Rajiv Gandhi University of Health Sciences

Master of Physiotherapy Degree Examination – April/May 2016

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

Paper – 1 – Principles 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. What are the ethical theories and principles for physiotherapy practice? Discuss the aims and objectives and the ethical rules based on the memorandum of Indian Association of Physiotherapists.
2. Discuss the steps for research process in physiotherapy practice.

SHORT ESSAY 6 X 10 = 60 Marks

3. Discuss the applications of International Classification of Functioning, Disability and Health (ICF) to physiotherapy.
4. Describe the procedure for monitoring temperature, pulse, respiration and blood pressure.
5. What are the factors affecting communication. How can you make an effective health communication?
6. Sampling and non sampling errors.
7. Hypothesis testing
8. Probability and its uses.

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Rajiv Gandhi University of Health Sciences

Master of Physiotherapy Degree Examination – April/May 2016

[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 Kinetic and Kinematics of Gait.

2. Explain the various body systems that undergo adaptation with exercise. Explain the changes that occur in each system with aerobic exercise programe.

SHORT ESSAY 6 X 10 = 60 Marks

3. Biomechanics of hand function.

4. Environmental influence on performance.

5. Neuromuscular Junction

6. Describe Muscle Plasticity

7. Instrumentation of NMES

8. Normal and applied Biomechanics of Ankle.

Rajiv Gandhi University of Health Sciences

Master of Physiotherapy Degree Examination – APRIL/MAY 2016

[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. Discuss in detail about Pulmonary Function Test (PFT) in Restrictive and Obstructive lung diseases
2. Write about motor control assessment and its importance in rehabilitation.

SHORT ESSAY 6 X 10 = 60 Marks

3. Posture and gait analysis methods in geriatric rehabilitation
4. Methods of fatigue assessment
5. Strength duration curve – Merits & demerits
6. Developmental screening methods
7. Methods of imaging techniques in musculo-skeletal disorder
8. Methods of muscle strength, endurance and skill assessment in a 400 meter relay athlete

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Rajiv Gandhi University of Health Sciences

Master of Physiotherapy – Part II Degree Examination – April/May 2016

[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. Discuss the various treatment approaches practiced in neurological rehabilitation.
2. Describe the various theories of pain. Explain the rationale of various physiotherapy modalities in pain management.

SHORT ESSAY 6 X 10 = 60 Marks

3. Energy consumption calculation and its significance in cardiac rehabilitation
4. Methods and benefits of kriyas in yoga
5. Classify artificial respirators. Add a note on indications and precautions.
6. Physiotherapy management of psoriasis
7. Assessment and management of Diastasis recti
8. Endurance exercises and its importance

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Rajiv Gandhi University of Health Sciences

Master of Physiotherapy Degree Examination – April/May 2016

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

Musculoskeletal & SPORTS PHYSIOTHERAPY
(RS–3 & RS–4)

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 in detail Pathomechnics of Foot deformities.
2. Role of Manual therapy in management of Rotator cuff Tendinopathy – Recent advances

SHORT ESSAY 6 X 10 = 60 Marks

3. TKR Rehabilitation protocol
4. Muscle energy techniques
5. Biomechanics of internal fixation
6. Plyometrics
7. Phases of Throwing
8. Rehab following putti platt Surgery

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Rajiv Gandhi University of Health Sciences

Master of Physiotherapy Degree Examination – April/May 2016

[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. Define Multiple sclerosis. Explain assessment and management of fatigue and gait in MS with duration of 2 years in a male patient of 52 years.

2. Recent Advances on the role of cognitive behavioral therapy in traumatic brain injury.

SHORT ESSAY 6 X 10 = 60 Marks

3. Mention the functional scales applied in neuro rehabilitation.
4. Explain PT management of flaccidity in acute stroke.
5. Explain Assessment & PT management of any 3 psychosomatic disorders.
6. Describe management of gait disorder in cerebellar dysfunction.
7. Explain the use of EMG biofeedback in neuro rehabilitation.
8. Explain the PT management of syringomyelia at T3-T5 level.

