

VOCATIONAL CURRICULUM - 2020

PHYSIOTHERAPY (618)



State Institute of Vocational Education

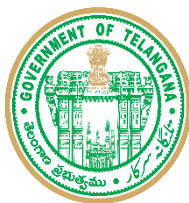
**O/o the Commissioner of Intermediate Education,
Telangana State, Hyderabad**

&

Board of Intermediate Education

Telangana State, Hyderabad

Dr. A. Ashok I.A.S-
COMMISSIONER



INTERMEDIATE EDUCATION
Government of Telangana
Nampally, Hyderabad- 500001
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Fore word

In any developing society with a booming population, Vocational Education occupies an important position for generating large scale employment opportunities. Viewed in this context the importance of Vocational Education for our country cannot be over emphasized. Vocationalization of Secondary Education was introduced in 1988 at the Intermediate level. Recently, the Government of India has developed a National Skills Qualification Framework for establishing a clear path for vocational education from the school level to the highest level. The Department of Intermediate Education has recently framed a new curriculum to bring greater value to the system of vocational education. The primary aim of this reform is to prepare the students with employable skills for absorption in organized sectors and in few cases, even for self-employment.

State Institute of vocational education and Board of Intermediate Education, Telangana have reviewed the curriculum of vocational courses of second year from the academic year 2019-20 in order to reorient them for their practical approach. Greater emphasis is now being placed on Laboratory work and on the job training.

Simultaneously, The State Institute of Vocational Education and the department of Intermediate Education are presently making efforts to upgrade the quality of infrastructure in the colleges to meet the challenges of the changed curriculum. I am confident that the revised curriculum of second year for Vocational Courses would prove to be beneficial to the students in the vocational stream and help them train in need based productive courses leading to gainful employment.

COMMISSIONER OF INTERMEDIATE EDUCATION

SCHEME OF INSTRUCTION AND EXAMINATION
ANNUAL SCHEME OF INSTRUCTION AND EXAMINATION FOR
1ST YEAR PHYSIOTHERAPY COURSE

Part-A		Theory		Practicals		Total	
		Periods	Marks	Periods	Marks	Periods	Marks
1.	English	150	50	-	-	150	50
2.	General Foundation course	150	50	-	-	150	50
Part-B							
3.	Paper-I Anatomy and Physiology	135	50	135	50	270	100
4.	Paper-II Psychology and Abnormal Psychology.	135	50	135	50	270	100
5.	Paper-III Biomechanics and Exercise Therapy.	135	50	135	50	270	100
6.	OJT	-	-	365	100	365	100
	Total	705	250	770	250	1475	500

II. on the Job Training[From 1st november to 31st December]

II YEAR PHYSIOTHERAPY COURSE

Part-A		Theory		Practicals		Total	
		Periods	Marks	Periods	Marks	Periods	Marks
1.	English	150	50	-	-	150	50
2.	General Foundation course	150	50	-	-	150	50
Part-B							
3.	Paper-I Medical and Surgical Condition	110	50	115	50	225	100
4.	Paper-II Orthopedics and Neurology	110	50	115	50	225	100
5.	Paper-III Electrotherapy.	110	50	115	50	225	100
6.	OJT	-	-	450	100	450	100
	Total	630	250	795	250	1425	500
I+II+III							1000

on the Job Training[From 1st August to 31st October]

EVALUATION OF ON THE JOB TRAINING:

The "On the Job Training" shall carry 100 marks for each year and pass marks is 50. During on the job training the candidate shall put in a minimum of 90 % of attendance.

The evaluation shall be done in the last week of January.

Marks allotted for evaluation:

S.No	Name of the activity	Max. Marks allotted for each activity
1	Attendance and punctuality	30
2	Familiarity with technical terms	05
3	Familiarity with tools and material	05
4	Manual skills	05
5	Application of knowledge	10
6	Problem solving skills	10
7	Comprehension and observation	10
8	Human relations	05
9	Ability to communicate	10
10	Maintenance of dairy	10
	Total	100

NOTE: The On the Job Training mentioned is tentative. The spirit of On the Job training is to be maintained. The colleges are at liberty to conduct on the job training according to their local feasibility of institutions & industries. They may conduct the entire on the job training periods of (363) I year and (450) II year **either by conducting classes in morning session and send the students for OJT in afternoon session or two days in week or weekly or monthly or by any mode which is feasible for both the college and the institution.** However, the total assigned periods for on the job training should be completed. The institutions are at liberty to conduct On the Job training during summer also, however there will not be any financial commitment to the department.

