

Branch Name:	BACHELOR OF PHYSIOTHERAPY
Program Code:	PT101
Course Title:	MEDICINE II (Neurology + Pediatrics)
Course Code:	2PT1010302
Pre-requisite Course:	Human Anatomy, Human Physiology, Pathology, Microbiology, Pharmacology, Psychology

Teaching and Examination Scheme:

Teaching Scheme (Hours per week)			Credit	Evaluation Scheme (Marks)					
Lecture	Tutorial	Practical		Theory(T)		Practical(P)		Total Marks	
				University Assessment	Continuous Assessment	University Assessment	Continuous Assessment	Theory	Practical
2+1	-	-	4+2	80 (55+25)	20 (15+5)	-	-	100	-

NEUROLOGY

COURSE OUTCOMES:

At the end of the course the candidate will be able to

1. Describe etiology, Patho-physiology, sign and symptoms, clinical evaluation and management of the various neurological conditions with interpretation of laboratory & radiological investigations.

Subject Contents:

Sr. No.	Topic	Hours
1	Anatomy, Physiology, Lesions and diseases of Pyramidal system, extra-pyramidal system, cerebellar system, spinal cord, upper and lower motor neuron, cranial nerves, brachial plexus, lumbosacral plexus and peripheral nerves.	08
2	Causes, Clinical features, and management of: Unconscious patient, hemiplegia, paraplegia, quadriplegia, cerebral diplegia, spastic child, foot drop and wrist drop.	15
3	Disorders of cerebral circulation.	08
4	Infections: Encephalitis, meningitis, poliomyelitis, transverse myelitis, slow viral diseases.	05
5	Diseases of Peripheral nerves: Peripheral neuropathy, other neuropathies.	10
6	Muscle disorders: Myopathy, polymyositis, Muscular dystrophies.	05
7	Degenerative diseases: Parkinsonism, myasthenia gravis motor neuron diseases, spinocerebellar degenerations and diseases of anterior horn cell, dementia.	13
8	Costo-clavicular syndrome.	02
9	Demyelinating disorders including multiple sclerosis.	05
10	Basic concept of electrophysiology and electromyography.	03
11	Giddiness and vertigo	02

List of References:

Text Books:

1. Lindsay KW, Bone I, Fuller G. Neurology and Neurosurgery Illustrated. 5th ed. Edinburg: Churchill Livingstone; 2010.
2. Principles and practice of medicine by – Davidson, 20th Edition, Churchill Livingstone Publication.
3. Textbook of medicine by Golwala, 18th edition.

Reference Books:

1. Treatment of Cerebral Palsy and Motor Delay. Shophie, Levitt.5th Edition.

List of Open Source Software/learning website:

- k-hub.in e library/A single platform for all e resources (K-hub, E Resource)
 - User Name- KB4605VNG
 - Password- BL@69BX!
- knowledgegainer.delnet.in (Delnet, E Resource)
 - User Name-gjspum
 - Password- spu10924

PEDIATRICS

COURSE OUTCOMES:

At the end of the course the candidate will be able to

1. Describe normal development and growth of a child, importance of immunization and breastfeeding and psychological aspect of development.
2. Describe neuromuscular, musculoskeletal and cardiopulmonary conditions related to immunological conditions, nutritional deficiencies, infectious disease and genetically transmitted conditions.
3. Acquired skill of clinical examination of a neonate / child with respect to neurological, musculoskeletal and respiratory function.

Subject Contents:

Sr. No.	Topic	Hours
1	Growth and development of a child from birth to 12 years, Including physical, social, adaptive development.	02
2	The maternal and neonatal factors contributing to high risk pregnancy, the neonate, inherited diseases, maternal infections - viral and bacterial, maternal diseases incidental to pregnancy, induced hypertension, chronic maternal diseases such as heart diseases, renal failure, tuberculosis, diabetes, epilepsy, bleeding in the mother at any trimester.	02
3	Community programs: International (WHO), national and local, for prevention of poliomyelitis, blindness, deafness, mental retardation and hypothyroidism, the immunization schedule for children.	02
4	Cerebral Palsy : Etiology - prenatal, perinatal and postnatal causes, pathogenesis, types of cerebral palsy (classification), findings on examination, general examination, examination of C.N.S., musculoskeletal system, respiratory system, G.I. Tract and nutritional status.	05
5	Associated defect-down's syndrome, Mental retardation, microcephaly, blindness, hearing and speech impairment, squint and convulsions.	03
6	Prevention - Appropriate management of high risk pregnancies, prevention of neonatal and postnatal infections, metabolic problems.	02
7	Muscular Dystrophy: Various forms, modes of inheritance and clinical manifestation, physical findings in relation to disabilities, progression of various forms and prognosis, treatment goals in forms which are not fatal.	05
8	Spinabifida, Meningomyelocele : Development, clinical features – lower limbs, bladder and bowel complications - U.T.I. and hydrocephalus, medical management.	05
9	Still's Disease: Classification, pathology in brief, physical findings, course and prognosis, treatment, prevention and correction of deformity.	02
10	Acute C.N.S. infections, Classification (Bacterial and Viral), the acute illness, C.N.S. sequel leading to mental retardation, blindness, deafness, speech defect, motor paralysis, bladder and bowel problems, seizure disorder and specific problems such as subdural effusion, hydrocephalus, pressure sores, feeding difficulties.	05

11	Normal diet of newborn and child: List dietary calorie, fat, Protein, mineral and vitamin requirement in normal child and in a child with malnutrition. Childhood obesity. Etiology, findings, and treatment of rickets, vitamin D deficiency and resistant rickets	02
12	Lung infections: Clinical findings, complications and medical treatment of bronchiectasis, lung abscess and bronchial asthma.	03

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1. Lindsay KW, Bone I, Fuller G. Neurology and Neurosurgery Illustrated. 5th ed. Edinburg: Churchill Livingstone; 2010.
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 - User Name-gjspum
 - Password- spu10924

Course Learning Outcomes (CLO): On completion of this course, the students will be able to:

CLO	Description	Bloom's Taxonomy Level
CLO1	Demonstrate competency in performing and interpreting the basic neurological investigations and assessment.	1 Remembering 2 Understanding 3 Applying
CLO2	Diagnose various neurological disorders on the basis of the clinical signs and symptoms.	1 Remembering 2 Understanding 3 Applying 4 Analyzing 5 Evaluating
CLO3	Identify the complications of various neurosurgical procedures and describe the indications and contraindications.	1 Remembering 2 Understanding 3 Applying
CLO4	Acquire the knowledge of normal development and growth of a child, importance of immunization and breastfeeding and psychological aspects of development.	1 Remembering 2 Understanding 3 Applying 4 Analyzing
CLO5	Understand the neuromuscular, musculoskeletal and cardiopulmonary conditions related to immunological conditions, nutritional deficiencies, infectious disease and genetically transmitted conditions.	1 Remembering 2 Understanding 3 Applying.
CLO6	Able to examine the neonate and/or child with respect to neurological, musculoskeletal and respiratory function.	1 Remembering 2 Understanding 3 Applying 4 Analyzing

Mapping of CLOs with Pos & PSOs

Course Learning Outcomes	Program Outcomes (POs)								Program Specific Outcomes (PSOs)							
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8
CLO1	H		M					M	M		H			M		
CLO2		H	M	M				M		M	H		H		M	M
CLO3		M	M		L		M				M	M		M		
CLO4			M	M			L	M	M		M			M		M
CLO5		M			M	M		M	M		M	M		M	L	
CLO6	M		M	M				M		M			H	M		L

H= High M=Medium L=Low-