

MASTER OF PHYSIOTHERAPY (MPT) DEGREE EXAMINATION**SECOND YEAR****BRANCH V – SPORTS PHYSIOTHERAPY****PAPER II – PHYSIOTHERAPY INTERVENTIONS****(SPECIALITY – II)****Q.P. Code: 278135****Time: Three Hours****Maximum: 100 marks****Answer ALL questions in the same order.****I. Elaborate on :**

Pages (Max.)	Time (Max.)	Marks (Max.)
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- | | | | |
|---|----|---------|----|
| 1. Explain the pathomechanics of patellofemoral pain syndrome signs and symptoms and treatment program. | 17 | 40 min. | 20 |
| 2. Discuss the neurophysiology mechanism of trigger point release and elaborate on the technique of any common five lower extremity trigger points release. | 17 | 40 min. | 20 |

II. Write notes on :

- | | | | |
|---|---|---------|---|
| 1. Orthotics in hand injuries. | 4 | 10 min. | 6 |
| 2. Sports massage. | 4 | 10 min. | 6 |
| 3. Progressive functional proprioceptive training. | 4 | 10 min. | 6 |
| 4. Core stability exercises. | 4 | 10 min. | 6 |
| 5. Conservative management for anterior shoulder instability. | 4 | 10 min. | 6 |
| 6. Therapeutic usage of ultrasound in sports injuries. | 4 | 10 min. | 6 |
| 7. Procedure for doing upper limb tension test I and II. | 4 | 10 min. | 6 |
| 8. Sports-specific training program for a cricket bowler. | 4 | 10 min. | 6 |
| 9. Curwin & Stanish eccentric rehabilitation program for tension lesions. | 4 | 10 min. | 6 |
| 10. Piriformis syndrome. | 4 | 10 min. | 6 |

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BRANCH V – SPORTS PHYSIOTHERAPY

PAPER II – PHYSIOTHERAPY INTERVENTIONS

(SPECIALITY – II)

Q.P. Code: 278135

Time: Three Hours

Maximum: 100 marks

Answer ALL questions in the same order.

I. Elaborate on :

**Pages Time Marks
(Max.) (Max.) (Max.)**

- | | | | |
|---|----|---------|----|
| 1. Maitland Mobilization fundamentals, grades, indications, Contra indications. | 17 | 40 min. | 20 |
| 2. ACL rehab for football player. Criteria to return to sports. | 17 | 40 min. | 20 |

II. Write notes on :

- | | | | |
|---|---|---------|---|
| 1. Eccentric training for lower limb. | 4 | 10 min. | 6 |
| 2. Lactic threshold. | 4 | 10 min. | 6 |
| 3. Oxygen debt. | 4 | 10 min. | 6 |
| 4. Various types of fatigue. | 4 | 10 min. | 6 |
| 5. Mc'connel Taping. | 4 | 10 min. | 6 |
| 6. Various methods of warm up. Local & global. | 4 | 10 min. | 6 |
| 7. Planter fasciitis in runners. | 4 | 10 min. | 6 |
| 8. Upper limb plyometrics. | 4 | 10 min. | 6 |
| 9. Strapping in sports. | 4 | 10 min. | 6 |
| 10. Protective equipments in sports. Principals in application. | 4 | 10 min. | 6 |

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Q.P. Code: 278135

Time: Three Hours

Maximum: 100 marks

Answer All questions

I. Elaborate on:

(2 x 20 = 40)

1. Discuss the intrinsic and extrinsic strategies of injury prevention in sports.
2. Functions of the sports physiotherapist when touring with the team.

II. Write notes on:

(10 x 6 = 60)

1. Emotional responses to injury layoff.
2. Clinical significance of Q angle.
3. Protective sports equipments.
4. Fitness tests.
5. Taping in sports.
6. Design a warm up protocol for a cricket bowler.
7. Cryotherapy in sports.
8. Compression syndromes in sports.
9. Rehabilitation following meniscal injury.
10. Water running in rehabilitation of the injured athletes.