PHYSIOTHERAPY
FIRST YEAR
PART B – VOCATIONAL SUBJECTS
PAPER – I: ANATOMY & PHYSIOLOGY (THEORY)

S.No	NAME OF THE UNIT	No. Of Periods	Weightage in marks	Short answer questions	Essay/ Problem questions
1	Emphasis to be placed on Topographical skeletal, Neuro Muscular and functional aspects of Anatomy a) Planes of the Human body b) Systems of the body c) The Units of structure and Functions of Cell	5	4	2	-
2.	Osteology a) Anatomical Position , planes, surfaces, relationship of parts of the body – proximal and distal b) Bones- Types of bones, Function, repair, structure of long bone, vertebral column, types of vertebral bones and surface land marks.	8	6	-	1
3.	Arthology a) Classification of Joints b) Construction of Joints c) Motions of Joints d) Articulations – articular surfaces and types of joints	8	6	-	1
4.	Myology a) Types of Muscle tissue and Fascia b) Muscles of upper extremity, lower extremity, trunk, eye and face etc. c) Origin, function, nerve supply and action-mainly of deltoid, triceps, biceps, glutius maximus, quarterceps, hamstrings and calf. d) Muscle spindle in detail	9	6	-	1
5.	Cardio-vascular system a) The heart main arteries, veins and capillaries b) Lymphatic circulation	5	8	1	1
6.	Nervous System	10	8	1	1

S.No	NAME OF THE UNIT	No. Of Periods	Weightage in marks	Short answer questions	Essay/ Problem questions
	a) Division and function of Nervous System b) Nerve tissue- neuron , nerve fiber c) Spinal cord, brain, and their structure d) Name the peripheral and cranial nerves, supplying the major functional group e) Cerebra Spinal Fluid				
7.	Respiratory System a) Anatomy of respiratory organs, Air passages, lungs, bronchial tree and segments	5	2	1	
8.	Digestive System a. Anatomy of Digestive organs, Oesophagus stomach, intestines b. The digestive glands	5	2	1	
9.	Urinary System: a) Anatomy of urinary organs, kidney, urinary bladder.	3	2	1	-
10	Reproductive System a) Male and female reproductive organs physiology.	5	2	1	-
	Physiology				
11.	Animal Cell	1			
12.	Blood a) Composition of blood – plasma, coagulation phenomenon, blood groups	3	2	1	-
13.	Heart and circulation a) Properties of heart muscles b) cardiac cycle c) Heart sounds d) B.P.	6	8	1	1
14.	Respiration a) Mechanism of breath b) Dyspnoea	5	8	1	1
15.	Neuromuscular system a) Phenomenon of Muscle contraction b) Change in body during exercise. c) synapse	5	15	2	1

S.No	NAME OF THE UNIT	No. Of Periods	Weightage in marks	Short answer questions	Essay/ Problem questions
	d) Neuro muscular junction e) C.N.S 5 hrs. a. Functions of Hypothalamus b. Cerebellum c. Thalamus d. Basal ganglia.				
16.	Metabolism of fat, carbohydrates proteins	3			
17.	Excretory System a) Functions of kidney b) Micturation phenomenon c) Skin functions and temperature regulation	6	2	1	
18.	Endocrine system a) Function of pancreas, pituitary and Thyroid.	5	2	1	
19.	Reproductive system a) Menstruation b) Physiological Changes during pregnancy c) Contraceptive method.	5	2	1	

PHYSIOTHERAPY
FIRST YEAR
PART B – VOCATIONAL SUBJECTS
PAPER – II: PSYCHOLOGY & ABNORMAL PSYCHOLOGY (THEORY)

