Rajiv Gandhi University of Health Sciences

7Master of Physiotherapy Degree Examination – Nov 2012

[Time: 3 Hours] [Max. Marks: 100]

Paper – 1 – Principal of Physiotherapy Practice & Research Methodology & Biostatistics
(RS & RS 2)

Q.P. CODE : 8111

Your answers should be specific to the questions asked.
Draw neat labeled diagrams wherever necessary. Answer all questions

LONG ESSAY **2 X 20 = 40 Marks**

1. Justify role of objective and subjective patient evaluation systems in physiotherapy practice.

2. Explain objectives of research. Describe various steps in testing of hypothesis.

SHORT ESSAY **6 X 10 = 60 Marks**

3. What is the scope for physiotherapists in various sectors of community rehabilitation?

4. Types of Research

5. Role of computer in research

6. Importance of pilot study in clinical research

7. Ethical rules & guidelines issued by IAP for its members

8. Importance of International Classification of Functioning Disability & Health in documents of patients management

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Rajiv Gandhi University of Health Sciences

Master of Physiotherapy Degree Examination – Nov 2012

[Time: 3 Hours] [Max. Marks: 100]

Paper – II – Biomechanics, Exercise Physiology & Electrophysiology (RS & RS 2)

Q.P. CODE : 8112

Your answers should be specific to the questions asked.
Draw neat labeled diagrams wherever necessary. Answer all questions

LONG ESSAY **2 X 20 = 40 Marks**

1. Discuss in detail about pain, its types, physiology of pain transmission and theories of pain modulation.
2. Enumerate in detail the types and pathomechanics of scoliosis.

SHORT ESSAY **6 X 10 = 60 Marks**

3. Body composition
4. Consideration of sex in exercise and training
5. Ergonomics for a software professional with neck pain
6. Effects of electrical stimulation
7. Analysis of posture in frontal plane
8. Exercise prescription for Diabetics.

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Rajiv Gandhi University of Health Sciences

Master of Physiotherapy Degree Examination – Nov 2012

[Time: 3 Hours] [Max. Marks: 100]

Paper – III – Physical & Functional Diagnosis
(RS & RS 2)

Q.P. CODE : 8113

Your answers should be specific to the questions asked.
Draw neat labeled diagrams wherever necessary. Answer all questions

LONG ESSAY **2 X 20 = 40 Marks**

1. Write an essay on assessment of physical fitness of an Individual
2. Describe the technique for nerve conduction study of right median nerve

SHORT ESSAY **6 X 10 = 60 Marks**

3. Bicycle Ergometry
4. Technique of pulmonary function test
5. Interpretation of Arterial blood gas(ABG) analysis
6. Quantitative analysis of gait
7. Clinical examination in movements dysfunctions
8. Somatosensory evoked potential(SSEP)

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8114_2012_2_S254

Rajiv Gandhi University of Health Sciences

Master of Physiotherapy Part II Degree Examination – Nov 2012

[Time: 3 Hours] [Max. Marks: 100]

PHYSIOTHERAPEUTICS

Q.P. CODE: 8114

Your answers should be specific to the questions asked.
Draw neat labeled diagrams wherever necessary. Answer all questions

LONG ESSAY **2 X 20 = 40 Marks**

1. Explain in detail the exercise testing and exercise prescription in a hypertensive patient
2. Explain any two motor control theories and its significance in physiotherapy management.

SHORT ESSAY **6 X 10 = 60 Marks**

3. General guidelines for cardiac and pulmonary rehabilitation.
4. Explain the role of progressive resisted exercise in musculoskeletal rehabilitation
5. Explain any one manual therapy school of thought.
6. Briefly explain cardiopulmonary resuscitation.
7. Various physiotherapeutic strategies used for spasticity reduction.
8. Discuss the significance of yoga in physiotherapy

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Rajiv Gandhi University of Health Sciences

Master of Physiotherapy Part II Degree Examination – Nov 2012

[Time: 3 Hours] [Max. Marks: 100]

MUSCULOSKELETAL DISORDER AND SPORTS

Q.P. CODE: 8115

Your answers should be specific to the questions asked.
Draw neat labeled diagrams wherever necessary. Answer all questions

LONG ESSAY **2 X 20 = 40 Marks**

1. A basketball player complaining of anterior knee pain of gradual onset. What are the differential diagnoses? Make a provisional diagnosis by reasoning and plan an assessment and rehabilitation of the same
2. Explain the effects of postural and strength exercises for non specific work related upper limb disorders – recent advance

SHORT ESSAY **6 X 10 = 60 Marks**

3. Upper and lower crossed syndromes and its management
4. Explain about the age and sex determination procedures done in athletes
5. Write about the various models for diagnosis and classification of chronic low back disorders
6. Gait deviations causes in transtibial amputee with a prosthetic fitting and its corrections
7. Energy conservation and joint protection techniques for a rheumatoid patient
8. Causes for failed back syndrome and its physiotherapeutic management

