MPT [1st Year]

Computers, Research Methodology & Biostatistics (MP104)

[Common for all Specialties]

Time: 3 Hours. Max Marks =80

Note: 1.) Attempt all questions.

- 2.) USE SEPARATE ANSWER BOOK FOR EACH PART.
- 3.) The Student must write O.P. Code in the space provided on the Title page of the respective Answer Book.

UNIT-I

[60 Marks]

QP Code: MPM104 Research Methodology & Biostatistics

NON-SCIENTIFIC CALCULATOR IS ALLOWED. NOTE: 1.

> LOG TABLE MAY BE USED IF REQUIRED. 2.

Long Essay 1x20=20

Note: Attempt any one question which carries 20 marks.

- What is Sampling? Explain any three types of probability and non- probability sampling.
- 2. What is Central tendency? Explain the merits and demerits of each measure of central tendency.

Note: All Questions are compulsory. Each carries 10 marks.

Short Essay 4x10=40

- Write short notes on the following:
 - (i) Methods of data collection
- Standard deviation (ii)

(iii) Hypothesis

- (iv) Sampling error
- 4. What is Research design? What are its merits? Explain any two true- experimental designs?
- 5. Find the rank difference correlation from the following score:

English	55	58	51	53	48	49	52	59	60	54
Math	61	47	39	38	36	43	49	50	42	41

Also interpret the results.

6. Forty-eight subjects were asked to express their attitude towards the proposition; should Physiotherapy course be made for two year by marking F(favourable), I(indifferent), U(unfavourable) out of 48 members in the group, 24 marked favorable, 12 indifferent and 12 unfavorable. Does this indicate a significant trend in opinion? Test with the help of chi-square test.

UNIT II

[20 Marks]

Computer **QP Code: MPR105**

- What do you mean by Hardware? Discuss various hardware components and their 1. functions. [5]
- What are various components of MS-Office? What are main features of MS-2. Powerpoint.
- How does Internet work? What are various applications of Internet in medical science. 3.

[5]

[5]

What do you mean by Statistical tools? What are various popular statistical methods. 4.

MPT [2nd Year]

Skill Enhancing Studies

(Ethics, Educational Technology & Medico legal aspects) MP-204/MPP-504 [Common for all Specialties]

Time: 3 Hours. Max Marks =80

Note: 1.) Attempt all questions.

- 2.) ATTEMPT BOTH PARTS IN SINGLE ANSWER BOOK ONLY.
- 3.) NO SUPPLEMENTARY SHEET SHALL BE ALLOWED/ PROVIDED
- 4.) The Student must write Q.P. Code in the space provided on the Title page of the Answer Book.

Section-A

Note: Attempt any one question which carries 20 marks.

I. **Long Essay** 1x20=20

1. Explain aims, philosophy and issues in Physiotherapy education.

OR

2. Write in detail about medico-legal aspects in Physiotherapy practice. Explain with suitable examples.

Section-B

Note: All Questions are compulsory. Each question carries 10 marks.

II. **Short Essay** 6x10=60

- Explain the relationship between Teaching and Learning. 3.
- 4. Explain the process of developing curriculum in Physiotherapy.
- 5. Explain various factors which influence planning of Teaching.
- Process of "Program evaluation". 6.
- 7. Dynamics of behaviour.
- Various methods of Teaching. 8.

MPT in Neurology [1st Year]

Review of Basic Sciences (MPN 101)

Time: 3 Hours. Max Marks =80

Note: 1.) Attempt all questions.

- ATTEMPT BOTH PARTS IN SINGLE ANSWER BOOK ONLY. 2.)
- 3.) NO SUPPLEMENTARY SHEET SHALL BE ALLOWED/ PROVIDED
- The Student must write Q.P. Code in the space provided on the Title page of 4.) the Answer Book.

Section-A

Note: Attempt any one question which carries 20 marks.

Long Essay 1x20=20

1. Write in detail about the blood supply of Brain. Add a note on the pathology of Intracranial hemorrhage.

OR

2. Write a detailed essay on Cranial nerves.

Section-B

Note: All Questions are compulsory. Each question carries 10 marks.