[LD 135]

OCTOBER 2013

Sub. Code: 8135

**MASTER OF PHYSIOTHERAPY (MPT) DEGREE EXAMINATION
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Q.P. Code: 278135

Time: Three Hours

Maximum: 100 marks

Answer All questions

I. Elaborate on:

(2 x 20 = 40)

1. Explain in detail the applied Biomechanics, aetiology and Exercise prescription following Hamstring injury of a 22 yr old athlete.
2. Physiotherapy management of a 30 yr old cricketer who had underwent arthroscopic Bankart repair tear less than 5mm.

II. Write notes on:

(10 x 6 = 60)

1. Pre – event massage.
2. DAPRE technique.
3. Fortification.
4. Role of mechanical compression in soft tissue edema.
5. Pulsed muscle energy technique.
6. Write briefly about “not to tape”
7. Thoracic outlet syndrome
8. Manipulation for tennis elbow.
9. Core stability exercise using swissball.
10. Osgood –Schlatter’s disease.

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Q.P. Code: 278135

Time: Three Hours

Maximum: 100 marks

Answer All questions

I. Elaborate on:

(2 x 20 = 40)

1. Pre operative management and post operative Physiotherapy management following ACL reconstruction.
2. Physiotherapy management of 25 year old Basketball player who had underwent rotator cuff repair.

II. Write notes on:

(10 x 6 = 60)

1. FITT principles.
2. Neural Tissue Mobilization.
3. Ballistic stretching.
4. Sports related protective equipment.
5. Carbohydrate loading.
6. Upper Limb Tension Test III.
7. Use of IRR in sports injuries.
8. Kinesthetic Taping.
9. Isokinetic exercise.
10. Glucose metabolism.

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Time: Three Hours

Maximum: 100 marks

Answer All questions

I. Elaborate on:

(2 x 20 = 40)

1. Discuss in detail the mechanics of four competitive swimming strokes.
Add a note on the functional difference between throwing and swimming actions which will have an impact in the rehabilitation of shoulder injuries.
2. Flexibility conditioning for runners. Add a note on neuro-physiology of stretching.

II. Write notes on:

(10 x 6 = 60)

1. Pathomechanics of tennis elbow.
2. Physiology of plyometrics.
3. Predisposing factors and management of medial tibial stress syndrome.
4. Common respiratory symptoms in athletes.
5. Exercise related causes of headache.
6. Ergonomics in sports.
7. Sports drink and fluid requirements – before, during and after training.
8. Hip adductor tendinopathy – Causes and Treatment.
9. Various sports training methods using hydrotherapy.
10. Prehabilitation programme.

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Time: Three Hours

Maximum: 100 marks

Answer All questions

I. Elaborate on:

(2 x 20 = 40)

1. Discuss in detail the training methods and various exercise strategies used in conditioning the lower extremity of a professional kabbadi player.
2. Discuss the intrinsic and extrinsic strategies of injury prevention in sports.

II. Write notes on:

(10 x 6 = 60)

1. Various soft tissue manipulations in treating sports injuries.
2. Prescribing sport specific shoes.
3. Gamekeeper's thumb.
4. Complications of exercise - associated menstrual irregularities.
5. Contents of the medical bag for interstate and international travel with team.
6. Flexibility tests.
7. Taping for ankle injuries.
8. Exercise programme for patella-femoral pain syndrome.
9. Principles and goals of competition nutrition.
10. Agility training.

[LH 135]

OCTOBER 2015

Sub. Code: 8135

**MPT DEGREE EXAMINATION
SECOND YEAR
SPECIALITY PAPER II – PHYSIOTHERAPY INTERVENTIONS
BRANCH V – SPORTS PHYSIOTHERAPY**

Q.P. Code : 278135

Time : Three hours

Maximum : 100 marks

I. Elaborate on:

(2 x 20 = 40)

1. Explain the general principles of therapeutic modalities and its physiological effects.
2. Discuss in detail the rehabilitation for ACL injury for football players. Add a note of criteria to return to sports.

