

MASTER OF PHYSIOTHERAPY (MPT) DEGREE EXAMINATION**SECOND YEAR****BRANCH V – SPORTS PHYSIOTHERAPY****PAPER I – PHYSIOTHERAPY ASSESSMENT****(SPECIALITY – I)****Q.P. Code: 278125****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. A 45 years old golfer came to Physiotherapy OPD with the complaint of Rt. Shoulder pain during forward elevation of ROM between 60° – 130° for the last 3 months. This has been a gradual onset and now, he is not able to play golf due to pain and restriction of shoulder movements. Document the examination of this golfer in detail with a note on differential diagnosis. | 17 | 40 min. | 20 |
| 2. Elaborate on the mechanics of mono and bi-articular muscles. | 17 | 40 min. | 20 |

II. Write notes on :

- | | | | |
|--|---|---------|---|
| 1. Pre game anxiety. | 4 | 10 min. | 6 |
| 2. Principles of aerobic fitness training. | 4 | 10 min. | 6 |
| 3. Aggression in sports. | 4 | 10 min. | 6 |
| 4. Ethics to be followed in the referral process and responsibilities. | 4 | 10 min. | 6 |
| 5. Preparation of a sports physiotherapist when traveling with team. | 4 | 10 min. | 6 |
| 6. Anatomy of core stability structures. | 4 | 10 min. | 6 |
| 7. Different mechanisms of sports injury. | 4 | 10 min. | 6 |
| 8. Aims and applications of WHO's model of ICIDH-2. | 4 | 10 min. | 6 |
| 9. Chondral injuries and osteochondral fractures. | 4 | 10 min. | 6 |
| 10. Female athlete triad. | 4 | 10 min. | 6 |

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BRANCH V – SPORTS PHYSIOTHERAPY

PAPER I – PHYSIOTHERAPY ASSESSMENT

(SPECIALITY – I)

Q.P. Code: 278125

Time: Three Hours

Maximum: 100 marks

Answer ALL questions in the same order.

I. Elaborate on :

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

- | | | | |
|---|----|---------|----|
| 1. Describe the biomechanics of throwing. Conservative Management methods used for shoulder injury during a Playing season. | 17 | 40 min. | 20 |
| 2. Explain the energy system involved and its significance in planning a training program for a football player. | 17 | 40 min. | 20 |

II. Write notes on :

- | | | | |
|--|---|---------|---|
| 1. Body mass index. | 4 | 10 min. | 6 |
| 2. Clinical features & investigations for stress fracture. | 4 | 10 min. | 6 |
| 3. ICF coding. | 4 | 10 min. | 6 |
| 4. Difference in stride & step length in various runners. | 4 | 10 min. | 6 |
| 5. Methods of cryotherapy application. | 4 | 10 min. | 6 |
| 6. Negative psychological factors of an injured athlete. | 4 | 10 min. | 6 |
| 7. Application of documentation skills for a fast bowlers return to sports from a shoulder injury. | 4 | 10 min. | 6 |
| 8. Sports massage. | 4 | 10 min. | 6 |
| 9. Fascia. | 4 | 10 min. | 6 |
| 10. Oxygen debt. | 4 | 10 min. | 6 |

[LC 125]

APRIL 2013

Sub. Code: 8125

**MASTER OF PHYSIOTHERAPY (MPT) DEGREE EXAMINATION
SECOND YEAR**

BRANCH V – SPORTS PHYSIOTHERAPY

PAPER I – PHYSIOTHERAPY ASSESSMENT

(SPECIALITY – I)

Q.P. Code: 278125

Time: Three Hours

Maximum: 100 marks

Answer All questions

I. Elaborate on:

(2 x 20 = 40)

1. Explain in detail the various fitness & training principles.
2. Common soft tissue injuries seen in volleyball. Explain the Mechanism of injuries and its management.

II. Write notes on:

(10 x 6 = 60)

1. Significance of ice bath after a game in sports.
2. Importance of functional status evaluation.
3. Biomechanics of free stroke in swimming.
4. Principals of Evidence Based Practice.
5. Lactic acid threshold.
6. X-ray for scapoid bone injury.
7. Structural component of a ligament.
8. Common defense style to rehabilitation.
9. Adaptive equipments.
10. Meniscus.

[LD 125]

OCTOBER 2013

Sub. Code: 8125

**MASTER OF PHYSIOTHERAPY (MPT) DEGREE EXAMINATION
SECOND YEAR**

BRANCH V – SPORTS PHYSIOTHERAPY

PAPER I – PHYSIOTHERAPY ASSESSMENT

(SPECIALITY – I)

Q.P. Code: 278125

Time: Three Hours

Maximum: 100 marks

Answer All questions

I. Elaborate on:

(2 x 20 = 40)

1. Discuss in detail about physical, psychological and emotional problems faced by female sports persons.
2. Describe Anatomy of knee joint and the function of ligaments.