S.No	NAME OF THE UNIT	No. Of Periods	Weightage in marks	Short answer questions	Essay/ Problem questions
1	What is psychology	5	8	1	1
2.	Behavior a) Types of abnormal behaviors	10	6	0	1
3.	Intelligence a) Evaluation, Mental Retardation, I.Q.	8	8	1	1
4.	Aptitudes	8	6	0	1
5.	Motivation a) Types and methods	8	6	0	1
6.	Personality development, assessment and disorder	8	2	1	0
7.	Learning	8	2	1	-
8.	Remembering and forgetting.	8	2	1	-
9.	Thinking perception and attending.	8	6	-	1
10.	Individual differences	8	2	1	-
11.	Frustrations and conflicts	8	2	1	-
12.	Psycho neurotic and psychosomatic disorder	8	2	1	-
13.	Child adolescent and geriatric psychology	10	6	-	1
14.	Alcoholism and drug addiction	10	2	1	-
15.	Menopausal syndrome.	5	2	1	-
16.	Functional psychosis.	10	6	-	1

PHYSIOTHERAPY
FIRST YEAR
PART B – VOCATIONAL SUBJECTS
PAPER – III: BIOMECHANICS & EXERCISE THERAPY (THEORY)

S. No	NAME OF THE UNIT	No. Of Periods	Weightage in marks	Short answer questions	Essay/ Problem questions
I	Biomechanics:				
1	Mechanical Principles Definition of Biomechanics, Axis and planes, kinematics, kinetics, gravity, center of gravity, line of gravity, base of support, equilibrium, fixation and stabilization, force, type of forces, levers of the body and their mechanical advantage, pulleys, springs, elasticity, types of muscle contraction, range of muscle work the group action of muscles, limb length measurement.	10	2	1	-
2.	Gait Analysis Definition, stages of gait, pathological gaits	10	6	0	1
II	Exercise Therapy: Introduction to Physiotherapy – role of physiotherapy General considerations, principles of treatment- Methods and effects.	1	-	-	-
1.	Starting positions	2	2	1	-
2.	An introduction to exercise therapy: Aims of exercise therapy, techniques of exercise therapy Goniometry in detail.	10	6	-	1
3.	Passive Movements Definition, classification, principles effects and uses of passive movements.	5	6	-	1
4.	Active Movements Definition, classification, techniques, effects and uses of active movements.	10	6	-	1
5.	Relaxation Definition, techniques of general and local relaxation	20	6	-	1
6.	Joint Mobility Introduction, classification of Joints, limitation of joint range of	10	6	-	1

	motion, mobilizing methods, Hip, Knee and Ankle.				
7.	Muscle strength Introduction type of muscle work, range of muscle work, muscular weakness and paralysis, prevention of muscle wasting.	10	6	-	1
8.	Stretching. Definition, classification, effects and uses.	5	2	1	-
9.	Neuromuscular coordination Frankel's Exercises.	2	2	1	-
10.	Proprioceptive Neuromuscular facilitation Definition, classification, effects and uses	5	2	1	-
11.	Hydro Therapy Definition, indications, contraindications, dangers and precautions.	3	2	1	-
12.	Breathing exercises, postural drainage.	7	2	1	-
13.	Posture Definition, classification, postural training.	4	2	1	-
14.	Suspension therapy [types] Mat exercises, Re-education board, Swiss ball, shoulder wheel, CMP, finger ladder, parallel bars, medicine balls, equilibrium board [definition, uses of all the above equipments]	10	2	1	-
15.	Walking aids and gait training	3	2	1	-
16.	Massage in detail.	8	6	-	1

PHYSIOTHERAPY
II YEAR
PART B – VOCATIONAL SUBJECTS
PAPER – I: MEDICAL & SURGICAL CONDITIONS (THEORY)