- 3. Write a note on Local anesthetic.
- 4 Write a note on pathology and symptoms of Meningitis.
- 5. Write short notes on:
 - Neuroglia a)
 - b) Synapse
- Write in detail about energy requirement of Elderly and importance of Balanced diet. 6.
- 7. Discuss about Arterial blood pressure.
- 8. Write a detailed note on Physiology of Pain.

Max Marks =80

MPT in Neurology [1st Year]

Review of Basic Therapeutics (MPN 102)

Time: 3 Hours.

Note: 1.) Attempt all questions. ATTEMPT BOTH PARTS IN SINGLE ANSWER BOOK ONLY. 2.) 3.) NO SUPPLEMENTARY SHEET SHALL BE ALLOWED/PROVIDED 4.) The Student must write Q.P. Code in the space provided on the Title page of the Answer Book. Section-A Note: Attempt any one question which carries 20 marks. **Long Essay** 1x20=201. Discuss in detail about Kinetic and kinematics of Knee joint. 2. Discuss in detail about application of High frequency current in Pain relief. **Section-B** Note: All Questions are compulsory. Each question carries 10 marks. 6x10=603. Brace for Scoliosis- Secondary to Hemiplegia. [10] Application of Medium frequency current in Neurological condition. [10] 4. 5. Basis for Stretching and its application in Spasticity [10] Electronic Goiniometer- application in physiotherapy. 6. [10] 7. Role of physiotherapy in Vocational rehabilitation of a patient with paraplegia. [10] 8. Principles of Hydrotherapy. [10]

MPT in Neurology [1st Year]

Advanced Therapeutics and Diagnosis (MPN 103)

Time: 3 Hours. Max Marks =80

Note: 1.) Attempt all questions.

- ATTEMPT BOTH PARTS IN SINGLE ANSWER BOOK ONLY. 2.)
- 3.) NO SUPPLEMENTARY SHEET SHALL BE ALLOWED/ PROVIDED
- 4.) The Student must write O.P. Code in the space provided on the Title page of the Answer Book.

Section-A

Note: Attempt any one question which carries 20 marks.

Long Essay. [1x20=20]

1. Discuss briefly about principles of PNF? Explain various techniques and patterns to break flexion synergy of upper limb in Hemiplegic patient?

Discuss in detail about principles and application of Cranio-sacral therapy (CST)? 2.

Section-B

Note: All Questions are compulsory. Each question carries 10 marks.

Short Essay. [6x10=60]

- Discuss briefly about application of Tai Chi therapy for a 45 years old patient suffering 3. from Diabetes with balance and posture problems?
- Discuss briefly about principles of ROOD's approach? Explain facilitatory and 4. inhibitory techniques?
- Discuss in detail about apparatus and analysis of EMG? Explain application of EMG 5. Biofeedback?
- Discuss in detail about mobilization of Sciatic nerve using Butler neural mobilization 6. technique?
- 7. Discuss briefly about Micro currents? Explain its various types and therapeutic uses?
- 8. Discuss briefly about Reflex inhibiting patterns used by Bobath?

MPT in Neurology [2nd Year]

BF/2023/10

Physical therapy in Neurological Conditions (MPN 201)

Time: 3 Hours. Max Marks =80

Note: 1.) Attempt all questions.

- 2.) ATTEMPT BOTH PARTS IN SINGLE ANSWER BOOK ONLY.
- 3.) NO SUPPLEMENTARY SHEET SHALL BE ALLOWED/ PROVIDED
- 4.) The Student must write Q.P. Code in the space provided on the Title page of the Answer Book.

Section-A

Note : Attempt any one question which carries 20 marks.

<u>Long Essay</u>. 1x20=20

1. Discuss different types of Spina bifida. Write in detail about assessment and management of a girl of 5 years diagnosed with Meningomyelocoele at L2 level.

<u>OR</u>

2. Discuss in detail about the management of Dermatomyositis.

Section-B

Note: All Questions are compulsory. Each question carries 10 marks.

