaly		
15		Management of pallor		
16		Congenital Heart disease & Heart failure		
18		Bleeding disorder in children		
		Bleeding disorder in children		
19		A child with joint swelling		
20		A child with joint swelling		
21		A Child with scanty micturition		
22		A Child with scanty micturition		
23		Convulsion In Children		
24		Convulsion In Children		

25		Accidental Poisoning		
26		Snake bite, Drowning		
27		Breast feeding, IYCF		
28		Low Birth Weight		
29		PNA with neonatal resuscitation		
30		Neonatal Sepsis		
31		Neonatal Jaundice		
32		Vaccination		
33		Assessment		
34		Feedback		

E. Practical works to be done:

SL		Date	Teacher
1.	Pulse/Respiration Rate /Temperature Measurement		
2.	Use of ambu bag		
3.	Measurement of weight, height/Length/OFC & MUAC		
4.	Use of growth chart		
5.	E.N.T examination-auroscope, tongue depressor		

F. Paedatric Emergency management to be observed

Sl		Date	Teacher
1.	Convulsion		
2.	Severe dehydration		
3.	Childhood poisoning Accidents		
4.	Respiratory distress- Acute Asthma		
5.	Heart failure		
6.	Shock		

G. Activities in Child OPD Date Teacher

(1) ORT corner ……. ……

i) Preparation ORT ……. ……

ii) Monitoring ORT ……. ……

iii) Counseling mother ……. ……

iv) Preparation of high energy density food

(khichuri, halwa) …..……. ……..

(2) Immunization clinic …… ……..

i) EPI Vaccination observed/practice OPV …….. ……..

ii) Counseling witnessed practice ……. ……..

iii) Cold chain observed ……. ……..

(3) Shishu Bikashkendro ……. ……..

(4) Lactation Management Centre ……. ……..

(identification of problem in breastfeeding,

Positioning and attachment)

H. Activities on Neonatal Ward **Date** **Teacher**

(1) Examination of Newborn

i) …… ……. ……

ii) ……. ……. ……

(2) **Case management to be observed**

i) Perinatal Asphysia ……. ……

ii) Low birth weight ……. ……

iii) Prematurity ……. ……

iv) Neonatal jaundice ……. ……

v) Neonatal infection ……. ……

Pneumonia ……. ……

Septicaemia ……. ……

Umbilical infection ……. ……

Oral thrush ……. ……

vi) Essential newborn Care ……. ……

(3) Events to be observed **Date** **Teacher**

1. Hand washing ……. ……
2. Breast feeding ……. ……
3. Endotracheal intubation/CPR ……. ……
4. N.G. tube feeding ……. ……
5. Phototherapy ……. ……
6. Exchange transfusion ……. ……
7. Umbilical Catherization ……. ……

Marks Obtained (%):
Comment:

Professor
Department of Paediatrics

Registrar
Department of Paediatrics