S.No	NAME OF THE UNIT	No. Of Periods	Weightage in marks	Short answer questions	Essay/ Problem questions
	General Medicine with Physiotherapy Management				
1.	Basics of Infection inflammation Oedema, deformity and contractures	3	8	1	1
	Infectious Diseases – Bones and Joints	12			
2.	Nutritional Disorders Rickets, scurvy, Osteomalacia and osteoporosis	6	2	1	0
3.	Respiratory disorders Asthma, Bronchitis, Emphysema, Bronchiectasis	7	6	0	1
4.	Cardio Vascular disorders Myocardial infraction, Angina, Congenital heart diseases , Ischaemic heart diseases	15	6	0	1
5.	Endocrinal disorders Dwarfism Gigantism	3	2	1	0
6.	Tetanus	3	2	1	0
7.	Gas Gangrene	3	2	1	0
8.	S.T.D AIDS, Syphilis, Gonorrhoea	3	2	1	0
9.	Leprosy (Clinical features related to PT) and tuberculosis	5	38	4	5
	Surgery with Management 1. Types of incisions 2. Anesthesia Types 3. Burns-Classification, degree of burns Contractures, skin graft and flaps.	15			
	Pre and post-operative physiotherapy Management for following surgeries 1. Cardiac surgery 2. Respiratory Surgery	5 5			
	Gynaecology				
	1. Various stages of Labour and clinical Management 2. Physiological changes during pregnancy and physiotherapy Management	8			
	Paediatrics				
	1. cerebral palsy and Pt Management 2. Developmental milestones 3. Hydro Cephalous and meningocele 4. Polio-Causes, Stages, prevention medical and P.T. Management	15			
	Dermatology				
	Dermatitis, Eczema, acne vulgaris, Psoriasis, Leukoderma, Alopecia -Specify on Physiotherapy Treatment	5			
	Total	110	68	10	8

PHYSIOTHERAPY

II YEAR

PART B – VOCATIONAL SUBJECTS

PAPER – II: ORTHOPAEDICS AND NEUROLOGY (THEORY)

Theory: 110 hours

Marks: 50

S. No	NAME OF THE UNIT	No. Of Periods	Weightage in marks	Short Answer Questions	Essay/Problem Questions
	ORTHOPAEDICS & PHYSIOTHERAPY		40		
1.	Introduction to Orthopaedics & Surgeries, Arthroscopy and Arthroplasty	4	2	1	0
2.	Sprains and strains, dislocation – its types – causes and principle of treatment.	6			
3.	Fractures – types, Causes, healing and complications of fractures	8	6	0	1
4.	Fractures of upper limb and lower limb, pelvis and vertebra Colle's Fracture, montegial Fracture and Galezzi Fractures	8	2	1	0
5.	Fingers condition - Bennets fracture, mallet finger, tenosynovitis trigger finger.	4	2	1	0
6.	Elbow Conditions-Myositis Ossificans, tennis elbow, supracondylar fracture of humerus	4	0	0	0
7.	Volkman's contracture, recurrent dislocation of shoulder	4	6	0	1
8.	Brachial Plexus, carpel tunnel syndrome.	6	6	0	1
9.	Joint inflammatory conditions, osteo arthritis, Rheumatoid arthritis, Periarthritis, Ankylosis spondylitis. Total Knee Replacement	4			
10.	Spinal deformities - Scoliosis, Kyphosis, lordosis, Spinal conditions – cervical spondylosis, lumbar spondylitis.	6	8	1	1
11.	Congenital conditions - C.T.E.V. C.D.H, Torticollis	3	6	0	1
12.	I.V.D.P.	3			
13.	knee deformities -Genuvalgum, Genuvarum Genu recurvatum	3	2	1	0
14.	Amputations and types role of Physiotherapy counseling	3			
15.	Orthopedic appliances – splints prosthesis and orthotics.	3	2	1	0
16.	Foot deformities – flat foot calcaneal spur. Plantar falsities.	3	2	1	0
	NEUROLOGY & PHYSIOTHERAPY				
17.	Introduction – approach to Neurological Cases	3	0	0	0