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Rajiv Gandhi University of Health Sciences

Master of Physiotherapy Degree Examination – May 2012

[Time: 3 Hours] [Max. Marks: 100]

Paper – 1 – Principal of Physiotherapy Practice & Research Methodology & Biostatistics
(RS & RS 2)

Q.P. CODE : 8111

Your answers should be specific to the questions asked.
Draw neat labeled diagrams wherever necessary. Answer all questions

LONG ESSAY **2 X 20 = 40 Marks**

1. Discuss the key steps in the patient client management process for clinical decision making

2. Explain in detail about different sampling technique in physiotherapy research.

SHORT ESSAY **6 X 10 = 60 Marks**

3. What are the factors affecting communication. How can you make an effective health communication?
4. Explain Performance Oriented Assessment of Mobility I – POMA – I (Tinnetti) for balance and gait in examination of motor functions.
5. Explain the legal issues that can affect physiotherapy care.
6. Correlation and Regression.
7. Pilot study
8. Processing of data

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8112_2012_1_S157

Rajiv Gandhi University of Health Sciences

Master of Physiotherapy Degree Examination – May 2012

[Time: 3 Hours] [Max. Marks: 100]

Paper – II – Biomechanics, Exercise Physiology & Electrophysiology (RS & RS 2)

Q.P. CODE : 8112

Your answers should be specific to the questions asked.
Draw neat labeled diagrams wherever necessary. Answer all questions

LONG ESSAY **2 X 20 = 40 Marks**

1. Describe the anatomy and physiology of peripheral nerve and Neuromuscular junction.
2. Normal response to aerobic exercise with respect to energy transfer oxygen intake and oxygen debt.

SHORT ESSAY **6 X 10 = 60 Marks**

3. Biomechanics of Skeletal tissue.
4. Instrumentation for Neuromuscular Electrical Stimulation.
5. Change in body mechanics in limping
6. Exercise prescription for an obese diabetic patient.
7. Response of Muscle Plasticity in Electrical Stimulation.
8. Material properties of soft tissues.

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Rajiv Gandhi University of Health Sciences

Master of Physiotherapy Degree Examination – May 2012

[Time: 3 Hours] [Max. Marks: 100]

Paper – III – Physical & Functional Diagnosis
(RS & RS 2)

Q.P. CODE : 8113

Your answers should be specific to the questions asked.
Draw neat labeled diagrams wherever necessary. Answer all questions

LONG ESSAY **2 X 20 = 40 Marks**

1. What are the factors affecting balance? Explain any two tests for assessment of balance.

2. Describe Concepts of Impairment, Disability & Handicap. Explain the Relevance to physiotherapy.

SHORT ESSAY **6 X 10 = 60 Marks**

3. Exercise Tolerance Testing

4. What is EMG biofeedback? Explain its use in physiotherapy.
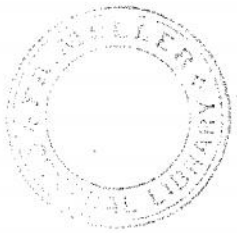
5. Determinants of human gait.

6. Explain concepts of Development Screening & Assessment. Write importance of the same.

7. Anthropometric measurements

8. Upper limb tension testing and its interpretation

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8114_2012_1_S253

Rajiv Gandhi University of Health Sciences

Master of Physiotherapy Part II Degree Examination – May 2012

[Time: 3 Hours] [Max. Marks: 100]

PHYSIOTHERAPEUTICS

Q.P. CODE: 8114

Your answers should be specific to the questions asked.
Draw neat labeled diagrams wherever necessary. Answer all questions

LONG ESSAY **2 X 20 = 40 Marks**

1. Define pain. Explain various levels of pain gate mechanism.

2. Write about the effects of cancer on quality of life and exercise prescription guidelines for a radical mastectomy undergone client

SHORT ESSAY **6 X 10 = 60 Marks**

3. Brunnstrom's approach in a hemiplegic patient

4. Write in detail about different types of ventilators

5. Physiology adaptation of cardiac system through aerobic and anaerobic exercises

6. Principles and technique of electrical stimulation for bells palsy.

7. Explain the red and yellow flags in the manual therapy treatment

8. Role of physiotherapy following a C – section procedure

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Rajiv Gandhi University of Health Sciences

Master of Physiotherapy Part II Degree Examination – May 2012

[Time: 3 Hours] [Max. Marks: 100]

MUSCULOSKELETAL DISORDER AND SPORTS

Q.P. CODE: 8115

Your answers should be specific to the questions asked.
Draw neat labeled diagrams wherever necessary. Answer all questions

LONG ESSAY **2 X 20 = 40 Marks**

1. Discuss pathomechanics and management for deformities of wrist and hand due to rheumatoid arthritis
2. Write an essay on neurodynamics