II. Write notes on:

(10 x 6 = 60)

1. Lateral epicondylitis.
2. Strapping in sports.
3. Oxygen debt.
4. Sports massage.
5. Piriformis syndrome.
6. Q angle and A angle.
7. Circuit training.
8. Role of biofeedback in sports rehabilitation.
9. Jumpers knee.
10. Carbohydrate loading.

[LI 135]

APRIL 2016

Sub. Code: 8135

**MPT DEGREE EXAMINATION
SECOND YEAR
SPECIALITY PAPER II – PHYSIOTHERAPY INTERVENTIONS
BRANCH V – SPORTS PHYSIOTHERAPY**

Q.P. Code : 278135

Time : Three hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Explain the fundamentals, grades, indications and contra-indications of Maitland mobilization.
2. Explain the signs and symptoms, Pathomechanics and Rehabilitative protocol of patelofemoral pain syndrome.

II. Write notes on:

(10 x 6 = 60)

1. Conservative management of anterior shoulder instability.
2. Uses of electrical currents in sports physiotherapy.
3. Restoration of normal mechanical function by manipulative therapy.
4. Tennis leg.
5. Formal and informal warmup techniques.
6. Flexibility training programme.
7. Mc'Connel taping.
8. Swimmers shoulder and its management.
9. Interval training.
10. Anthropometric measurement.

[LJ 135]

OCTOBER 2016

Sub. Code: 8135

**MPT DEGREE EXAMINATION
SECOND YEAR
SPECIALITY PAPER II – PHYSIOTHERAPY INTERVENTIONS
BRANCH V – SPORTS PHYSIOTHERAPY**

Q.P. Code : 278135

Time : Three hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Describe in detail the whole body protocol, conditioning exercises and preventive exercises in training a fast bowler in cricket.
2. Explain in detail the different schools of thought in the field of mobilization.

II. Write notes on:

(10 x 6 = 60)

1. Eccentric training.
2. Protective equipments in foot ball sport.
3. Management for wry neck.
4. Upper limb tension tests.
5. Ergonomics for weight lifting sport.
6. Taping protocol for sprinters.
7. Management for shin splints.
8. Endurance training for swimmers.
9. How to enhance peak performance in rowing?
10. General principles in application of modalities for sports injuries.

[LK 135]

MAY 2017

Sub. Code: 8135

**MPT DEGREE EXAMINATION
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SPECIALITY PAPER II – PHYSIOTHERAPY INTERVENTIONS
BRANCH V – SPORTS PHYSIOTHERAPY**

Q.P. Code : 278135

Time : Three hours

Maximum : 100 Marks

I. Elaborate on: **(2 x 20 = 40)**

1. Discuss in detail about the athletic emergency care and its first-aid management.
2. Design a protocol for a 20 yrs old male baseball player for enhancing his sports performance. Add a note on preventing of injuries.

II. Write notes on: **(10 x 6 = 60)**

1. Basic pharmacology in sports physiotherapy.
2. Anthropometric testing.
3. Neural tissue mobilization.
4. Swiss ball exercises.
5. PNF in manipulation.
6. High altitude training regime.
7. Resisted versus Assisted training.
8. Sports vision training.
9. Conditioning programme after ACL repair.
10. Mulligan spinal manipulation techniques.

[LL 135]

OCTOBER 2017

Sub. Code: 8135

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BRANCH V – SPORTS PHYSIOTHERAPY**

Q.P. Code : 278135

Time : Three hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Explain in detail the management of a 25 year old female squash player who had underwent repair of grade II (R) acromio clavicular ligament. Add a note on fitness for return to sports.
2. Discuss in detail the protocol for the enhancement of peak performance in cycling sport.