Short Essay. 6x10=60

- 3. Assessment and management of Complex regional pain syndrome.
- 4. Bladder dysfunction and its management in Neurological disorders.
- 5. Disability management in Myasthenia gravis.
- 6. Role of neural plasticity in Neurological rehabilitation.
- 7. Residual signs and symptoms of Viral encephalitis. Formulate a physiotherapy programme for a man of 45 years with Post residual effects of Viral encephalitis.
- 8. Strength training in Motor neuron disease. Justify the statement with suitable examples.

MPT in Neurology [2nd Year]

BF/2023/10

Physiotherapy in Neurosurgical Conditions (MPN 202)

Time: 3 Hours. Max Marks =80

Note: 1.) Attempt all questions.

- 2.) ATTEMPT BOTH PARTS IN SINGLE ANSWER BOOK ONLY.
- 3.) NO SUPPLEMENTARY SHEET SHALL BE ALLOWED/ PROVIDED
- 4.) The Student must write Q.P. Code in the space provided on the Title page of the Answer Book.

Section-A

Note: Attempt any one question which carries 20 marks.

Long Essay. 1x20=20

1. Explain differences between Laminectomy and Discectomy. Explain role of physiotherapy in the management of Post Laminectomy.

<u>OR</u>

2. Discuss various causes and classification of Peripheral nerve injury. Explain role of physiotherapy in the non-surgical management of Peripheral nerve injury.

Section-B

Note: All Questions are compulsory. Each question carries 10 marks.

Short Essay. 6x10=60

- 3. Explain various types of Incontinence. Explain physiotherapy management of bladder incontinence in Spinal cord injury.
- 4. Discuss various complications of Brain surgery and their management.
- 5. Physiotherapy management of Tubercular meningitis.
- 6. Physiotherapy management of a Post operative case of Spinal tumour.
- 7. Explain Rancho Los Amigos Scale (RLA Scale) and its usage.
- 8. Explain importance of Orthosis in the management of Scoliosis.

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MPT in Neurology [2nd Year]

BF/2023/10

Physical Therapy in Paediatric Neurology Conditions (MPN 203)

Time: 3 Hours. Max Marks =80

Note: 1.) Attempt all questions.

- 2.) ATTEMPT BOTH PARTS IN SINGLE ANSWER BOOK ONLY.
- 3.) NO SUPPLEMENTARY SHEET SHALL BE ALLOWED/ PROVIDED
- 4.) The Student must write Q.P. Code in the space provided on the Title page of the Answer Book.

Section-A

Note: Attempt any one question which carries 20 marks.

Long Essay. 1x20=20

1. Discuss approach to Autistic spectrum disorder in children and list five (5) key intervention strategies?

<u>OR</u>

2. Discuss the approach to Nutritional disorders in children in India and list 5 key interventional strategies.

Section-B

Note: All Questions are compulsory. Each question carries 10 marks.

Short Essay. 6x10=60

- 3. Physical therapy in DMD (Duchenne Muscular Dystrophy).
- 4. Nocturnal enuresis and its management
- 5. List the causes of Stroke in children. Enumerate the principles of physiotherapy management of stroke in children
- 6. Assessment of IQ in children
- 7. Components of National immunization programme in children in India
- 8. Management of birth related injuries of Brachial plexus with special references to physiotherapy strategies

MPT in Sports [1st Year]

Review of Basic Sciences (MPS101)

Max Marks =80 Time: 3 Hours.

Note: 1.) Attempt all questions.

- ATTEMPT BOTH PARTS IN SINGLE ANSWER BOOK ONLY. 2.)
- 3.) NO SUPPLEMENTRAY SHEET SHALL BE ALLOWED/ PROVIDED
- The Student must write Q.P. Code in the space provided on the Title page of 4.) the Answer Book.

Section-A

Note: Attempt any one question which carries 20 marks.

