

September 2008

[KT 179]

Sub. Code: 2073

M.D. DEGREE EXAMINATION

Branch XIX – Physical Medicine and Rehabilitation

**PHYSICAL MEDICINE AND REHABILITATION – II
(CARDIAC AND PULMONARY REHABILITATION
GERIATRIC, O & G)**

Common to

**Part II – Paper II(Candidates admitted upto 2003-04) and
Paper III – (For candidates admitted from 2004-2005 onwards)**

Q.P. Code : 202073

Time : Three hours

Maximum : 100 marks

Draw suitable diagram wherever necessary.

Answer ALL questions.

I. Essay questions :

(2 X 20 = 40)

1. Describe the various phases of Cardiac Rehabilitation following myocardial infarction.
2. What are the common rehabilitation problems one will come across in a geriatric ward? Outline the various rehabilitation measures for the common problems.

II. Write short notes on :

(10 X 6 = 60)

1. Interstitial fibrosis.
 2. Cardiac Stress test.
 3. Kegel's exercises.
 4. Deep vein thrombosis.
 5. Aerobic exercises.
 6. Pulmonary function.
 7. Intermittent Positive Pressure ventilation.
 8. ECG in Cardiac ischemia.
 9. Cor pulmonale.
 10. Postural drainage.
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March 2009

[KU 179]

Sub. Code: 2073

M.D. DEGREE EXAMINATION

Branch XIX – PHYSICAL MEDICINE AND REHABILITATION

Part II – Paper II (Candidates admitted upto 2003-04) and

Paper III – (For candidates admitted from 2004-2005 to 2007-2008)

PHYSICAL MEDICINE AND REHABILITATION – II

(CARDIAC AND PULMONARY REHABILITATION

GERIATRIC, O & G)

Q.P. Code : 202073

Time : Three hours

Maximum : 100 marks

Draw suitable diagram wherever necessary.

Answer ALL questions.

I. Essay questions :

(2 x 20 = 40)

1. Give an account of rehabilitation measures after coronary bypass surgery.
2. Discuss the pulmonary concerns and their management in a quadriplegic at C3 level.

II. Write short notes on :

(10 x 6 = 60)

1. Exercise therapy in elderly.
2. SACH foot.
3. Management of stress incontinence in women.
4. Antiphospholipid antibody.
5. Trendelenberg gait.
6. Low temperature thermoplastics.
7. Diaphragmatic breathing.
8. Duchenne Muscular dystrophy.
9. Syme's amputation.
10. Patellar tendon bearing socket.

MAY 2011

[KY 179]

Sub. Code: 2073

M.D. DEGREE EXAMINATION

BRANCH XIX – PHYSICAL MEDICINE AND REHABILITATION

PHYSICAL MEDICINE AND REHABILITATION – II

(CARDIAC AND PULMONARY REHABILITATION, GERIATRICS, O&G)

Q.P. Code : 202073

**Time : 3 hours
(180 Min)**

Maximum : 100 marks

Answer ALL questions in the same order.

I. Elaborate on :

Pages (Max.)	Time (Max.)	Marks (Max.)
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1. Discuss the deleterious effects of prolonged immobilization.

11	35	15
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2. Describe the phases of cardiac rehabilitation of a 50 year old male patient who has had an acute myocardial infarction.

11	35	15
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II. Write notes on :

1. Neurogenic claudication.

4	10	7
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2. Pharmacological management of Parkinsonism.

4	10	7
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3. Effects of restrictive and obstructive pulmonary disease on lung functions.

4	10	7
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4. Complications of cervical spondylosis.

4	10	7
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5. Strategies to prevent falls in the elderly.

4	10	7
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6. Back pain in pregnancy.

4	10	7
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7. Stress incontinence.

4	10	7
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8. Periarthritis shoulder.

4	10	7
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9. Pharmacological options for the management of Osteoporosis.

4	10	7
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10. Causes of peripheral neuropathy.