II. Write notes on:

(10 x 6 = 60)

1. Hooke's law.
2. Warming up and Cooling down.
3. Health care Model.
4. Swimmers Shoulder.
5. SAID principle.
6. Soft tissue injury in athletes.
7. Heatstroke.
8. Mallet fingers.
9. Running biomechanics.
10. ICF coding.

[LE 125]

APRIL 2014

Sub. Code: 8125

**MASTER OF PHYSIOTHERAPY (MPT) DEGREE EXAMINATION
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BRANCH V – SPORTS PHYSIOTHERAPY

PAPER I – PHYSIOTHERAPY ASSESSMENT

(SPECIALITY – I)

Q.P. Code: 278125

Time: Three Hours

Maximum: 100 marks

Answer All questions

I. Elaborate on:

(2 x 20 = 40)

1. Discuss in detail the type and related factors of muscle injury.
2. Discuss ballistic movement of shoulder during sports performance.

II. Write notes on:

(10 x 6 = 60)

1. Acute hemarthrosis.
2. Role of the menisci.
3. Anxiety.
4. NAGI model.
5. Evidence in practice.
6. Plica syndrome.
7. Contributing factors for Exercise induced Leg pain.
8. Infrapatellar Bursitis.
9. Pathophysiology of tendinitis.
10. Connective tissue.

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Q.P. Code: 278125

Time: Three Hours

Maximum: 100 marks

Answer All questions

I. Elaborate on:

(2 x 20 = 40)

1. What are the Principles of Evaluation of Physical Fitness?
Discuss the Influence of Altitude and Climate on Physical Performance in Sports.
2. Discuss in detail about the Assessment techniques employed by a Sports Physiotherapist to evaluate the Physical Fitness of 25 Years old Male Basketball player who is returning to his Sports after ACL Reconstruction of his right Knee joint.

II. Write notes on:

(10 x 6 = 60)

1. Endurance Testing.
2. Warming up and Cooling Down.
3. Evaluation for Patello femoral Pain Syndrome.
4. Ballistic Movement of Ankle During Sports.
5. Glucose Metabolism.
6. Isokinetic Testing.
7. Evaluation of Back Pain in a Swimmer.
8. Taping Works in Sports Injuries.
9. Clinical Tests for Assessment of Balance.
10. Pre Participation Evaluation.

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Q.P. Code: 278125

Time: Three Hours

Maximum: 100 marks

Answer All questions

I. Elaborate on:

(2 x 20 = 40)

1. Discuss the normal response of Aerobic Exercise with respect to Energy Transfer, Oxygen Intake and Oxygen Debt.
2. Sports specific evaluation for a Sprinting Female Athlete following Meniscal Repair for return to Sports.

II. Write notes on:

(10 x 6 = 60)

1. Various methods used in Muscle Strength Testing.
2. Principles of Training Diet.
3. Pre Participation Evaluation.
4. Electromyography.
5. Proprioceptive Evaluation of Lower Extremity.
6. Emergency Injury Assessment in Sports.
7. Soft Tissue Injury in Sports.
8. Importance of Exercise.
9. Repetitive Strain Injury (RSI) of Upper Extremity in Sports.
10. Various methods of Fatigue Assessment.

[LH 125]

OCTOBER 2015

Sub. Code: 8125

**MPT DEGREE EXAMINATION
SECOND YEAR
SPECIALITY PAPER I – PHYSIOTHERAPY ASSESSMENT
BRANCH V – SPORTS PHYSIOTHERAPY**

Q.P. Code : 278125

Time : Three hours

Maximum : 100 marks

I. Elaborate on:

(2 x 20 = 40)

1. Biomechanics of throwing, assessment of shoulder in overhead sports with discussion on gleno humeral internal rotation deficit, glenohumeral external rotation gain and total range of motion deficit.
2. Running injuries in an athlete, assessment of runner's leg and foot.

II. Write notes on:

(10 x 6 = 60)

1. Delayed onset of muscle soreness.
2. Cardiopulmonary exercise testing in athletes.
3. Heat stroke in marathon runners.
4. Assessment and injuries in medial patella femoral ligament.
5. Back pain in fast bowlers – differential diagnosis.
6. Bowlers thumb.
7. Athletes foot.
8. Tennis leg.
9. Dequervian tenosynovitis.
10. Valgus stress overload syndrome.

[LI 125]

APRIL 2016

Sub. Code: 8125

**MPT DEGREE EXAMINATION
SECOND YEAR
SPECIALITY PAPER I – PHYSIOTHERAPY ASSESSMENT
BRANCH V – SPORTS PHYSIOTHERAPY**

Q.P. Code : 278125

Time : Three hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Pre Participation Evaluation in Athletes.
2. Clinical conditions in shoulder among overhead Athletes. Detailed shoulder evaluation with special tests, investigation procedures in shoulder injuries basics – X-RAY, Musculoskeletal Ultrasound, CT & MRI.