Long Essav

1x20=20

2. Discuss Brachial plexus with its applied anatomy. Enlighten physiotherapy management of Klumpke's palsy.

OR

2. Regulation of various Endocrine glands and its secretions.

Section-B

Note: All Questions are compulsory. Each question carries 10 marks.

Short Essay

- 3. Explain in detail about the process of Inflammation and repair.
- Energy requirement for various energy system in Sports. 4.
- 5. Explain process of Blood doping with its significance in Sport performance.
- 6. Classification of Joints and its relation to movement.
- 7. Classification of Bones in various categories with examples.
- 8. Structure and properties of Muscle.

MPT in Sports [1st Year]

Review of Basic Therapeutics (MPS102)

Time: 3 Hours. Max Marks =80

Note: 1.) Attempt all questions.

- ATTEMPT BOTH PARTS IN SINGLE ANSWER BOOK ONLY. 2.)
- 3.) NO SUPPLEMENTRAY SHEET SHALL BE ALLOWED/ PROVIDED
- The Student must write Q.P. Code in the space provided on the Title page of 4.) the Answer Book.

Section-A

Note: Attempt any one question which carries 20 marks.

Long Essay. 1x20=20

1. Describe the pathomechanics of Ligament injuries of Knee in Sports.

2. Explain biomechanics of Throwing.

Section-B

Note: All Questions are compulsory. Each question carries 10 marks. **Short Essay.**

- 3. Physiological effects of Cold.
- 4. Describe below Knee prosthesis.
- 5. Write an essay on use of Acupuncture to treat pain in sports.
- Write the pathomechanics of Spinal injuries in Sports person. 6.
- 7. Write the physiological effects & basic techniques of Sauna bath.
- Write basic principles of different PNF patterns for relaxation of Upper extremity 8. muscles.

MPT in Sports [1st Year]

Advanced Therapautics and Diagnosis (MPS103)

T:	ne: 3 Ho	<u> </u>	Max Marks =90			
	ne: 3 rio te: 1.)	Attempt all questions.	Max Marks =80			
140	2.)	ATTEMPT BOTH PARTS IN SING	LE ANSWER BOOK ONLY			
	3.)	NO SUPPLEMENTRAY SHEET SHAI				
	4.)		he space provided on the Title page of			
	,	the Answer Book.	spuce provided on the 1 the page of			
		Section-A				
No	te: Atte	empt any one question which carries 20	marks.			
	Lon	ng Essay	1x20=20			
1.		o distinguish Heat cramps, Heat exhaustic	on and Heat stroke. Write your answer			
		ing on following points:	() ()			
	` '	efinition (b) Causes	(c) Sign & symptoms (d)			
	Preve	ntion (e) Treatment				
		<u>OR</u>				
2.	(a) Wl	hat is Metabolic syndrome? Discuss the	aetiology, pathophysiology,			
		aracteristics and risk factors of the metabol				
	(b) De	efine Endocrine gland. Briefly describe t	he hormonal response of			
		rowth hormone with exercise training.	[10]			
		Section-B	. ,			
No	ote: A11 (Questions are compulsory. Each questi	on carries 10 marks.			
		, , ,				
	<u>5no</u>	ort Essay	6x10=60			
3.		cribe Butler's Neurodynamics concept. Expire is concept to treat Sciatica due to Radiculo				
4.	Writ	e Short Notes –	[5+5=10]			
	(a)	Explain why women experiences High E	Buovancy than men?			
	(b)	What is Decompression Sickness and it	•			
5.	(a)	What is Overtraining? List the sign & syr	notoms of the overtraining [5]			
0.	(b)	Do athletes require more Protein? Discu	•			
6.		at is Basal (Resting) Metabolic Rate (BMF al metabolic rate and age. What are the un	,			
7.	(a)	Discuss about the Exercise induced Asth	ıma. [5]			
-	(b)	What is Cardiovascular Drift?	[5]			
8.	Enumerate the Julius "Wolff's Law". Write in detail about the SIX princip promote Bone health					
	•					

MPT in Sports [2nd Year]

Physical Therapy in Sports Conditions (MPS201)

Time: 3 Hours. Max Marks =80

Note: 1.) Attempt all questions.

