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MANIPAL UNIVERSITY

MASTER OF PHYSIOTHERAPY (MPT) PART – II DEGREE EXAMINATION – MAY 2013

SUBJECT: PAPER – I: SECTION “A”: GENERAL IN ALL TOPICS IN COMMUNITY PHYSIOTHERAPY
(SPECIALITY AREA: COMMUNITY PHYSIOTHERAPY)

Monday, May 27, 2013

Time: 10:00 – 13:00 Hrs.

Max. Marks: 100

✍ **Answer ALL questions.**

1. Discuss the issues related to patient with head injury in the community. Add a note on management for the same in the community.

(15+10 = 25 marks)

2. Discuss disability under following headings:

2A. Independent living

2B. Principles for prescription of assistive technology

2C. PWD act

(5+10+10 = 25 marks)

3. Explain the management of osteoporosis in community.

(25 marks)

4. Explain the principles of antenatal exercise. Design an exercise program for antenatal phase in community and list out the limitations for the same.

(10+15 = 25 marks)



MANIPAL UNIVERSITY**MASTER OF PHYSIOTHERAPY (MPT) PART – II DEGREE EXAMINATION – MAY 2013****SUBJECT: PAPER – I: SECTION “A”: GENERAL IN ALL TOPICS IN PAEDIATRIC PHYSIOTHERAPY
(SPECIALITY AREA: PAEDIATRIC PHYSIOTHERAPY)**

Monday, May 27, 2013

Time: 10:00 – 13:00 Hrs.

Max. Marks: 100

✍ Answer ALL questions.

1. Discuss anatomy of pelvic floor and abdominal muscles. (25 marks)
2. Discuss tonic labyrinthine and tonic neck reflexes. (25 marks)
3. Discuss physiotherapy management strategies in normal vaginal delivery versus caesarean section. (25 marks)
4. **Short notes:**
 - 4A. Polycystic ovarian disease and physiotherapy.
 - 4B. Sensory stimulation in neonatal intensive care unit.
 - 4C. Postural control development between birth to three months of life.
 - 4D. Embryologic development of cardiopulmonary system.
 - 4E. Hypoxic ischemic encephalopathy.

(5×5 = 25 marks)



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MANIPAL UNIVERSITY

MASTER OF PHYSIOTHERAPY (MPT) PART – II DEGREE EXAMINATION – MAY 2013

**SUBJECT: PAPER - I: SECTION "A": GENERAL IN ALL TOPICS IN
CARDIOPULMONARY SCIENCES**

(SPECIALITY AREA: CARDIO PULMONARY SCIENCES)

Monday, May 27, 2013

Time: 10:00 – 13:00 Hrs.

Max. Marks: 100

✍ **Answer ALL questions.**

1. Write the physiotherapeutic management for the patients with intermittent claudicating pain.
2. Write the physiological effects of various body positions and its therapeutic significance.
3. Write in detail the In – hospital rehabilitation program for conservatively managed myocardial infarction patients.

(25×3 = 75 marks)

4. Write short notes on:

- 4A. Non invasive mechanical ventilation.
- 4B. Ventilatory muscle training.
- 4C. Intermittent positive pressure breathing.
- 4D. Flutter valve.
- 4E. Autogenic drainage.

(5×5 = 25 marks)



Reg. No.

MANIPAL UNIVERSITY

MASTER OF PHYSIOTHERAPY (MPT) PART – II DEGREE EXAMINATION – MAY 2013

SUBJECT: PAPER – I: SECTION “A”: GENERAL IN ALL TOPICS IN NEUROLOGICAL CONDITIONS
(SPECIALITY AREA: NEUROSCIENCES)

Monday, May 27, 2013

Time: 10:00 – 13:00 Hrs.

Max. Marks: 100

Answer All Questions. All questions carry equal marks.

1. Write in detail about theories of motor learning and its clinical applications.
2. Write in detail about the various physiotherapy techniques used to facilitate muscle tone including rationale behind the techniques.
3. Mention the stages of EMG. Write in detail about the different abnormal potentials observed in electromyography.
4. **Short notes:**
 - 4A. Locomotor control.
 - 4B. Motor relearning program.
 - 4C. Evaluation tools for balance assessment.
 - 4D. Supportive devices for hemiplegic shoulder.
 - 4E. H reflex.