II. Write notes on:

(10 x 6 = 60)

1. Anterior Knee Pain Syndrome.
2. Anterior Cruciate Ligament injury.
3. Spondylolisthesis in a fast bowler.
4. Sinus tarsi syndrome.
5. Swimmers shoulder.
6. Chondrol injuries & Osteochondral Defect (OCD) in talus.
7. Sports physiotherapist touring with teams, what to prepare?
8. Sports medicine team.
9. Role of sports physiotherapist in marathon.
10. Physical examination of the wrist & hand.

[LJ 125]

OCTOBER 2016

Sub. Code: 8125

**MPT DEGREE EXAMINATION
SECOND YEAR
SPECIALITY PAPER I – PHYSIOTHERAPY ASSESSMENT
BRANCH V – SPORTS PHYSIOTHERAPY**

Q.P. Code : 278125

Time : Three hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Describe in detail about the physiological responses and adaptations to exercise in Musculoskeletal system.
2. Explain in detail the injury assessment of a cyclist who had just collapsed after a span of 30 kms of cycling under humid temperature.

II. Write notes on:

(10 x 6 = 60)

1. Principles and management of tendon transfer surgeries.
2. Isokinetic testing after Anterior Cruciate Ligament reconstruction.
3. Biopsy procedures in sports assessment.
4. Physiotherapy verses medical model of practice.
5. Principles of evidence based physiotherapy practice in sports field.
6. Biomechanics of throwing.
7. Pre participation meal.
8. Psychosocial wellness.
9. Sports fitness testing.
10. Carbohydrate loading response.

[LK 125]

MAY 2017

Sub. Code: 8125

**MPT DEGREE EXAMINATION
SECOND YEAR
SPECIALITY PAPER I – PHYSIOTHERAPY ASSESSMENT
BRANCH V – SPORTS PHYSIOTHERAPY**

Q.P. Code : 278125

Time : Three hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Explain in detail the injury assessment of a Football Goal keeper who was hit by the ball and injured his face and head.
2. How will you evaluate and certify for fitness of a differently abled person who is wheelchair bound? Add a notes on, what sports does the person will qualify?

II. Write notes on:

(10 x 6 = 60)

1. Contact sports injuries.
2. Purpose and need for physiotherapy assessment.
3. Differentiate heat exhaustion and heat stroke.
4. Explain the factors affecting sports fitness.
5. International Classification of Impairments Disability and Handicap Model (ICIDH-I).
6. Explain the basics of X-ray and views taken.
7. Examination of an athlete who had sprained his lower trunk.
8. Substance abuse.
9. Exercises in high attitudes.
10. Assessment based on MET values.

[LL 125]

OCTOBER 2017

Sub. Code: 8125

**MPT DEGREE EXAMINATION
SECOND YEAR
SPECIALITY PAPER I – PHYSIOTHERAPY ASSESSMENT
BRANCH V – SPORTS PHYSIOTHERAPY**

Q.P. Code : 278125

Time : Three hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Discuss in detail the biomechanics and pathomechanics of a Normal Shoulder and Peri Arthritis Shoulder of a 35 year old rowing sport person.
2. Assessment of commonest injuries for a Basket ball player. Add a note on examination of sport specific muscle power examination.

II. Write notes on:

(10 x 6 = 60)

1. Various categories of movement dysfunction.
2. Assessment of a below knee amputee for paraolympic sports.
3. Sports specific fitness assessment for agility and balance.
4. Jumper's knee.
5. Write a note on World Anti Doping Agency (WADA).
6. Explain the principles of sports psychology.
7. Basics of electromyography and its interpretation.
8. Explain the etiological and biomechanical considerations of sports assessment.
9. Endocrine system assessment in sports.
10. Wellness in Rehabilitation.

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

[LM 125]

MAY 2018

Sub. Code: 8125

**MPT DEGREE EXAMINATION
SECOND YEAR
SPECIALITY PAPER I – PHYSIOTHERAPY ASSESSMENT
BRANCH V – SPORTS PHYSIOTHERAPY**

Q.P. Code : 278125

Time : Three hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Explain in detail about the common running injuries in and around the Knee joint.
2. Explain the basic skill of physical, functional and sports specific assessment in a Cricket bowler.

II. Write notes on:

(10 x 6 = 60)

1. Warming up and cooling down.
2. Factors contributing to the patellofemoral pain syndrome.
3. Isokinetic training.
4. Swimmer's shoulder.
5. Epiphyseal injuries.
6. Anaerobic metabolism.
7. Common causes of sports injuries in the older athlete.
8. Role of rotator interval in stability for the shoulder.
9. Carbohydrate loading diet.
10. Doping.