- 2.) ATTEMPT BOTH PARTS IN SINGLE ANSWER BOOK ONLY.
- NO SUPPLEMENTRAY SHEET SHALL BE ALLOWED/ PROVIDED 3.)
- The Student must write O.P. Code in the space provided on the Title page of 4.) the Answer Book.

Section-A

Note: Attempt any one question which carries 20 marks.

Long Essay. 1x20=20

1. Write the principles of training for a Cricket player in general and specific to body movement coordination during batting?

2. Write in detail about the role of Intrinsic and Extrinsic risk factors in Sports injuries?

Section-B

Note: All Questions are compulsory. Each question carries 10 marks.

Short Essay. 6x10=60

- 3. Discuss Gamekeepers thumb and its management?
- 4. Write the general principles of Flexibility training program?
- 5. Explain the concepts of Well balanced diet for an athlete?
- 6. Discuss the principles of Athletic taping techniques?
- 7. Explain principles of Fitness?
- 8. Explain principles of Circuit training?

Max Marks =80

MPT in Sports [2nd Year]

Athletic Injuries (MPS202)

Time: 3 Hours.

1.)	Attempt all questions.	E ANICIAIEI	$\mathbf{p} \mathbf{p} \mathbf{o} \mathbf{v} \mathbf{v}$	ONI V		
•						
-			-		page of	
,	the Answer Book.	-	-			
	Section-	<u>A</u>				
: Atte	mpt any one question which carries	20 marks.				
Long	<u>g Essay</u> .			1x20=20		
Discuss in detail Antero-lateral impingement of the Ankle, its physiotherapy management plan and add a note on its differential diagnosis.						
	<u>OR</u>					
	• •	describe	the vari	ous types	of	
	Section-	<u>B</u>				
: All 9	Questions are compulsory. Each qu	estion carri	ies 10 ma	rks.		
Shor	t Essay.		6x10=60			
Write (a) (b)	notes on : Post- concussion Syndrome Baker's cyst			[5] [5]		
Discuss in detail "Medial Tibial Stress syndrome of the Leg" and add a note on its differential diagnosis.						
Write (a) (b)	notes on : Ischiogluteal Bursitis Quadriceps contusion			[5] [5]		
		nd discuss	its diag	nostic crite	ria and	
Discu	ss in detail about the various injuries o	f Disabled a	thlete and	l its manager	nent.	
Write (a) (b)	Allingham exercise for Shoulder			[5] [5]		
	2.) 3.) 4.) : Atte Long Discumana Define Tendi : All (Shor Write (a) (b) Discudiffere Write (a) (b) Enlist mana Discu Write (a)	2.) ATTEMPT BOTH PARTS IN SINGI 3.) NO SUPPLEMENTRAY SHEET SHA 4.) The Student must write O.P. Code in the Answer Book. Section: : Attempt any one question which carries Long Essay. Discuss in detail Antero-lateral impingement management plan and add a note on its differential management plan and add a note on its differential diagnosis. Section: : All Questions are compulsory. Each question in detail "Medial Tibial Stress syncoliferential diagnosis. Write notes on: (a) Ischiogluteal Bursitis (b) Quadriceps contusion Enlist various types of Claudication are management plan. Discuss in detail about the various injuries of the Write notes on: (a) Allingham exercise for Shoulder	2.) ATTEMPT BOTH PARTS IN SINGLE ANSWE 3.) NO SUPPLEMENTRAY SHEET SHALL BE ALI 4.) The Student must write O.P. Code in the space the Answer Book. Section-A: Attempt any one question which carries 20 marks. Long Essay. Discuss in detail Antero-lateral impingement of the management plan and add a note on its differential diag OR Define Tendinopathy. Enumerate and describe Tendinopathy and its aetiologic factors. Section-B: All Questions are compulsory. Each question carres Short Essay. Write notes on: (a) Post-concussion Syndrome (b) Baker's cyst Discuss in detail "Medial Tibial Stress syndrome of the differential diagnosis. Write notes on: (a) Ischiogluteal Bursitis (b) Quadriceps contusion Enlist various types of Claudication and discuss management plan. Discuss in detail about the various injuries of Disabled a Write notes on: (a) Allingham exercise for Shoulder	2.) ATTEMPT BOTH PARTS IN SINGLE ANSWER BOOK 3.) NO SUPPLEMENTRAY SHEET SHALL BE ALLOWED/4. The Student must write Q.P. Code in the space provided the Answer Book. Section-A: Attempt any one question which carries 20 marks. Long Essay. Discuss in detail Antero-lateral impingement of the Ankle, its management plan and add a note on its differential diagnosis. OR Define Tendinopathy. Enumerate and describe the variatendinopathy and its aetiologic factors. Section-B: All Questions are compulsory. Each question carries 10 marks. Write notes on: (a) Post-concussion Syndrome (b) Baker's cyst Discuss in detail "Medial Tibial Stress syndrome of the Leg" and differential diagnosis. Write notes on: (a) Ischiogluteal Bursitis (b) Quadriceps contusion Enlist various types of Claudication and discuss its diagranagement plan. Discuss in detail about the various injuries of Disabled athlete and write notes on: (a) Allingham exercise for Shoulder	2.) ATTEMPT BOTH PARTS IN SINGLE ANSWER BOOK ONLY. 3.) NO SUPPLEMENTRAY SHEET SHALL BE ALLOWED/ PROVIDED 4.) The Student must write O.P. Code in the space provided on the Title the Answer Book. Section-A: Attempt any one question which carries 20 marks. Long Essay. 1x20=20 Discuss in detail Antero-lateral impingement of the Ankle, its physiothera management plan and add a note on its differential diagnosis. OR Define Tendinopathy. Enumerate and describe the various types Tendinopathy and its aetiologic factors. Section-B: All Questions are compulsory. Each question carries 10 marks. Short Essay. 6x10=60 Write notes on: (a) Post- concussion Syndrome [5] (b) Baker's cyst [5] Discuss in detail "Medial Tibial Stress syndrome of the Leg" and add a not differential diagnosis. Write notes on: (a) Ischiogluteal Bursitis [5] (b) Quadriceps contusion [5] Enlist various types of Claudication and discuss its diagnostic criter management plan. Discuss in detail about the various injuries of Disabled athlete and its manager Write notes on: (a) Allingham exercise for Shoulder [5]	