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MANIPAL UNIVERSITY


MASTER OF PHYSIOTHERAPY (MPT) PART – II DEGREE EXAMINATION – MAY 2013
SUBJECT: PAPER - I: SECTION “A”: GENERAL IN ALL TOPICS IN ORTHOPAEDIC CONDITIONS
(SPECIALITY AREA: ORTHOPAEDICS)

Monday, May 27, 2013

Time: 10:00 – 13:00 Hrs.

Max. Marks: 100

 Answer ALL questions.

 All questions carry equal marks.

1. Describe clinical presentations and common complications following C3-C4 spinal cord injury and their management.
2. Describe Kaltenborn school of thought.
3. Assessment and management of spastic hand.
4. **Write short notes on:**
 - 4A. Descending pain suppressing system
 - 4B. Joint protection principles in Rheumatoid arthritis
 - 4C. Rationale for taping in ankle sprain
 - 4D. Splinting in median nerve injury
 - 4E. Clinical reasoning in manual therapy



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MANIPAL UNIVERSITY

MASTER OF PHYSIOTHERAPY (MPT) PART – II DEGREE EXAMINATION – MAY 2013

SUBJECT: PAPER – I: SECTION “B”: RECENT ADVANCES IN COMMUNITY PHYSIOTHERAPY
(SPECIALITY AREA: COMMUNITY PHYSIOTHERAPY)

Wednesday, May 29, 2013

Time: 10:00 – 11:30 Hrs.

Max. Marks: 50

✍ Answer ALL questions.

✍ All questions carry equal marks.

1. Elaborate the role of an exercise based intervention program in controlling type II diabetes mellitus.
2. Develop a comprehensive physiotherapy based intervention program for addressing the age related sensory motor issues leading to falls.



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MANIPAL UNIVERSITY



MASTER OF PHYSIOTHERAPY (MPT) PART – II DEGREE EXAMINATION – MAY 2013

SUBJECT: PAPER - I: SECTION "B": RECENT ADVANCES IN ORTHOPAEDIC CONDITIONS
(SPECIALITY AREA: ORTHOPAEDICS)

Wednesday, May 29, 2013

Time: 10:00 – 11:30 Hrs.

Max. Marks: 50

-  **Answer ALL questions.**
 **All questions carry equal marks.**

1. Taping in Patello femoral pain syndromes.
2. Role of testing cervical joint position sense in rehabilitation.



Reg. No.

MANIPAL UNIVERSITY

MASTER OF PHYSIOTHERAPY (MPT) PART – II DEGREE EXAMINATION – MAY 2013

SUBJECT: PAPER – I: SECTION “B”: RECENT ADVANCES IN PAEDIATRIC PHYSIOTHERAPY
(SPECIALITY AREA: PAEDIATRIC PHYSIOTHERAPY)

Wednesday, May 29, 2013

Time: 10:00 – 11:30 Hrs.

Max. Marks: 50

- ✍ **All questions are compulsory.**
- ✍ **All questions carry equal marks.**

1. Electrotherapy modalities in pelvic floor dysfunction.
2. Balance assessment in children.



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MANIPAL UNIVERSITY

MASTER OF PHYSIOTHERAPY (MPT) PART – II DEGREE EXAMINATION – MAY 2013

**SUBJECT: PAPER – I: SECTION “B”: RECENT ADVANCES IN NEUROLOGICAL CONDITIONS
(SPECIALITY AREA: NEUROSCIENCES)**

Wednesday, May 29, 2013

Time: 10:00 – 11:30 Hrs.

Max. Marks: 50

✍ **Answer ALL questions.**

✍ **All questions carry equal marks.**

1. Gait training for chronic stroke patients.
2. Evidence of Physiotherapy in preterm infants.



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MANIPAL UNIVERSITY

MASTER OF PHYSIOTHERAPY (MPT) PART-II DEGREE EXAMINATION – MAY 2013
SUBJECT: PAPER - I: SECTION "B": RECENT ADVANCES IN CARDIOPULMONARY SCIENCES
(SPECIALITY AREA: CARDIOPULMONARY SCIENCES)

Wednesday, May 29, 2013

Time: 10:00 – 11:30 Hrs.