II. Write notes on:

(10 x 6 = 60)

1. Deep friction massage.
2. Trigger point release technique.
3. Nutation and counter Nutation.
4. Management for spondylolisthesis L4-L5.
5. On field first aid procedure.
6. Principles of injury prevention.
7. Training for shunt and spurt muscles.
8. Mc'Connell multimodal physiotherapy technique.
9. Management of pommel arm in gymnastics.
10. Exercise associated muscle cramps.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[LM 135]

MAY 2018

Sub. Code: 8135

**MPT DEGREE EXAMINATION
SECOND YEAR
SPECIALITY PAPER II – PHYSIOTHERAPY INTERVENTIONS
BRANCH V – SPORTS PHYSIOTHERAPY**

Q.P. Code : 278135

Time : Three hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Explain the significance of two joint muscles in the lower limb in relation to sports.
2. Describe in detail about the phases of throwing and throwing injuries in sports.

II. Write notes on:

(10 x 6 = 60)

1. Describe three functional tests that can be used to decide return to sport after anterior cruciate ligament injury.
2. Principles of training.
3. Tibial stress syndrome.
4. Role of Cryosprays in sports.
5. Ballistic stretching vs static stretching.
6. Principles of fitness.
7. Ball exercises.
8. Piriformis syndrome.
9. Stress fracture.
10. Skin fold thickness measurements.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[LN 135]

OCTOBER 2018

Sub. Code: 8135

**MPT DEGREE EXAMINATION
SECOND YEAR
SPECIALITY PAPER II – PHYSIOTHERAPY INTERVENTIONS
BRANCH V – SPORTS PHYSIOTHERAPY**

Q.P. Code : 278135

Time : Three hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Explain in detail about the Rehabilitation protocol from day 1 to return to field of a hockey player following Grade 2 lateral Collateral Ligament injury of Ankle.
2. Write the management of Acromio Clavicular joint injury of a Cricket player following an injury at the field.

II. Write notes on:

(10 x 6 = 60)

1. Bio-mechanics of throwing.
2. Carbohydrate loading.
3. Star excursion training.
4. Jumper's knee.
5. Sports emergency kit.
6. Iliotibial band syndrome.
7. Pre-seasonal diet.
8. Importance of hydration during sports.
9. Importance of Proprioceptive Neuromuscular Facilitation in sports.
10. Neural tissue mobilization technique of sciatic nerve.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[LO 135]

MAY 2019

Sub. Code: 8135

**MPT DEGREE EXAMINATION
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BRANCH V – SPORTS PHYSIOTHERAPY
SPECIALITY PAPER II – PHYSIOTHERAPY INTERVENTIONS**

Q.P. Code : 278135

Time : Three hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Outline the causes for shoulder impingement. Discuss the physiotherapy plan from acute stage to return to sports.
2. Write in detail about the complete fitness evaluation.

II. Write notes on:

(10 x 6 = 60)

1. Clinical implications of open and closed kinetic chain exercise.
2. Morphological differentiation of Patella.
3. Piriformis syndrome.
4. Taping in lateral ligament injuries of ankle.
5. Swiss ball exercises.
6. Hop tests.
7. Adductor strain.
8. Anatomy of a running shoe.
9. Osteochondritis dessicans.
10. Wartenberg's syndrome.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[LP 135]

OCTOBER 2019

Sub. Code: 8135

**MPT DEGREE EXAMINATION
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SPECIALITY PAPER II – PHYSIOTHERAPY INTERVENTIONS**

Q.P. Code : 278135

Time : Three hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Explain in details about immediate on field management and post operative management of Anterior Cruciate Ligament injury following Hyper extension of the knee in a hockey player.
2. Explain the Cardiovascular, respiratory, metabolic adaptations that would be observed in the individual following aerobic exercise training.

II. Write notes on:

(10 x 6 = 60)

1. Warm up schedule.
2. Interval training.
3. SHIN splints.
4. Hold relax technique in Hamstring tightness.
5. Different ways of stretching piriformis.
6. Principles of sports wrapping.
7. Various types of Fatigue.
8. Ideal sports shoe.
9. Doping – list few agents and its ill effects.
10. Heat stroke.