MPT-Sports 2nd Year

Applied Exercise Physiology and Sports Psychology (MPS 203)

Time: 3 Hours. Max Marks =80 Note: 1.) Attempt all questions. ATTEMPT BOTH PARTS IN SINGLE ANSWER BOOK ONLY. 2.) 3.) NO SUPPLEMENTRAY SHEET SHALL BE ALLOWED/PROVIDED The Student must write Q.P. Code in the space provided on the Title page of 4.) the Answer Book. Note: Attempt **THREE** questions from each Section A & B. First Question in both sections is **compulsory**. Section-A Marks 40 (Sports Psychology) 1. Describe the role of Sports Psychology in Sports peak performance. [20] 2. Write short notes on the following. Role of heredity in growth and development (a) [5] (b) Factors affecting personality [5] 3. Describe the role of aggression in sports. [10] 4. Write short notes on the following: Theories of Leadership (a) [5] (b) Stages of skill acquisition [5] **Section-B** Marks 40 (Applied Exercise Physiology) 5. Describe the physiological effects of aerobic training. [20] 6. Describe the physiological adaptations in high altitude training. [10] 7. Write short notes on the following. Measurement of muscle strength [5] Pre competition meal [5] (b)

Exercise prescription for a patient with coronary artery disease

[5]

[5]

Write short notes on the following:

Body Mass Index

8.

(b)

MPT in Orthopedics [1st Year]

Review of Basic Sciences (MPO-101)

Time: 3 Hours. Max Marks =80 Note: 1.) Attempt all questions.