	<ol style="list-style-type: none"> 1. Cerebral Cortex 2. Pyramidal tract 3. Extra pyramidal tract 4. Cerebellum 5. Spinal Cord 6. Peripheral Nerve <p>Brief outline of their structure and functions. Difference between UMN and LMN lesions</p>				
18.	Cerebral circulation and its disorders/ Head Injury Hemiplegia, Paraplegia, Quadriplegia Coma , Epilepsy	3	6	0	1
19.	Infections and inflammation Meningitis, encephalitis, encephalomyelitis, poliomyelitis, intracranial tumours [gliomas, meningiomas]	3			
20.	Extrapyramidal syndromes Chorea, Athetosis, Hemiballisms, tremors, rigidity, parkinsonism.	3	0	0	0
21.	Syphilis and its neurological complications	3	2	1	0
22.	Demyelinating and degenerative disorders, Multiple sclerosis, Motor neurone disorder.	3	6	0	1
23.	Disorders of peripheral nerves	3	2	1	0
24.	Polyneuropathy GBS, Diabetic neuropathy.	3	0	0	0
25.	Disorders of spinal cord- spin bifida, syringomyelia, transverse myelitis, and spinal tumours.	3	2	1	0
26.	Ataxia-Types of ataxia, clinical features pathology, medical and physiotherapy treatment.	3	6	0	1
	Total	110	68	10	8

PHYSIOTHERAPY
II YEAR
PART B – VOCATIONAL SUBJECTS
PAPER – III: ELECTROTHERAPY [THEORY]

Theory: 110 hours

Marks: 50

S. No	NAME OF THE UNIT	No. Of Periods	Weightage in marks	Short answer questions	Essay/ Problem questions
1.	Physics and Basic Electrical Components Electromagnetic radiation, Conductors & Non-conductors of electricity, Transmission of heat, physical effects of heat, static electricity, electric shock, earth shock	20	16	2	2
2.	Methods of heating the tissue: Physiological effects of heat, paraffin Wax bath, Hot packs, Moist packs, infra-red rays, U.V.rays.	20	10	2	1
3.	Low frequency currents: Faradic & Galvanic currents, SD curve, Iontophoresis, TENS	20	10	2	1
4.	Cryotherapy	10	8	1	1
5.	Medium Frequency Current Interferential Therapy	15	8	1	1
6.	High Frequency currents: SWD, MMD, US [Basics of Lazer] Difference between low frequency & high frequency currents.	25	16	2	2
	Total	110	68	10	8
In all the above units definition, production, preparation of apparatus & Patient, physiological effects, techniques, dosage indication, contraindication, dangers and precautions are to be covered.					

ON JOB TRAINING

PHYSIOTHERAPY II YEAR

S.No	Topics to be covered
I.	Case history of each patient Respiratory conditions – Asthma, Bronchitis, Emphysema, and Bronchiectasis.
2.	Case history of Cardiac Patients 1. Myocardial infraction 2. Angina 3. Ischemic heart disease 4. Congenital heart disease.
3.	Postural drainage and Breathing Exercises
4.	Assisting Physiotherapist in giving Physiotherapy Management for Medical conditions. 1) Burns 2) Leprosy
5.	Assisting Physiotherapist in giving Pre and post-operative Management for 1) Cardiac Surgery 2) Respiratory Surgery
6.	Assisting Physiotherapist in giving Physiotherapy Management for 1. Acne Vulgaris 2. Psoriasis
7.	Taking case history of different Orthopaedic and neurological conditions.
8.	Identification of different Orthotics and prosthetics
9.	Assisting Physiotherapist in giving Physiotherapy Management of following conditions
i.	Hemiplegia patients
ii.	Polio Myelitis
iii.	Parkinsonism
iv.	Multiple sclerosis.
v.	CBS
vi.	Spin bifida
vii.	Cerebral Ataxia
viii.	Head injury
ix.	Different types of fractures.
x.	TKR
xi.	Paraplegia
xii.	Peripheral nerve injuries.
xiii.	Amputations.
Xiv	OA,RA etc.
10.	Details of electrotherapy equipment its knowledge and its operation.
11	Assisting to qualified Physiotherapist in treating patients 35 hrs.
12.	Assisting Physiotherapist in giving Treatment or application of Equipments on patients
i.	Wax bath
ii.	Moist Pack
iii.	Infra-red
iv.	Hot packs
v	SWD
vi	US
vii	TENS
viii	IFT
ix	Stimulator
x	Traction
xi	Cryotherapy
xii	U.V. Rays
xiii	Iontophoresis