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

[LN 125]

OCTOBER 2018

Sub. Code: 8125

**MPT DEGREE EXAMINATION
SECOND YEAR
SPECIALITY PAPER I – PHYSIOTHERAPY ASSESSMENT
BRANCH V – SPORTS PHYSIOTHERAPY**

Q.P. Code : 278125

Time : Three hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Explain the basic structural and mechanical properties of ligaments and how will it adapt to the injuries?
2. Discuss the physiological differences between a male and female athlete and its possible impact on training.

II. Write notes on:

(10 x 6 = 60)

1. Visual and auditory evoked potentials.
2. Piriformis syndrome.
3. Lactic threshold.
4. Acclimatization.
5. Endurance testing.
6. Emergency care in the field.
7. Unhappy traid of the knee.
8. Principles of Pilates method.
9. Components of Athletic shoe.
10. Segond fracture.

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

[LO 125]

MAY 2019

Sub. Code: 8125

**MPT DEGREE EXAMINATION
SECOND YEAR
BRANCH V – SPORTS PHYSIOTHERAPY
SPECIALITY PAPER I – PHYSIOTHERAPY ASSESSMENT**

Q.P. Code : 278125

Time : Three hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Common soft tissue injuries seen in Volleyball. Explain the mechanism of injuries and its management.
2. Explain the basic skill of physical, functional and sports specific assessment in a Football goal keeper.

II. Write notes on:

(10 x 6 = 60)

1. Principles of aerobic fitness training.
2. Clinical features and investigation for stress fracture.
3. Oxygen debt.
4. Hamstring muscle injury.
5. Meniscus.
6. Jersey finger.
7. Sports medical team.
8. IT band friction syndrome.
9. NAGI model.
10. Bio mechanics of back stroke swimming.

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

[LP 125]

OCTOBER 2019

Sub. Code: 8125

**MPT DEGREE EXAMINATION
SECOND YEAR
BRANCH V – SPORTS PHYSIOTHERAPY
SPECIALITY PAPER I – PHYSIOTHERAPY ASSESSMENT**

Q.P. Code : 278125

Time : Three hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Explain in detail the various fitness components and the FITT principles of training.
2. Classify the various types of ligament injury. Write in detail about the sports specific assessment anterior cruciate ligament injury in a football player.

II. Write notes on:

(10 x 6 = 60)

1. Sports massage.
2. Lactic acid threshold.
3. Adaptive equipments.
4. Sports specific assessment for meniscal injury.
5. Plyometrics.
6. Explain the star excursion balance test and vertical jump test.
7. Describe the various stages of throwing and the muscles involved in it.
8. Importance of carbohydrates in athletes.
9. Plica syndrome.
10. Infrapatellar Bursitis.

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

[LQ 125]

NOVEMBER 2020
(MAY 2020 SESSION)

Sub. Code: 8125

**MPT DEGREE EXAMINATION
SECOND YEAR
BRANCH V – SPORTS PHYSIOTHERAPY
SPECIALITY PAPER I – PHYSIOTHERAPY ASSESSMENT**

Q.P. Code : 278125

Time : Three hours

Maximum : 100 Marks

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

1. Explain in detail the various fitness and training principles.
2. Describe the Biomechanics of throwing, conservative management methods used for shoulder injury during a playing session.

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

1. Sports massage.
2. X-rays findings for scaphoid bone injury.
3. Female athlete.
4. Body mass index.
5. Overuse injuries.
6. Sport man's hernia.
7. Electromyography.
8. ICF coding.
9. Bio mechanics of breast stroke swimming.
10. Connective tissue.

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

[MPT 0321]

MARCH 2021

Sub. Code: 8125

(OCTOBER 2020 EXAM SESSION)

MPT DEGREE EXAMINATION

SECOND YEAR

BRANCH V– SPORTS PHYSIOTHERAPY

SPECIALITY PAPER I – PHYSIOTHERAPY ASSESSMENT

Q.P. Code : 278125

Time : Three hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Describe and Discuss in detail about the complete assessment techniques employed by a sports physiotherapist in the evaluation of physical fitness of 25 years old male football player returning to his sports after arthroscopic ACL Reconstruction of his right knee.
2. Discuss about documentation and examination for low back pain in cricket players. Add a note on differential diagnosis.

II. Write notes on:

(10 x 6 = 60)

1. Evaluation for tibial stress syndrome.
2. Taping ankle lateral ligament sprain in athletes.
3. Onset of blood lactate accumulation among athletes.
4. Valgus extension overload syndrome.
5. Shoulder impingement syndrome – Assessment.
6. Sports physiotherapist presence on-field-roles and responsibilities.
7. Carbohydrate loading diet.
8. Endurance Testing.
9. World Anti-Doping Agency (WADA).
10. Patella femoral pain syndrome – Evaluation.