- 2.) ATTEMPT BOTH PARTS IN SINGLE ANSWER BOOK ONLY.
- 3.) NO SUPPLEMENTARY SHEET SHALL BE ALLOWED/ PROVIDED
- 4.) The Student must write Q.P. Code in the space provided on the Title page of the Answer Book.

Section-A

Note: Attempt any one question which carries 20 marks.

Long Essay 1x20=20

3. Describe Nervous system. Write it's organization & functioning for various Sensorymotor functioning.

OR

3. Define Endocrine/ Hormonal response to exercise.

Section-B

Note: All Questions are compulsory. Each question carries 10 marks.

- 3. Drugs acting on Central Nervous System.
- Control of Respiration 4
- Myositis Ossificans 5.
- 6. Lymphatic Circulation.
- 7. Stages of Repair/ Healing of Bone
- Classification of Bones 8.

MPT in Orthopedics [1st Year]

Review of Basic Therapeutics (MPO 102)

Time: 3 Hours. Max Marks =80

Note: 1.) Attempt all questions.

- ATTEMPT BOTH PARTS IN SINGLE ANSWER BOOK ONLY. 2.)
- 3.) NO SUPPLEMENTARY SHEET SHALL BE ALLOWED/ PROVIDED
- The Student must write Q.P. Code in the space provided on the Title page of 4.) the Answer Book.

Section-A

Note: Attempt any one question which carries 20 marks.

Long Essay

1x20=20

2. Discuss in detail the kinematics variables that describe the motion of Scapulothoracic and Glenohumeral Joint.

2. Write in detail the production of Ultra sound and write the parameters of Ultra sound for different conditions.

Section-B

Note: All Questions are compulsory. Each question carries 10 marks.

6x10=60

- 3. Describe the effects of Immobilisation on Joints. Why exercises are important in the immobilization phase after a bony injury? [10]
- Write Short Notes on: 4.

[5+5=10]

- (a) Ankle- foot orthosis
- (b) Three point pressure system in orthotics
- 5. Enumerate the ligaments of Ankle joint and explain the patho- mechanics of Lateral ankle sprain. Why ATFL ligament is more prone to injury in this situation? [10]
- 6. Write Short Notes on:

[5+5=10]

- SOMI Brace in the patients with Spinal injury
- (b) Pulsed short wave diathermy for Joint effusion
- 7. Enumerate the Progressive resisted exercises (PRE) and it's methods. What is 10 RM, and explain the Knight's DAPRE regimen in detail. [10]
- 8. Explain Archimedes principle and contraindications for hydrotherapy.[10]

MPT in Orthopedics [1st Year]

Advanced Therapautics and Diagnosis (MPO 103)

Time: 3 Hours. Max Marks =80

Note: 1.) Attempt all questions.

- ATTEMPT BOTH PARTS IN SINGLE ANSWER BOOK ONLY. 2.)
- 3.) NO SUPPLEMENTARY SHEET SHALL BE ALLOWED/ PROVIDED
- 4.) The Student must write O.P. Code in the space provided on the Title page of the Answer Book.

Section-A

Note: Attempt any one question which carries 20 marks.

Long Essay 1x20=20

1. Discuss basic concept, principles, grades and uses of Maitland technique.

OR

2. Discuss principles, effects, uses and contraindications of Biofeedback.

Section-B

Note: All Questions are compulsory. Each question carries 10 marks.

Short Essay 6x10=60

- Write about concept and application of Micro currents along with its indications and 3. contraindications.
- 4. Write short notes on following:

[5+5=10]

- Electrical silence and insertional activity in EMG (a)
- (b) Application of positional stretch
- 5. Discuss in detail about calculation, types and uses of Nerve conduction velocity.
- Describe in detail about types, physiological effects and therapeutic uses of LASER. 6.
- 7. Discuss recent advances and advanced techniques in Physiotherapy.
- 8. What do you mean by Manual therapy? Write basic classification of manual therapy and concept of Cyriax technique.

MPT in Orthopaedics [2nd Year]

BF/2023/10

Physical Therapy in Orthopedic Conditions (MPO 201)

Time: 3 Hours. Max Marks =80

Note: 1.) Attempt all questions.