List of Equipment

1. Wheel Chair
2. Goniometer
3. Inch tape
4. Knee hammer
5. BP apparatus
6. Suspension table
7. Examination table
8. Shoulder wheel
9. Quadriceps table
10. static Bicycle
11. Supination – pronation board
12. Ankle Exercises.
13. Swiss ball, Medicine balls
14. Traction table
15. finger ladder
16. parallel bars
17. All types of walkers
18. All types of crutches, sticks.
19. Ropes and pulleys
20. Springs, slings
21. Cervical collar, LS belt
22. Equilibrium board
23. Re-education board
24. Splints
25. Crepe bandage
26. Electrotherapy equipment's.
 - i) Wax bath
 - ii) Auto tract [Cervical & lumbar traction machine]
 - iii) US (Ultra Sound]
 - iv) Electrical Muscle stimulator
 - v) Interferential therapy
 - vi) Short wave diathermy
 - vii) Ultra Violet radiation
 - viii) TENS
 - ix) Massager [Vibrator]
 - x) Infra red [luminous/ non-luminous]
 - xi) Hydro collator packs
 - xii) Heat pads.

A Suggested list of Collaborating Institutions

1. All the Government hospitals and Medical Colleges.
2. NIMHS, Hyderabad
3. Sweekar Rehabilitation Institute, Secunderabad.
4. Thakur Hari Prasad Institute, Dilshuknagar, Hyderabad
5. Any Hospital with will equipped Physiotherapy Center with minimum 40 bed capacity.
6. Prashant Physiotherapy Center, Kachiguda, Hyderabad Ph.No.9391017833.

**MODEL PAPER
FIRST YEAR
PAPER-I: ANATOMY & PHYSIOLOGY**

Marks: 50

Section –A

Note: [i] Answer all the questions

[ii] Each question carries 2 marks.

2X10=20

- 1) Write any six movements occurring at joints?
- 2) Define osteology?
- 3) Write the functions of blood?
- 4) What is Blood pressure and mention the factors effecting BP?
- 5) Write about meninges?
- 6) What is Neuro Muscular Junction?
- 7) Write about the lobes of the lungs?
- 8) What are the secretions of stomach?
- 9) Draw the Urinary system diagram?
- 10) What is menopause?

Section –B

Note: [i] Answer five questions

[ii] Each question carries 6 marks.

5X6=30

- 11) Explain the structure of bone and write the functions of skeletal system?
- 12) Classify joints and explain the structure of the synovial joints?
- 13) Write the origin, insertion, nerve supply and actions of Quadriceps and Hamstrings muscle?
- 14) Explain in detail about cardiac cycle?
- 15) Explain in detail about the structure and functions of brain?
- 16) Mention the names of cranial nerves?
- 17) Explain in detail about brachial plexus?
- 18) Write about the mechanism of the Respiration?
- 19) Write the structure and function of liver?
- 20) Explain the structure of skin with a neat labeled diagram?

**MODEL PAPER
FIRST YEAR
PAPER-II: PSYCHOLOGY & ABNORMAL PSYCHOLOGY**

Marks: 50

Section –A

Note: [i] Answer all the questions

[ii] Each question carries 2 marks.

2X10=20

- 1) Define Psychology?
- 2) Define mental retardation?
- 3) Mention any two ways to improve motivation?
- 4) What is meant by personality disorder?
- 5) Name the theories of learning?
- 6) Define memory?
- 7) Name various types of thinking?
- 8) Name different types of conflicts?
- 9) What is meant by Juvenile delinquency?
- 10) Define Alcoholism?

Section –B

Note: [i] Answer five questions

[ii] Each question carries 6 marks.

5X6=30

- 11) Describe various branches of psychology?
- 12) Write about behaviour in detail?
- 13) Write about Intelligence tests in detail?
- 14) Discuss briefly about motivation?
- 15) Write briefly about personality assessment?
- 16) Briefly explain various types of Learning?
- 17) Explain various factors affecting attention?
- 18) Explain various causes of frustration briefly?
- 19) What are the causes of depression in older adults?
- 20) Explain various types of Psychosis?

