Rajiv Gandhi University of Health Sciences

Master of Physiotherapy Degree Examination – APRIL-2018

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

Paper – 1 – Principles of Physiotherapy Practice & Research Methodology & Biostatistics

(Revised Scheme)

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. Explain the various factors for selection of standardized tests and scales used in assessment and interpretation of pain.
2. Explain in detail Analysis of Variance (ANOVA) and co-variance.

SHORT ESSAY 6 X 10 = 60 Marks

3. Explain in detail scope of Physiotherapy in Industry.
4. Discuss the application of International Classification of Functioning, Disability and Health (ICF) in rehabilitation assessment.
5. Format of reporting research work in Scientific Journals
6. Descriptive statistics
7. Importance of History taking, assessment and patient communication in planning for a physiotherapy intervention
8. Discuss the ethical aspects in research.

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Master of Physiotherapy Degree Examination – APRIL-2018

[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. Explain glucose & fat metabolism during exercise and its relevance in exercise prescription for obesity
2. What is fatigue? Explain the environmental factors related to management of fatigue

SHORT ESSAY 6 X 10 = 60 Marks

3. Explain in detail properties of inter – vertebral disc & related mechanics
4. Importance of strength Duration Curve in physiotherapy
5. Importance of nutrition & caloric balance in health
6. Ergonomic care for a physiotherapist working in pediatric rehabilitation unit.
7. Write about physiological properties of muscle tissue
8. Name various types of currents used for electrical stimulation in physiotherapy. Explain their physiological & therapeutic effects

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Master of Physiotherapy Degree Examination – APRIL 2018

[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 the steps involved in musculoskeletal examination process.
2. Role of nerve conduction studies in Neurological rehabilitation

SHORT ESSAY 6 X 10 = 60 Marks

3. Exercise ECG testing
4. Developmental screening
5. Clinical examination of movement dysfunction
6. Disability evaluation of lower limb amputee
7. Psychometric properties of Berg balance scale
8. Skinfold determination

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Master of Physiotherapy Degree Examination – APRIL-2018

[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 on the classification of asanas, its scope and limitations. Add a note on safety measures to be followed during performing asanas.
2. Mention about various exercise therapy techniques. Justify your application of these techniques on various cases.

SHORT ESSAY 6 X 10 = 60 Marks

3. Exercise planning and prescription
4. Role of physiotherapy in common skin conditions
5. Principles of neurological approach
6. Meaning of Bandha and Mudra and its types
7. Effect of isometric, aerobic and anaerobic exercises on cardiac function
8. Facilitation and Inhibition techniques

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Master of Physiotherapy Degree Examination – APRIL-2018

[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 in detail the mechanics and pathomechanics of deformities of rheumatoid hand.
2. Effects of functional stabilization training on pain and function in subjects with patellofemoral pain syndrome – Recent advances

SHORT ESSAY 6 X 10 = 60 Marks

3. Cryokinetics and its clinical applications
4. Tendon healing and its implications in Rehabilitation
5. Costal sprains
6. Explain the role of core stabilization in orthopedic rehabilitation
7. Principles of injury prevention
8. Justify the role of ultrasound in Fracture healing

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Master of Physiotherapy Degree Examination – APRIL-2018

[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. Discuss the difference between the two hemispheres of the brain and their significances related to physiotherapy.
2. Write about recent advances in the management of BPPV.

SHORT ESSAY 6 X 10 = 60 Marks

3. Basal ganglia disorders and PT management
4. Motor learning theories and its relevance to physiotherapy
5. MND and its PT management
6. Role of biofeedback in stroke
7. Role of aids and appliances in neurological disorders
8. Mention the functional scales applied in neuro rehabilitation.

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Master of Physiotherapy Degree Examination – APRIL-2018

[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. Write the cardiac rehabilitation for a patient with MI.
2. Write the exercise planning and prescription for obesity. Add a note on recent advances in treating obese individuals.

SHORT ESSAY 6 X 10 = 60 Marks

3. Write the physiotherapy techniques to clear secretions.
4. Effects of positioning on lung volumes and capacities
5. Physiotherapy management for heart failure
6. Explain different methods of inspiratory muscle training.
7. Oxygen therapy
8. Weaning of ventilation

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Master of Physiotherapy Part II Degree Examination – APRIL-2018

[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. What is the role of the NIOSH lifting equation in indentifying risk? What is the biomechanics of injury during manual material handling?
2. Discuss recent trends in WHO Action plan for disability and its importance for physiotherapists

SHORT ESSAY 6 X 10 = 60 Marks

3. Discuss the steps involved initiating and managing a community elderly fall prevention programme.
4. Elaborate the role of NGO in inclusive education.
5. Discuss the relevance of ICF Core sets in goal setting for a patient with stroke.
6. Discuss strengths and limitations of outreach clinics as a method of CBR.
7. Discuss the role of a physiotherapist in a school
8. What are the steps involved in performing a home evaluation as a part rehabilitation of a patient with traumatic brain injury in RLA stage Vll Error! Objects cannot be created from editing field codes.