- 2.) ATTEMPT BOTH PARTS IN SINGLE ANSWER BOOK ONLY.
- 3.) NO SUPPLEMENTARY SHEET SHALL BE ALLOWED/ PROVIDED
- 4.) The Student must write Q.P. Code in the space provided on the Title page of the Answer Book.

Section-A

Note: Attempt any one question which carries 20 marks.

Long Essay [1x20=20]

1. Discuss various Peripheral nerve injuries. Add a note on Leprosy and its PT management.

OR

2. Discuss Cerebral palsy and its PT management in detail. Add a note on Tendon transfer?

Section-B

Note: All Questions are compulsory. Each question carries 10 marks.

Short Essay. [6x10=60]

- 3. Discuss various Vascular diseases and its PT management.
- 4. Discuss Shoulder hand syndrome and its PT management.
- Discuss the qualities of an Ideal stump? Give management and training of below knee amputation.
- 6. Briefly discuss Lordosis and its PT management.
- 7. Discuss Strength duration curve. Write a note on Compartment syndrome.
- 8. Discuss ACL rupture and the rehabilitation programme in detail?

MPT in Orthopaedics [2nd Year]

BF/2023/10

Spinal Disorders and Rehabilitation (MPO 202)

Time: 3 Hours. Max Marks =80

Note: 1.) Attempt all questions.

- 2.) ATTEMPT BOTH PARTS IN SINGLE ANSWER BOOK ONLY.
- 3.) NO SUPPLEMENTARY SHEET SHALL BE ALLOWED/ PROVIDED
- 4.) <u>The Student must write Q.P. Code in the space provided on the Title page of the Answer Book.</u>

Section-A

Note: Attempt any one question which carries 20 marks.

 $\underline{\text{Long Essay}} \qquad [1x20=20]$

1. Discuss "Spondylolisthesis", its classification and management.

<u>OR</u>

2. Discuss Cervical Spine injuries with associated neurological problems.

Section-B

Note: All Questions are compulsory. Each question carries 10 marks.

Short Essay [6x10=60]

- 3. Write in detail the rehabilitation of T10 Vertebral fracture with complete cord lesion.
- 4. Role of physiotherapy in Repetitive strain injuries in Sports Women.
- 5. Discuss Lumbo-pelvic rhythm and Facet dysfunction.
- 6. Discuss the modification of wheel chairs, according to the Thoracic level Spinal cord injuries.
- 7. Stabilization and strengthening exercise for Low back pain patient.
- 8. Classify Spinal fracture. Give in detail about the physiotherapy management on rehabilitation of T10 paraplegia.

MPT in Orthopaedics [2nd Year]

BF/2023/10

Hand Rehabilitation (MPO 203)

Time: 3 Hours. Max Marks =80

Note: 1.) Attempt all questions.

- 2.) ATTEMPT BOTH PARTS IN SINGLE ANSWER BOOK ONLY.
- 3.) NO SUPPLEMENTARY SHEET SHALL BE ALLOWED/ PROVIDED
- 4.) The Student must write Q.P. Code in the space provided on the Title page of the Answer Book.

Section-A

Note: Attempt any one question which carries 20 marks.

Long Essay [1x20=20]

1. Write in detail about Extensor tendon injuries with their physiotherapy management.

OR

2. Write the pathophysiology, clinical features and rehabilitation of Rheumatoid Hand.

Section-B

Note: All Questions are compulsory. Each question carries 10 marks.

Short Essay [6x10=60]

- 3. Enumerate various Bones in Hand and discuss VICI (Volar intercalated instability).
- 4. Explain Spastic Hand with its physiotherapy rehabilitation.
- 5. Write about the detailed Sensory assessment of the Hand.
- 6. Explain in detail about de-Quervein's syndrome and its rehabilitation.
- 7. Write about the pathophysiology, clinical features and physiotherapy management of RSD.
- 8. Describe how will you do functional assessment of Hand.

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