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Rajiv Gandhi University of Health Sciences

Master of Physiotherapy Part II Degree Examination – April/May 2016

[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. Describe exercise testing under indications, equipments, protocols, contraindications, safety, termination criteria, and interpretation of results and prognostic criteria for the same.
2. Recent advances on Beneficial Effects of Exercise Training on Early Recovery in Patients With Chronic Heart Failure.

SHORT ESSAY 6 X 10 = 60 Marks

3. Neurophysiological Facilitation of Respiration
4. Describe the physiotherapy techniques in infants and children. Add a note on Precautions during chest manipulation, Positioning and manual hyperinflation in children.
5. Pulmonary function testing-procedure and Interpretation
6. Describe in detail Physiotherapy methods to decrease the work of breathing.
7. Pulmonary Rehabilitation on activity levels in patients with Chronic Bronchitis.
8. Describe phase I Cardiac Rehabilitation with emphasis on the Program goals, Evaluation Exercise prescription and patient Education

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Rajiv Gandhi University of Health Sciences

Master of Physiotherapy Part II Degree Examination – April/May 2016 [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. Describe the components of an ergonomic evaluation. Plan an ergonomic evaluation protocol for a company of a 100 employees working in a textile shop.
2. What are the risk factors for falls in the elderly? Elaborate with evidence.

SHORT ESSAY 6 X 10 = 60 Marks

3. Describe the CBR matrix and its relevance to physiotherapy
4. Discuss goal setting and management of knee joint arthritis as a community programme.
5. Discuss the role of education in community based rehabilitation
6. What are barriers? What might be barriers to inclusiveness our society
7. What are the goal setting priorities in a person with Parkinson disease with freezing episodes?
8. What is the role of early intervention in childhood orthopaedic disorders? Elucidate with and example.

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Rajiv Gandhi University of Health Sciences

Master of Physiotherapy – Part II Degree Examination – April/May 2016

[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. Discuss the normal gross and fine motor development from birth to 6 months of age. Add a note on soft neurological signs in infancy.
2. Recent advances on Aerobic training in cerebral palsy children

SHORT ESSAY 6 X 10 = 60 Marks

3. Physiotherapy assessment and management of a one-year old child with Down's syndrome
4. Gross motor function measure scale
5. Sitting and standing devices for children with cerebral palsy
6. Discuss different theories of motor development.
7. Physiotherapy modalities in children – uses and precautions
8. Discuss clinical features of ADHD and autism.

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Rajiv Gandhi University of Health Sciences

Master of Physiotherapy Degree Examination – OCTOBER 2016

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

Paper – 1 – Principles 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. Define the term “Outcome Measure” Enumerate the available measures used to measure balance, describe any ONE in detail giving all its psychometric properties.
2. Classify the tests used in Data Analysis. Explain each test of significance in detail

SHORT ESSAY 6 X 10 = 60 Marks

3. Write on the declaration of Ethical principles of world Confederation of Physiotherapy (WCPT).
4. Type of communication used in patient care and their importance.
5. List the domains of International Classification of Function (ICF) and explain any one in detail
6. Informed Consent and its importance.
7. Types of research designs
8. Write a note on the various styles of progress notes used in documentation

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Rajiv Gandhi University of Health Sciences

Master of Physiotherapy Degree Examination – OCTOBER 2016

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

Paper – II – Biomechanics, Exercise Physiology & Electrophysiology

(Revised Scheme)

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. Explain the concept of health and fitness and explain the different methods to assess sports specific fitness.
2. Discuss in detail electrophysiological assessment devices.

SHORT ESSAY 6 X 10 = 60 Marks

3. Exercise prescription for Type II diabetes
4. Discuss the muscle work in Hook grip.
5. H – reflex and F wave
6. Muscle plasticity
7. Considerations of age and sex in exercise and training
8. Neuromuscular junction

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Rajiv Gandhi University of Health Sciences

Master of Physiotherapy Degree Examination – OCTOBER 2016

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

Paper – III – Physical & Functional Diagnosis

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. Discuss various methods of management of pain with mechanism.
2. Define EMG and explain its role in rehabilitation.