4	10	7
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APRIL 2012

[LA 179]

Sub. Code: 2073

**M.D. DEGREE EXAMINATION
BRANCH XIX – PHYSICAL MEDICINE AND REHABILITATION
PHYSICAL MEDICINE AND REHABILITATION – II
(CARDIAC AND PULMONARY REHABILITATION, GERIATRICS, O&G)
Q.P. Code : 202073**

**Time : 3 hours
(180 Min)**

Maximum : 100 marks

Answer ALL questions in the same order.

I. Elaborate on :

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

- | | | | |
|--|----|----|----|
| 1. Discuss the etiopathology and risk factors of chronic peripheral arterial occlusive disease. Describe the measures for pain management, risk modification, exercise training and pharmaceutical interventions for a patient with chronic peripheral arterial occlusive disease. | 16 | 35 | 15 |
| 2. Describe the effects of aging on bone mass. What are the factors that contribute to risk of falls in elderly? How will you manage acute pain in patients with osteoporosis? Discuss the pharmacologic options in treatment of osteoporosis. | 16 | 35 | 15 |

II. Write notes on :

- | | | | |
|--|---|----|---|
| 1. Describe the pulmonary function tests in obstructive and restrictive lung disease. | 4 | 10 | 7 |
| 2. Explain the spectrum of degenerative changes in the lumbar spine. | 4 | 10 | 7 |
| 3. Outline the contraindications to exercise stress testing. | 4 | 10 | 7 |
| 4. Effects of exercise on patients with chronic obstructive pulmonary disease. | 4 | 10 | 7 |
| 5. List out the causes of post stroke shoulder pain and outline their management. | 4 | 10 | 7 |
| 6. List the lacunar syndromes and mention their anatomic correlates. | 4 | 10 | 7 |
| 7. Outline the cardiac exercise approaches for the musculoskeletal management of osteoporosis. | 4 | 10 | 7 |
| 8. Principles of exercise approaches for the musculoskeletal management of osteoporosis. | 4 | 10 | 7 |
| 9. What are the adaptations with aerobic training? | 4 | 10 | 7 |
| 10. List the causes and management of back pain in pregnancy. | 4 | 10 | 7 |

**M.D. DEGREE EXAMINATION
BRANCH XIX – PHYSICAL MEDICINE & REHABILITATION**

**PHYSICAL MEDICINE & REHABILITATION - II
(CARDIAC AND PULMONARY REHABILITATION, GERIATRICS,
O&G)**

Q.P.Code: 202073

Time: Three Hours

Maximum: 100 marks

I. Elaborate on:

(2X15=30)

1. Discuss the rehabilitation in a 70 year old gentleman with a left MCA infarct along with hearing insufficiency
2. Explain the principles of Pulmonary rehabilitation in a patient of COPD (Chronic Obstructive Pulmonary Disease)

II. Write notes on:

(10X7=70)

1. Stress incontinence management
2. Management of diabetic foot ulcer
3. Pulmonary complications in spinal cord injury
4. Role of vitamin D in rehabilitation
5. Benefits of physical activity on risk factors of coronary artery disease
6. Discuss types of Exercise Stress Testing
7. Pharmacological management in Dementia
8. Evaluation of bladder disturbances in the elderly
9. Management of infertility in spinal cord injury
10. Role of incentive spirometry in Pulmonary rehabilitation

[LD 179]

OCTOBER 2013

Sub. Code: 2073

M.D. DEGREE EXAMINATION

BRANCH XIX – PHYSICAL MEDICINE & REHABILITATION

PHYSICAL MEDICINE & REHABILITATION - II

(CARDIAC AND PULMONARY REHABILITATION, GERIATRICS, O&G)

Q.P.Code: 202073

Time: Three Hours

Maximum: 100 marks

I. Elaborate on:

(2 x 15 = 30)

1. Describe the pulmonary complications and their management in a young male with traumatic spinal cord injury?
2. What are the changes in the body with aging? What are the rehabilitation strategies to manage falls in elderly?