MODEL PAPER
FIRST YEAR
PAPER – III: BIOMECHANICS AND EXERCISE THERAPY

Marks: 50

Section –A

Note: [i] Answer all the questions

[ii] Each question carries 2 marks.

2X10=20

1. Define Bio mechanics.
2. What is LOG?
3. What are the different fundamental starting positions?
4. What is contracture?
5. What is reeducation?
6. Write about indications for hydrotherapy.
7. List any two breathing exercises.
8. What are axillary crutches?
9. Name the different types of suspension.
10. What is CPM.

Section –B

Note: [i] Answer five questions

[ii] Each question carries 6 marks.

5X6=30

11. Explain the Physiological effects of Massage.
12. Explain in detail about diaphragmatic breathing.
13. Write in detail about the Frenkel's Exercise.
14. What are the types of exercises used to strengthen muscles?
15. What are the methods of Local Relaxation?
16. What are the techniques, principles of assisted exercise?
17. What are the principles of giving relaxed passive movements? Explain.
18. What are the different aims of exercise therapy?
19. Explain the stages of GAIT cycle.
20. Explain about the types of muscle contractions.

**MODEL PAPER
SECOND YEAR
PAPER-I: MEDICAL SURGICAL CONDITIONS**

Marks: 50

Section –A

Note: [i] Answer all the questions

[ii] Each question carries 2 marks.

2X10=20

1. Define Oedema.
2. What are the complications of valve replacement?
3. What is Scurvy and what are the causes?
4. What is Gigantism?
5. Define Tetanus.
6. What are types of gangrene?
7. Write the causes of AIDS.
8. What are the incisions used in surgical procedures?
9. What is pneumonectomy?
10. Write about ventricular septal defect?

Section –B

Note: [i] Answer five questions

[ii] Each question carries 6 marks.

5X6=30

11. Define Angina Pectoris. Write about treatment in detail.
12. What is blue disease? Describe the clinical features and medical management as well as its management?
13. What is Septic Arthritis and write the treatment in detail?
14. What is TB? Causes, clinical features, medical management and PT management?
15. Write about the types of Anesthesia.
16. Classify burns.
17. Write about Cerebral Palsy and PT management.
18. Write about Physiotherapy management for thoracotomy.
19. Write about tetralogy of fallot?
20. Classify COPD and explain its complications in detail.

**MODEL PAPER
SECOND YEAR
PAPER-II - ORTHOPAEDICS AND NEUROLOGY**

Marks: 50

Section –A

Note: [i] Answer all the questions

[ii] Each question carries 2 marks.

2X10=20

- 1) What is orthoscopy?
- 2) Name any three features of Fracture?
- 3) What is meant by tenosynovitis?
- 4) Name any two spinal deformities?
- 5) Define Genu recurvatum?
- 6) Name the types of Orthosis?
- 7) What is meant by flat foot?
- 8) Write the clinical features of parkinsonism?
- 9) What is multiple sclerosis?
- 10) Write any four peripheral nerve disorders?

Section –B

Note: [i] Answer five questions

[ii] Each question carries 6 marks.

5X6=30

- 11) Discuss in detail about fractures?
- 12) Write in detail about recurrent dislocation of shoulder?
- 13) Write about periarthrits of shoulder with PT management?
- 14) Write in detail about Cervical spondylosis with PT management?
- 15) Write in detail about CDH?
- 16) Write about plantar fasciitis in detail?
- 17) Explain Briefly about stroke and its management?
- 18) Explain in detail about motor neuron disease and its management?
- 19) Explain in detail about Gullian barre syndrome?
- 20) Explain in detail about Ataxia?

**MODEL PAPER
SECOND YEAR
PAPER-III - ELECTROTHERAPY**

Marks: 50

Section –A

Note: [i] Answer all the questions

[ii] Each question carries 2 marks.