SHORT ESSAY 6 X 10 = 60 Marks

3. Quantitative analysis of gait
4. F – wave
5. Skill related fitness components and its assessments.
6. Exercise ECG testing
7. Disability evaluation of a humeral fracture client in community setting
8. Body composition

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Rajiv Gandhi University of Health Sciences

Master of Physiotherapy – Part II Degree Examination – OCTOBER 2016

[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 mobilization. Write down the indications and contraindications of mobilization. What are the Maitland grades of mobilization?
2. What are Asanas? Describe the scope and limitations of asanas. What are the safety measures and precautions to be followed while performing asanas?

SHORT ESSAY 6 X 10 = 60 Marks

3. Theories of motor learning and its implications
4. Exercise prescription for a lady with stress incontinence
5. Elaborate the role of various physiotherapy modalities on skin conditions.
6. Importance of physiotherapy in cancer rehabilitation
7. Write about method of monitoring dosages in electrotherapy techniques
8. What is MET? What are the different methods used to measure energy expenditure?

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Rajiv Gandhi University of Health Sciences

Master of Physiotherapy Degree Examination – OCTOBER 2016

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

Musculoskeletal & SPORTS PHYSIOTHERAPY

(RS–3 & RS–4)

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. Explain the instrumental (kinetic and kinematic) analysis of cycling.
2. Explain the recent advance studies for assessment and management of 50 years male who has undergone ACL reconstruction surgery.

SHORT ESSAY 6 X 10 = 60 Marks

3. Explain the traditional Pilates methods for 36 year old women following hysterectomy.
4. Enumerate the benefits of sports psychological training.
5. Explain in detail cardio-respiratory fitness tests.
6. Movement analysis of hip joint during gait cycle
7. Explain the principles and concepts of Neural mobilization.
8. Explain various prosthesis used in THR and describe its management.

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Rajiv Gandhi University of Health Sciences

Master of Physiotherapy Degree Examination – OCTOBER 2016

[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. Describe the various facilitatory and inhibitory techniques with rationale.
2. Recent advances on effect of mirror therapy integrating functional electrical stimulation on gait in stroke patients

SHORT ESSAY 6 X 10 = 60 Marks

3. Explain the clinical features of Ataxic Cerebral Palsy and its Physiotherapy management.
4. Explain physiotherapy management following Parkinson's diseases. Add a note on Hoehn and Yahr scale
5. Explain in detail about vestibular rehabilitation.
6. Principles for prescriptions of walking aids in neurologically disabled community dwellers
7. Visual evoked potential.
8. Write about perceptual disorders – testing and treatment

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Rajiv Gandhi University of Health Sciences

Master of Physiotherapy Part II Degree Examination – OCTOBER 2016

[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. Discuss the acute physiotherapy management for a patient with head injury
2. Recent advances on the use of PEP device in patient with COPD

SHORT ESSAY 6 X 10 = 60 Marks

3. Describe the mechanism and etiology of respiratory muscle fatigue. Draw a conceptual frame work for respiratory muscle training
4. What are the specific abnormal breathing patterns? Discuss the indications, goals and procedures for breathing exercises
5. Discuss the musculoskeletal complications and physiotherapy management after CABG
6. Significance of serum cardiac enzyme markers in rehabilitation
7. Describe the overall effects of exercise in diabetes
8. Physiotherapy management in chronic arterial disorders

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Rajiv Gandhi University of Health Sciences

Master of Physiotherapy Degree Examination – OCTOBER 2016

[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. Describe the importance of gross motor activity in child of 2 year with development delay. How will you train the same in the community set up

2. Recent advances on effectiveness of balance training on performance in elderly

SHORT ESSAY 6 X 10 = 60 Marks

3. Importance of early intervention

4. District rehabilitation centres

5. Discuss the musculoskeletal changes in pregnant lady and its implications on Locomotion

6. Home exercise program for below knee amputee

7. Describe functional capacity evaluation. Critique existing FCEs

8. Home program for diabetic foot

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