Max. Marks: 50

- ✍ Answer ALL questions.
- ✍ All questions carry equal marks.

1. Discuss the Exercise based rehabilitation for Heart failure.
2. Discuss the effect of different manual hyperinflation circuits for secretion clearance in mechanically ventilated patients.



Reg. No.

MANIPAL UNIVERSITY

MASTER OF PHYSIOTHERAPY (MPT) PART – II DEGREE EXAMINATION – MAY 2013

SUBJECT: PAPER - II: ELECTIVE: PAEDIATRIC PHYSIOTHERAPY
(SPECIALITY AREA: PAEDIATRIC PHYSIOTHERAPY)

Friday, May 31, 2013

Time: 10:00 – 13:00 Hrs.

Max. Marks: 100

Answer ALL questions.

1. Discuss the application of the sensory integration approach for the rehabilitation of the autistic children.
(25 marks)
2. Discuss the rehabilitation of a child with meningomyelocele at the upper lumbar level.
(25 marks)
3. Describe the management strategies and long term outcomes in children with brachial plexus injury.
(25 marks)
4. **Write short notes on:**
 - 4A. Rehabilitation in Haemophilia.
 - 4B. Rehabilitation in Slipped femoral Epiphysis.
 - 4C. Childhood Asthma and its management.
 - 4D. Special Education in children.
 - 4E. Developmental co-ordination disorders.

(5×5 = 25 marks)



MANIPAL UNIVERSITY

MASTER OF PHYSIOTHERAPY (MPT) PART – II DEGREE EXAMINATION – MAY 2013

SUBJECT: PAPER – II: ELECTIVE – SPORTS REHABILITATION
(SPECIALITY AREA: ORTHOPAEDICS)

Friday, May 31, 2013

Time: 10:00 – 13:00 Hrs.

Max. Marks: 100

✍ **Answer ALL questions.**

✍ **All questions carry equal marks.**

1. **Discuss regarding:**

1A. Role of sports equipment in injuries and injury prevention

1B. Plyometric testing and training

2. Discuss in detail regarding the pathomechanics and rationale for management of shoulder impingement syndromes in swimmers.

3. **Discuss regarding:**

3A. Role of sports psychologist

3B. Psychological factors involved in sports performance

4. Discuss the conservative management with rationale in various grades of ACL injuries.



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MANIPAL UNIVERSITY

MASTER OF PHYSIOTHERAPY (MPT) PART – II DEGREE EXAMINATION – MAY 2013

SUBJECT: PAPER - II: ELECTIVE: GERIATRICS
(SPECIALITY AREA: COMMUNITY PHYSIOTHERAPY)

Friday, May 31, 2013

Time: 10:00 – 13:00 Hrs.

Max. Marks: 100

✍ **Answer ALL questions.**

✍ **All questions carry equal marks.**

1. Write in detail about the aging and modern theories of aging.
2. Describe in detail about the components of comprehensive geriatric assessment.
3. Discuss physical activity programs for the older people living in community under the following headings:
 - 3A. Flexibility
 - 3B. Functional Strength
 - 3C. Balance
 - 3D. Endurance
 - 3E. Mobility
4. Discuss in detail about various forms of geriatric rehabilitation services.



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MANIPAL UNIVERSITY

MASTER OF PHYSIOTHERAPY (MPT) PART – II DEGREE EXAMINATION – MAY 2013

SUBJECT: PAPER - II: ELECTIVE – HAND REHABILITATION
(SPECIALITY AREA: ORTHOPAEDICS)

Friday, May 31, 2013

Time: 10:00 – 13:00 Hrs.