II. Write notes on:

(10 x 7 = 70)

1. List the commonly used pharmacologic agents in osteoporosis, their common dosage and potential side effects.
2. List the brain stem stroke syndromes? Add a note on each of their locations, structural injury and characteristics?
3. List the Brunnstorm's stages of recovery in stroke?
4. What are the clinical features in a patient with lumbar intervertebral disc Prolapse?
5. Borg rating scale.
6. List the common causes of osteoporosis.
7. Describe the functional assessment scales giving examples.
8. Summarise the risk factors for coronary artery disease.
9. List the indications for terminating exercise stress testing.
10. Describe the antenatal exercises and post natal exercises.

(LE 179)

APRIL 2014

Sub. Code:2073

M.D. DEGREE EXAMINATION

BRANCH XIX - PHYSICAL MEDICINE & REHABILITATION

PHYSICAL MEDICINE & REHABILITATION-II

(CARDIAC AND PULMONARY REHABILITATION, GERIATRICS, O & G)

Q.P.Code: 202073

Time: Three Hours

Maximum: 100 marks

I. Elaborate on:

(2X15=30)

1. Rehabilitation of an elderly patient with acute Myocardial infarction.
2. Rehabilitation of an elderly female patient with osteoporosis.

II. Write notes on:

(10X7=70)

1. Effects of antihypertensives on exercise responses.
2. Young lady with grade I uterine prolapse.
3. Exercise in pregnancy.
4. Cardiac asthma.
5. Prevent falls in elderly.
6. Resistant hypertension.
7. Positron Emission Tomogram scan.
8. Goals of pulmonary rehabilitation.
9. Congestive cardiac failure.
10. Proximal muscle weakness in elderly.

M.D. DEGREE EXAMINATION
BRANCH XIX – PHYSICAL MEDICINE & REHABILITATION
PAPER III – PHYSICAL MEDICINE & REHABILITATION - II
(CARDIAC AND PULMONARY REHABILITATION, GERIATRICS, O&G)

Q.P.Code: 202073

Time: Three Hours

Maximum: 100 marks

Answer ALL questions

I. Elaborate on:

(2 x 15 = 30)

1. List out the risk factors involved in Coronary heart disease. Discuss in detail about the principles in rehabilitation of a patient with Coronary Heart disease who has undergone a CABG.
2. Discuss briefly the clinical features and management of an elderly male with central cord syndrome.

II. Write notes on:

(10 x 7 = 70)

1. Post herpetic neuralgia.
2. Pelvic floor exercises.
3. Normal pressure hydrocephalus.
4. Endocrine changes following brain injury.
5. Hand deformities in Rheumatoid arthritis.
6. Hyponatremia.
7. Evaluation of pressure ulcers.
8. Nosocomial infection.
9. Rotator cuff injury.
10. Glasgow outcome scale.

M.D. DEGREE EXAMINATION

BRANCH XIX – PHYSICAL MEDICINE AND REHABILITATION

PAPER III – PHYSICAL MEDICINE AND REHABILITATION - II
(CARDIAC AND PULMONARY REHABILITATION, GERIATRICS, O & G)

Q.P.Code: 202073

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Discuss common pulmonary function tests. Describe briefly the principles and rehabilitation of chronic obstructive airway disease.
2. Discuss the common disorder of speech following cerebrovascular accident. Describe briefly how you would address this problem in an elderly male following dominant hemisphere stroke?

II. Write notes on:

(10 x 7 = 70)

1. Homonymous hemianopsia.
2. Painful arc syndrome.
3. Reticular activating system.
4. Neurogenic claudication.
5. Complications of Colles' fracture.
6. Subdural hematoma.
7. Drugs for Parkinson's disease.
8. Postural hypotension.
9. Insomnia.
10. Isotope scan for Ischemic Heart Disease.

