### MAY 2011

[KY 752]

Sub. Code: 8152

### MASTER OF PHYSIOTHERAPY (MPT)

### **DEGREE EXAMINATION**

### New Regulations : For candidates admitted from 2010-2011onwards

### FIRST YEAR

### **Paper II – PHYSIOTHERAPEUTICS**

### Q.P. Code : 278152

**Time : Three hours** 

### **Answer All questions**

### Draw suitable diagrams where ever necessary

### I. Essay Questions :

- 1. Describe the types of Mckenzie's syndromes, use of repeated movements in Mckenzie's method of spinal examination and explain the treatment principles for derangement syndrome.
- 2. Explain the physical parameters ,physiological effects & contraindications for faradic current stimulation. Enumerate the method of reeducation of pelvic floor muscles using faradic current.

### **II. Write Short Notes :**

- 1. Principles of motor nerve conduction study.
- 2. Use of compression in oedema reduction.
- 3. Exercise induced muscle soreness.
- 4. General rules and guidelines for all mobilization treatments.
- 5. Types of EMG needle electrodes.
- 6. High voltage pulsed galvanic stimulation.
- 7. Continuous passive motion.
- 8. Trigger point release.
- 9. Method of ultrasound application.
- 10. Self stretching.

#### \*\*\*\*\*\*

### $(10 \times 6 = 60)$

Maximum : 100 marks

 $(2 \times 20 = 40)$ 

### October 2011

[KZ 752]

Sub. Code: 8152

### MASTER OF PHYSIOTHERAPY (MPT) DEGREE EXAMINATION

### FIRST YEAR

### **PAPER II – PHYSIOTHERAPEUTICS**

*Q.P. Code* : 278152

### Maximum : 100 marks

(180 Min)

Time : 3 hours

### Answer ALL questions in the same order.

I. Elaborate on :	Pages (Max.)	Time (Max.)	Marks (Max.)
<ol> <li>Explain in details the effects of immobilization on musculoskeletal, cardio respiratory and nervous system. Rationale the application of various Physiotherapeutic modalities appropriate in managing the effects of immobilization.</li> </ol>	17	40	20
2. Explain in detail the neuro physiological principles and treatment principles of proprioceptive neuromuscular facilitation techniques. Describe about various proprioceptive neuromuscular facilitation techniques to improve stability.	17	40	20
II. Write notes on :			
1. Neural mobilization	4	10	6
2. Principles and application of Cyriax manipulation	4	10	6
3. Traditional electrophysiological techniques	4	10	6
4. Barrier concepts in manual therapy	4	10	6
5. EMG changes in peripheral neuropathies	4	10	6
6. F wave	4	10	6
7. Mobilization with impulse and without impulse	4	10	6
8. Clinical efficacy of electrical stimulation	4	10	6
9. Somato sensory evoked potentials and its uses	4	10	6
10. Positional release techniques	4	10	6

\*\*\*\*\*\*

### [LA 752] MAY 2012 Sub. Code: 8152 MASTER OF PHYSIOTHERAPY (MPT) DEGREE EXAMINATION FIRST YEAR PAPER II – PHYSIOTHERAPEUTICS Q.P. Code: 278152 Time: 3 hours Maximum: 100 marks

Ime	(180 Min) Maximum: 10			U marks	
	Answer ALL questions in the same or	der.			
I. Ela	borate on:	Pages (Max.)	Time (Max.)	Marks (Max.)	
1.	Classify various types of spinal traction. Describe the therapeutic effects of spinal traction. Explain in detail the procedure for positional traction for cervical and lumbar spine.	17	40	20	
2.	Define electromyography. Explain in detail the various normal and abnormal spontaneous activities in electromyography.	17	40	20	
II. W	rite notes on :				
1.	Articular neurology.	4	10	б	
2.	Eccentric strength training.	4	10	6	
3.	Detail the various methods of ROM measurement for				
	thoracic and lumbar spine.	4	10	6	
4.	Properties of fast and slow pain fibers.	4	10	6	
5.	Differentiate H reflex and F wave.	4	10	6	
6.	Principles of muscle energy techniques.	4	10	6	
7.	Perturbations in standing posture.	4	10	6	
8.	Concave-convex rule and its importance in				
	manipulation.	4	10	6	
9.	Explain various methods of external compression				
	techniques to reduce oedema.	4	10	6	
10	. Myofacial massage.	4	10	6	

\*\*\*\*\*\*

### Maximum: 100 marks

### I. Elaborate on :

Time : 3 hours

1. Phases of healing process and the guidelines, indications, contraindications for using therapeutic modalities.

**APRIL 2013** 

MPT DEGREE EXAMS FIRST YEAR PAPER II – PHYSIOTHERAPEUTICS *Q.P. Code : 278152* 

2. The principles, indications, contraindications and method of application of Butler's neural mobilization technique for the upper limbs.