SHORT ESSAY **6 X 10 = 60 Marks**

3. Role of orthotics in lower motor neuron lesions
4. Principles of training in sports physiotherapy
5. Muscle energy techniques
6. F – waves studies
7. Physical disability evaluation methods
8. Rationale for physiotherapy after total hip replacement arthroplasty

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8116_2012_1_S254

Rajiv Gandhi University of Health Sciences

Master of Physiotherapy part II Degree Examination – May 2012

[Time: 3 Hours] [Max. Marks: 100]

Neurological and Psychosomatic Disorders

Q.P. CODE: 8116

Your answers should be specific to the questions asked.
Draw neat labeled diagrams wherever necessary. Answer all questions

LONG ESSAY **2 X 20 = 40 Marks**

1. Write about the Pathophysiology of Parkinson's disease. Explain the clinical features and Exercise prescription for stage I Parkinson disease patient
2. Write about the recent advances in the orthotic management of gait in stroke

SHORT ESSAY **6 X 10 = 60 Marks**

3. Write in detail about the Autonomic Nervous System testing
4. Role of Aids and appliances in neurological disorders.
5. Write about vocational rehabilitation in 24 year old patient with tranverse myelitis at level of D4-5
6. Write about Dysphagia in stroke and its management
7. Explain the role of EMG, biofeedback in neurological rehabilitation
8. Role of cognitive rehabilitation for a head injured patient

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8117_2012_1_S273

Rajiv Gandhi University of Health Sciences

Master of Physiotherapy Part II Degree Examination – May 2012

[Time: 3 Hours] [Max. Marks: 100]

CARDIO RESPIRATORY DISORDERS

Q.P. CODE: 8117

Your answers should be specific to the questions asked.
Draw neat labeled diagrams wherever necessary. Answer all questions

LONG ESSAY **2 X 20 = 40 Marks**

1. A patient known case of COPD/DM/CAD had sudden onset of acute respiratory failure with ABG value of pH 7.29, PCO_2 60 mmHg, paO_2 56mm Hg, HCO_3:20mmol SpO_2:82% was intubated and with ventilator settings of CMV mode PEEP12cm H_2O FiO_2:60%. Write in detail specific ICU evaluation and management for this patient. Add a note on weaning form ventilator
2. Recent advances on effects of pulmonary rehabilitation on activity levels in patients with COPD

SHORT ESSAY **6 X 10 = 60 Marks**

3. Risk factors in atherogenesis
4. Rate pressure produce
5. Modified naughton protocol
6. Nôn invasive ventilation
7. VO2 max analysis
8. Apache II

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Rajiv Gandhi University of Health Sciences

Master of Physiotherapy Part II Degree Examination – May 2012

[Time: 3 Hours] [Max. Marks: 100]

COMMUNITY REHABILITATION

Q.P. CODE: 8118

Your answers should be specific to the questions asked.
Draw neat labeled diagrams wherever necessary. Answer all questions

LONG ESSAY **2 X 20 = 40 Marks**

1. Design an aerobic fitness program for a non – athletic 23 year old college student having poly cystic ovarian disease and obesity. Outline the principle, precaution, factors you would consider while designing the exercise program in the community set up
2. Recent advance on quality of life in the community dwelling disabled population

SHORT ESSAY **6 X 10 = 60 Marks**

3. Explain the importance of person with disability act in the rehabilitation of disabled
4. Discuss the evaluation and treatment plan for 55 year old female with bilateral osteoarthritis of knee joint her at the community set – up
5. Discuss the role of ergonomic application in pushing and pulling
6. Barrier modification for 10 year old child with diplegic cerebral palsy.
7. Explain the principle involved in designing computer work station
8. What factor would you consider in the clinical decision making in prescribing mobility aids in elderly

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Rajiv Gandhi University of Health Sciences

Master of Physiotherapy part II Degree Examination – May 2012

[Time: 3 Hours] [Max. Marks: 100]

Pediatrics
Q.P. CODE: 8119

Your answers should be specific to the questions asked.
Draw neat labeled diagrams wherever necessary. Answer all questions

LONG ESSAY **2 X 20 = 40 Marks**

1. Write about Spina bifida, its causes and clinical features. Explain in detail about post operative PT management for spina bifida in 8 years old patient giving importance to locomotion
2. Write about recent advances in improving mobility in children with cerebral palsy

SHORT ESSAY **6 X 10 = 60 Marks**

3. Explain the role of Group therapy in children with physical disabilities
4. Explain the principles of sensory integration in management of child with development
5. Detail PT assessment of patient in pediatric intensive care unit following severe bronchospasm
6. Explain the clinical features of Athetoid CP and its PT management
7. Write about spinal muscular atrophy and its types and PT management of acute childhood spinal muscular atrophy
8. Write about PT assessment and intervention for asthma in preschool child

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