Max. Marks: 100

✍ **Answer ALL questions.**

✍ **All questions carry equal marks.**

1. Explain the types, causes, consequences and management of carpal instabilities.
2. Explain the role of scapular and neck posture in development of upper quarter dysfunction.
3. Explain the preoperative assessment, preparation and postoperative rehabilitation for total claw hand reconstruction.
4. **Write short notes:**
 - 4A. Development of hand function in children.
 - 4B. Biomechanical changes in wrist arthrodesis.
 - 4C. Sensory reeducation.
 - 4D. Jebson's tailor test.
 - 4E. Management of spastic hand.



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MANIPAL UNIVERSITY

MASTER OF PHYSIOTHERAPY (MPT) PART – II DEGREE EXAMINATION – MAY 2013

SUBJECT: PAPER - II: ELECTIVE: MANUAL THERAPY
(SPECIALITY AREA: ORTHOPAEDICS)

Friday, May 31, 2013

Time: 10:00 – 13:00 Hrs.

Max. Marks: 100

- ✍ **Answer ALL questions.**
✍ **All questions carry equal marks.**

1. Explain the hypothesis categories in Clinical Reasoning. (25 marks)
2. Explain movement diagram and its application in manual therapy. (25 marks)
3. Explain the different types of Sacroiliac joint dysfunction with specific management principles. (25 marks)
4. **Write short answers:**
 - 4A. Fryette's law of physiological spinal motion
 - 4B. NAG'S and SNAG'S
 - 4C. Cervical Facet lock – Assessment and management strategies
 - 4D. Trigger point
 - 4E. Pilates school of thought(5×5 = 25 marks)



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MANIPAL UNIVERSITY

MASTER OF PHYSIOTHERAPY (MPT) PART – II DEGREE EXAMINATION – MAY 2013

SUBJECT: PAPER - II: ELECTIVE: PAEDIATRIC NEUROLOGY
(SPECIALITY AREA: NEUROSCIENCES)

Friday, May 31, 2013

Time: 10:00 – 13:00 Hrs.

Max. Marks: 100

✍ **Answer all questions.**

✍ **All questions carry equal marks.**

1. Discuss the various measures available to evaluate the gross motor functions of an infant.
2. Describe the management of a 10 year old child with dystonic CP.
3. Describe the principles of play therapy. Explain the setting and techniques of using play therapy in treating a child with proprioceptive disorder.
4. **Write a short note on:**
 - 4A. Complications of Hypoxic ischemic encephalopathy.
 - 4B. Acute stage physiotherapy management of a 6 month old child with head injury.
 - 4C. Equilibrium reactions.
 - 4D. Balance in Down's syndrome.
 - 4E. Kangaroo mother care.



MANIPAL UNIVERSITY**MASTER OF PHYSIOTHERAPY (MPT) PART – II DEGREE EXAMINATION – MAY 2013****SUBJECT: PAPER - II: ELECTIVE: ADULT NEUROLOGY
(SPECIALITY AREA: NEUROSCIENCES)**

Friday, May 31, 2013

Time: 10:00 – 13:00 Hrs.

Max. Marks: 100

✍ Answer all questions.

✍ All questions carry equal marks.

1. Explain the rehabilitation of upperlimb functions following hemiplegia.
2. Discuss the methods of gait analysis. Add a note on gait training strategies in Parkinson disease.
3. Describe the various wheelchair propulsion techniques. Discuss the repetitive strain injuries caused due to wheelchair propulsion in subjects with spinalcord injury.
4. **Write a short note on:**
 - 4A. Evaluation of facial nerve.
 - 4B. Habituation exercises.
 - 4C. Rehabilitation principles in subjects with limbic lobe dysfunction.
 - 4D. Causes and management principles of footdrop.
 - 4E. Uses of tilting table in neurological disorders.



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MANIPAL UNIVERSITY

MASTER OF PHYSIOTHERAPY (MPT) PART – II DEGREE EXAMINATION – MAY 2013

SUBJECT: PAPER - II: ELECTIVE: OCCUPATIONAL HEALTH
(SPECIALITY AREA: COMMUNITY PHYSIOTHERAPY)

Friday, May 31, 2013

Time: 10:00 – 13:00 Hrs.

Max. Marks: 100

✍ Answer ALL questions.

✍ All questions carry equal marks.