M.D. DEGREE EXAMINATION

BRANCH XIX – PHYSICAL MEDICINE AND REHABILITATION

PAPER III – PHYSICAL MEDICINE AND REHABILITATION - II
(CARDIAC AND PULMONARY REHABILITATION, GERIATRICS, O & G)

Q.P.Code: 202073

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Discuss the etiopathology and risk factors of chronic peripheral arterial disease? Describe the measures for pain relief, risk modifications, exercise training and pharmacological interventions for a patient with chronic peripheral arterial occlusive disease?
2. Discuss the respiratory complications in a young male with traumatic spinal cord injury. How will you manage these problems?

II. Write notes on:

(10 x 7 = 70)

1. Exercise stress testing in cardiac rehabilitation-protocols and findings associated with poor prognosis.
2. Conditions associated with ageing in spinal cord injury.
3. Pharmacological management of dementia.
4. Principles of pulmonary rehabilitation in patients with COPD.
5. Lymphatic diseases of the lower limb.
6. Causes of peripheral neuropathy.
7. Antenatal and post natal exercises.
8. Ataxic hemiparesis.
9. Postural drainage.
10. Effects of restrictive and obstructive disease on lung functions.

M.D. DEGREE EXAMINATION

BRANCH XIX – PHYSICAL MEDICINE AND REHABILITATION

PAPER III – PHYSICAL MEDICINE AND REHABILITATION - II
(CARDIAC AND PULMONARY REHABILITATION, GERIATRICS, O & G)

Q.P.Code: 202073

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Discuss briefly principles of rehabilitation following Angioplasty for Coronary Artery disease.
2. Discuss the management of an elderly male with right hemisphere middle cerebral artery infarct.

II. Write notes on:

(10 x 7 = 70)

1. Incentive spirometry.
2. Myaesthesia gravis.
3. Orthostatic hypotension.
4. Chronic Subdural hemorrhage.
5. Investigations for multiple myeloma.
6. Physiological dead space.
7. Bronchiectasis.
8. Insomnia.
9. Prostate specific antigen.
10. Obstructive sleep apnoea.

M.D. DEGREE EXAMINATION

BRANCH XIX – PHYSICAL MEDICINE AND REHABILITATION

PAPER III – PHYSICAL MEDICINE AND REHABILITATION - II
(CARDIAC AND PULMONARY REHABILITATION, GERIATRICS, O & G)

Q.P. Code: 202073

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Discuss the etiopathology of Parkinsonism. Describe the clinical presentation, medical management and rehabilitation approach to a 60 year old patient with Parkinson's disease?
2. List the changes in the body with ageing. Describe the rehabilitation of a 80 year old lady with left hemiparesis and left hemiarthroplasty for hip fracture. Describe the strategies to prevent falls in elderly.

II. Write notes on:

(10 x 7 = 70)

1. Complications of neurogenic bladder.
2. Back pain in pregnancy.
3. Lumbar canal stenosis.
4. Use of Dual energy X-ray Absorptiometry to evaluate bone mineral density.
5. Alzheimer's disease.
6. Adaptations with aerobic training.
7. Indications for terminating exercise stress testing.
8. Mechanical ventilation.
9. Evaluation of bladder disturbances in elderly.
10. Diagnostic evaluation of chronic venous insufficiency.

[LQ 179]

**AUGUST 2020
(MAY 2020 SESSION)**

Sub. Code: 2073

M.D. DEGREE EXAMINATION

BRANCH XIX – PHYSICAL MEDICINE AND REHABILITATION

**PAPER III – PHYSICAL MEDICINE AND REHABILITATION - II
(CARDIAC AND PULMONARY REHABILITATION, GERIATRICS, O & G)**

Q.P. Code: 202073

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on: **(2 x 15 = 30)**

1. Discuss about the blue bloaters and pink puffers in respiratory illness. Discuss in detail about the medical management and rehabilitation strategies in a patient with bronchiectasis.
2. List the conditions and diseases of elderly, their causes and discuss in detail about their management.