2X10=20

1. What is meant by phonophoresis?
2. What is coupling media?
3. What is beat frequency?
4. Indications of Cryotherapy
5. Define faradic current
6. What is motor point?
7. Write about indications of hot packs?
8. Write about effects and uses of moist packs?
9. What is meant by electromagnetic radiation?
10. Write the modes of transmission of heat.

Section –B

Note: [i] Answer five questions

[ii] Each question carries 6 marks.

5X6=30

11. Explain about electric Shock in detail.
12. Explain briefly about Wax bath with its applications, indications, contraindications and uses in detail?
13. Explain in detail about SD curve.
14. Write about physical effects of heat in detail
15. Write in detail about the production of infrared Rays?
16. Explain in detail about the applications, Physiological effects, indications and contraindications of IFT.
17. Write about methods of application of Cryotherapy in detail.
18. What are the indications, contraindications, physiological and therapeutic effects of ultrasound?
19. Explain in detail about Deltoid Inhibition with PT management?
20. Write about techniques of application of SWD.

On Job Training [1st year & 2nd year]

OJT Site:

General Hospitals
Private Nursing Homes
Special Hospitals
Special Rehabilitation Centers
Leading clinics /Prashant Physiocentre Ph.No.939107833
The clinic attached to the College
NGO dealing with the handicapped.
National and state level institute working for the rehabilitation of the
handicapped.
Gymnasiums
Stadiums

Reference Books.

- 1. Biomechanics**
 1. Cynthia & Norkins : Joint Structure and function
 2. Gardiner M.D: The Principles of Exercise Therapy
- 2. Exercise Therapy**
 1. Kendall: Manual Muscle testing
 2. Gardiner M.D. The Principles of Exercise Therapy
 3. Margaret Hollis : Exercise Therapy
 4. Kisner : Therapeutic Exercise.
 5. Cyriax J: massage, Manipulation & local Anesthesia.
 6. Cynthia's: Goniometry.
 7. Margaret Hollis : Massage Therapy
 8. Resistance Exercise Sports Training, Body Shaping, Obesity, Joint Pains
by Prashant Shah – 9391017833.
 9. Exercise Therapy by prashant shah : 9391017833
 10. Swiss Ball, Medicine Ball, Tubes Exercises by Prashant shah –
9391017833.
- 3. Electrotherapy**
 1. Calayton's : Electrotherapy
 2. Low & Reed: Electrotherapy Explained.
 3. Joseph Khan : Electrotherapy
 4. Sayeed Ahmeed : electrotherapy
- 4. Psychology**
 1. S.K.Mangal: Textbook of Psychology & abnormal psychology
 2. Murgesh: psychology.
- 5. Anatomy & Physiology**
 1. B.D.Chaurasia: 3 Volumes, Text book of Anatomy
 2. Toratora : Anatomy & Physiology
 3. Guyton : Text book of Physiology
 4. Chaudari : Text book of Physiology
 5. Gray : Gray's Anatomy
 6. B.D.Chaurasis: Handbook of Anatomy
 7. Evelyn pearce: Anatomy & Physiology for Nurses.
 8. Murgesh: anatomy & physiology.
- 6. Medical & Surgical Condition.**
 1. Tidy's Physiotherapy
 2. Cash Medicine

3. Cash Surgery
4. Polden: PT in obstetrics & Gynecology
5. Bailey & Love: Text Book of Surgery
6. Davidson: Textbook of Medicine.
7. Golwalla: Text book of Medicine.
8. Das: Clinical
9. P.J.Mehta: Clinical Examination
10. Das: Textbook of Surgery
11. Phyotherapy Dictionary
12. Hutchison's [hand book]: Clinical Examination.

7. Orthopaedics & Neurology

1. Cash Orthopaedics
2. Cash Neurology
3. O.Sullivan: Physical Rehabilitation
4. Ian Bramely : Paraplegia & tetraplegia
5. Jon Ebunzer : Orthopaedics in Physiotherapy
6. Adams J.C: Outline of fractures including injuries.
7. Jayant Joshi: Essential of Orthopaedics.
8. Natrajan: Textbook of orthopedics.
9. Maheshwari: Textbok of Orthopaedics.
10. Brain & Branister : Neurology
11. Inderbersing : Neuro Anatomy.