1. Explain job placement assessment for a paraplegic who is looking for an office job.
2. Explain the role of administrative and engineering controls in the management of work related musculoskeletal disorders.
3. Write in detail the principles of risk assessment in industries.
4. Explain the components of return to work program.



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MANIPAL UNIVERSITY

MASTER OF PHYSIOTHERAPY (MPT) PART – II DEGREE EXAMINATION – MAY 2013

SUBJECT: PAPER - II: ELECTIVE: WOMEN'S HEALTH PHYSIOTHERAPY
(SPECIALITY AREA: PAEDIATRIC PHYSIOTHERAPY)

Friday, May 31, 2013

Time: 10:00 – 13:00 Hrs.

Max. Marks: 100

 Answer ALL questions.

1. Discuss postoperative complications and physiotherapy management following abdominal hysterectomy in a young woman.

(25 marks)

2. Discuss the role of physiotherapy in the management of pelvic floor dysfunction.

(25 marks)

3. Discuss the principles of exercise testing and prescription in female athletes.

(25 marks)

4A. Discuss the role of exercise prescription in PCOS.

4B. Role of physiotherapy in postnatal period.

(12+13 = 25 marks)



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MANIPAL UNIVERSITY

MASTER OF PHYSIOTHERAPY (MPT) PART – II DEGREE EXAMINATION – MAY 2013

SUBJECT: PAPER – II: ELECTIVE – HEALTH PROMOTION AND FITNESS
(SPECIALITY AREA: CARDIO PULMONARY SCIENCES)

Friday, May 31, 2013

Time: 10:00 – 13:00 Hrs.

Max. Marks: 100

☞ Answer ALL questions.

1. Discuss the effect of exercise training on inflammatory markers in Obese with type II diabetes.

(25 marks)

2. Discuss the effect of exercise training in PCOS.

(25 marks)

3. Discuss diabetic foot and role of physiotherapy in diabetic foot management.

(25 marks)

4. Short note:

4A. Exercise and Lymph edema.

4B. Exercise and fatigue.

(12+13 = 25 marks)



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MANIPAL UNIVERSITY

MASTER OF PHYSIOTHERAPY (MPT) PART – II DEGREE EXAMINATION – MAY 2013

SUBJECT: PAPER – II: ELECTIVE: ICU MANAGEMENT
(SPECIALITY AREA: CARDIO PULMONARY SCIENCES)

Friday, May 31, 2013

Time: 10:00 – 13:00 Hrs.

Max. Marks: 100

All questions are compulsory.

1. Discuss physiotherapy management in patients with inhalation burns managed with mechanical ventilation.
(25 marks)
2. Discuss in detail chest physiotherapy techniques in neonates with prolonged mechanical ventilation.
(25 marks)
3. Discuss physiotherapy implications various ICU monitoring devices.
(25 marks)
- 4A. Discuss complications of positive pressure ventilation.
- 4B. Advantages and disadvantages of manual hyperinflation devices in adults.
(12+13 = 25 marks)



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MANIPAL UNIVERSITY

MASTER OF PHYSIOTHERAPY (MPT) PART – II DEGREE EXAMINATION – MAY 2013

**SUBJECT: PAPER - II: ELECTIVE: CARDIOPULMONARY REHABILITATION
(SPECIALITY AREA: CARDIO PULMONARY SCIENCES)**

Friday, May 31, 2013

Time: 10:00 – 13:00 Hrs.

Max. Marks: 100

Answer ALL questions.

1. What are the types of arterial occlusive diseases? Discuss in detail the assessment and evidence based practice for exercise training in peripheral arterial disease.

(25 marks)

2. Explain in detail the outcome measures for cardiac rehabilitation.

(25 marks)

3. Define pulmonary rehabilitation. Plan a rehabilitation program for a 65 year old male smoker with interstitial lung disease.

(25 marks)

4. Short notes:

4A. Clinical interpretation of Bruce protocol in chronic MI.

4B. Discuss the guidelines for Basic Life Support.

4C. Assessment and risk stratification for Phase 2 cardiac rehabilitation.

4D. Physiotherapy management of hyperventilation syndrome.

4E. Clinical implications of lipid profile.

(5×5 = 25 marks)