II. Write notes on: **(10 x 7 = 70)**

1. Paraneoplastic disorders
2. Ankle brachial index
3. Valvular heart diseases
4. Hypertrophic scarring
5. Post partum pelvic floor dysfunction
6. Pharmacological interventions for osteoporosis
7. Outcome measures in rehabilitation – measures and their ICF domain
8. Tenodesis splint
9. Heterotrophic ossification
10. Crutch gaits.

[MD 0721]

**JULY 2021
(MAY 2021 SESSION)**

Sub. Code: 2073

M.D. DEGREE EXAMINATION

BRANCH XIX – PHYSICAL MEDICINE AND REHABILITATION

**PAPER III – PHYSICAL MEDICINE AND REHABILITATION - II
(CARDIAC AND PULMONARY REHABILITATION, GERIATRICS, O & G)**

Q.P. Code: 202073

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Describe the rehabilitation management following coronary artery bypass surgery.
2. Describe the principles and rehabilitation of a patient with COPD.

II. Write notes on:

(10 x 7 = 70)

1. Cardiac stress test.
2. Strategies to prevent fall in elderly.
3. Cardiac asthma.
4. Exercise in pregnancy.
5. Goals of pulmonary rehabilitation.
6. Deep vein thrombosis.
7. Complications of cervical spondylosis.
8. What are the adaptations with aerobic training?
9. Role of Vitamin D in rehabilitation.
10. List of common causes of osteoporosis.

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

[MD 0522]

MAY 2022

Sub. Code: 2073

M.D. DEGREE EXAMINATION

BRANCH XIX – PHYSICAL MEDICINE AND REHABILITATION

PAPER III – PHYSICAL MEDICINE AND REHABILITATION - II
(CARDIAC AND PULMONARY REHABILITATION, GERIATRICS, O & G)

Q.P. Code: 202073

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on: **(2 x 15 = 30)**

1. Discuss the special considerations and contraindications to exercise during Pregnancy.
2. Define Cardiac Rehabilitation. Discuss the Rehabilitation principles and program following an Acute Anterolateral wall infarction in a 40 years young adult male.

II. Write notes on: **(10 x 7 = 70)**

1. Aerobic exercise prescription in Elderly.
2. Buerger's Disease and management.
3. Emphysema.
4. Principles of Tendon transfer procedure.
5. Sexual dysfunction in a stroke patient.
6. Diabetic Peripheral Neuropathy.
7. Pulmonary function tests.
8. Tone inhibiting Orthosis.
9. Issues of Rehabilitation in Cancer patients and management strategies.
10. Wheel chair components and its prescription for Thoracic SCI Patient.

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

[MD 0723]

**JULY 2023
(MAY 2023 EXAM SESSION)**

Sub. Code: 2073

M.D. DEGREE EXAMINATION

BRANCH XIX – PHYSICAL MEDICINE AND REHABILITATION

**PAPER III – PHYSICAL MEDICINE AND REHABILITATION - II
(CARDIAC AND PULMONARY REHABILITATION, GERIATRICS, O & G)**

Q.P. Code: 202073

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on: **(2 x 15 = 30)**

1. What are the changes in the body with Aging? What are the Rehabilitation strategies to manage falls in elderly?
2. Describe the phases of Cardiac Rehabilitation of a 50-year-old male patient who has had an Acute Myocardial Infarction.

II. Write notes on: **(10 x 7 = 70)**

1. Neurogenic claudication.
2. List the causes and management of Back pain in Pregnancy.
3. What are the adaptation with aerobic training?
4. List out the causes of post stroke shoulder pain and outline their management.
5. Evaluation of Bladder disturbances in the elderly.
6. Role of incentive spirometry in Pulmonary Rehabilitation.
7. Interstitial fibrosis.
8. List the Brunnstorm stages of recovery in stroke.
9. Alzheimer's disease.
10. Deep Vein Thrombosis.