### **II.** Write notes on :

- 1. Types of resistance exercise
- 2. Evidence based clinical application of stretching
- 3. Variations of Muscle Energy Technique
- 4. Balance training
- 5. Physiological and technical variables affecting the nerve conduction study
- 6. Properties of Water and its clinical significance
- 7. Single-Fibre electromyography
- 8. Russian Currents
- 9. Biomechanical principles in Manual therapy
- 10. Kinesiological EMG

### Sub. Code: 8152

## (2x20=40)

[LC 752]

(10x6=60)

[LD 752]

OCTOBER 2013

Sub. Code: 8152

# MASTER OF PHYSIOTHERAPY DEGREE EXAMINATIONS

### FIRST YEAR

### **PAPER II – PHYSIOTHERAPEUTICS**

### *Q.P. Code* : 278152

Maximum: 100 marks

### **Answer ALL Questions**

### I. Elaborate on:

**Time: Three Hours** 

- 1. Write in detail about the principles, indications, contra-indications, assessment and method of application of Maitland's manual therapy techniques.
- 2. Write in detail about the definition, principles, types, indications and contra-indications of aerobic exercises.

### **II.** Write notes on:

- 1. Strength duration curve
- 2. EMG bio feed back
- 3. Jump sign
- 4. Trampoline
- 5. Whirl pool bath
- 6. Cryo-stretch
- 7. Iontophoresis
- 8. Mc.Kenzie exercises
- 9. Factors affecting nerve conduction
- 10. Pain assessment

\*\*\*\*\*\*

 $(2 \times 20 = 40)$ 

### $(10 \times 6 = 60)$

### **APRIL 2014**

### MPT DEGREE EXAMS FIRST YEAR PAPER II – PHYSIOTHERAPEUTICS

### *Q.P. Code* : 278152

### Maximum: 100 marks

### I. Elaborate on :

Time : 3 hours

- 1. The basic physics, physiological, therapeutic effects, techniques, indications, contraindications and evidence based clinical application of therapeutic ultrasound.
- 2. The Mckenzie method of spinal pain management.

### II. Write notes on :

- 1. The Slump test.
- 2. Low-Intensity stimulators (LIS).
- 3. Mulligan's mobilizations with movements (MWMs).
- 4. Proprioceptive Neuromuscular Facilitation stretching.
- 5. Common aerobic exercises and its effects on the spine.
- 6. Neurophysiological assessment of Brachial plexus lesions.
- 7. Principles of Stabilization training.
- 8. Electrical properties of tissues.
- 9. Normal motor unit potential
- 10. EMG Biofeedback.

\*\*\*\*\*\*

### (2x20=40)

(10x6=60)

OCTOBER 2014

**MPT DEGREE EXAMINATION** FIRST YEAR **PAPER II – PHYSIOTHERAPEUTICS** 

### *Q.P. Code* : 278152

### **Time : Three hours**

### I. Elaborate on:

- 1. Define laser and its principles application of laser in pain, inflammation, edema reduction and diabetic ulcer.
- 2. Describe the principles of mobilization of spine by mulligan therapy compare maitland Vs Mulligan mobilization.

### II. Write notes on:

- 1. Arndt Schultz principle
- 2. Principles of aerobic exercise
- 3. Stress incontinence
- 4. Electrical properties of tissues
- 5. Training with functional devices
- 6. Compression wraps
- 7. Pulsed short ware diathermy
- 8. Exercises induced muscle soreness
- 9. Current parameters
- 10. Functional electrical stimulation (FES)

\*\*\*\*\*\*

Sub. Code: 8152

Maximum : 100 marks

 $(2 \times 20 = 40)$ 

 $(10 \times 6 = 60)$ 

[LF 752]