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Rajiv Gandhi University of Health Sciences

Master of Physiotherapy – Part II Degree Examination – APRIL-2018

[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. Explain the clinical features of Duchenne muscular dystrophy and its management for an 8 years old school going child.
2. Effect of tread mill training and supramalleolar orthosis use in motor skill development for infants with Down's syndrome.

SHORT ESSAY 6 X 10 = 60 Marks

3. What are the developmental screening scales commonly used and write about any two of them in detail.
4. Explain cardio- pulmonary disorders in developing children.
5. Define sensory integration and describe the treatment techniques.
6. Define and classify cerebral palsy. Write the neuro developmental treatment principles for athetoid type.
7. Explain how you make pediatric therapy equipment in rural set up utilizing the local resources.
8. Describe asymmetrical, symmetrical tonic neck reflex and tonic labyrinthine reflexes and explain the process of their integration.

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Master of Physiotherapy Degree Examination – APRIL-2018

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

Principles of Physiotherapy Practice, Research Methodology and Biostatistics, Exercise Physiology, electrophysiology

Q.P. CODE: 8121

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 documentation procedure adapted in terms of assessment and management in rehabilitation based on International Classification of Functional Disability and health (ICF).
2. Explain the various properties of measurement such as reliability, validity, responsiveness, and MCID.

SHORT ESSAY 6 X 10 = 60 Marks

3. Explain the different methods of Fatigue assessment.
4. Discuss the ethical principles for a physiotherapist in clinical practice.
5. Explain electrical stimulations and its effects on various systems.
6. Discuss the Type I and type II bias.
7. Explain the instrumentation for neuromuscular electrical stimulation.
8. Explain the adaptations of various systems to endurance training.

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Master of Physiotherapy Degree Examination – APRIL-2018

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

Physical and Functional Diagnosis

Q.P. CODE: 8122

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 about NMES and its importance in Physiotherapy.
2. Imaging techniques used in Musculoskeletal disorders

SHORT ESSAY 6 X 10 = 60 Marks

3. Explain in brief about developmental screening.
4. PFT in COPD with interpretation
5. Evaluation of disability of a spinal cord injury
6. Biofeedback
7. Berg balance scale and its psychometric properties
8. Skinfold measurement with interpretation

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Master of Physiotherapy Degree Examination – APRIL 2018

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

Physiotherapeutics

Q.P. CODE: 8123

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 principles, approaches and management of pediatric patient.
2. Describe in detail about prenatal and postnatal physiotherapy management.

SHORT ESSAY 6 X 10 = 60 Marks

3. Discuss the significance of yoga in physiotherapy.
4. Explain any one manual therapy school of thought.
5. Explain briefly about theories of motor learning.
6. Exercise prescription in diabetic patient
7. Explain briefly about pain modulation.
8. Burns rehabilitation protocol

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Master of Physiotherapy Degree Examination – APRIL-2018

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

Musculoskeletal Disorders and Sports

Q.P. CODE: 8124

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 recent advances in management of Plantar Fasciitis.
2. Discuss the role of PT management of Pain in complex regional pain syndrome – justify.

SHORT ESSAY 6 X 10 = 60 Marks

3. Role of Neuromuscular training in ACL injuries
4. Evaluation of Disability of supra condylar fracture of humerus
5. Psychometric properties of functional outcomes in osteoarthritis of knee
6. Orthopedic implants and its implications in Musculoskeletal Rehabilitation
7. Manual therapy techniques to treat SI Joint dysfunction
8. Pathomechanics of Trendelenberg Gait

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Master of Physiotherapy Degree Examination – APRIL-2018

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

Neurological and Psychosomatic Disorders

Q.P. CODE: 8125

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. Neurophysiology of posture and balance
2. Recent advances in improving gait after Stroke

SHORT ESSAY 6 X 10 = 60 Marks

3. ASIA Scale
4. Management of Dystonia
5. Biofeedback training
6. Neurogenic bladder and its management
7. H-Reflex
8. Evidence based practice in Bell’s Palsy

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Rajiv Gandhi University of Health Sciences

Master of Physiotherapy Degree Examination – APRIL-2018

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

Cardio Respiratory Disorders

Q.P. CODE: 8126

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 the assessment and management for a patient with Bronchial asthma.
2. Write the physiotherapy management for an ICU patient who is non intubated and unconscious.

SHORT ESSAY 6 X 10 = 60 Marks

3. Write the physiotherapy techniques to reduce work of breathing.
4. Write the importance of positioning in respiratory physiotherapy.
5. Write the physiotherapy management for hysterectomy.
6. Explain in detail about energy conservation techniques.
7. Hyperbaric oxygen therapy
8. IPPB

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Master of Physiotherapy Degree Examination – APRIL-2018

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

Community Physiotherapy

Q.P. CODE: 8127

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 role of physiotherapy in the lifelong care of a person with traumatic spinal cord injury. Include the International Classification of Functioning Disability and Health (ICF) framework and Community Based Rehabilitation (CBR) matrix to elucidate your answer.
2. Describe the recent advances in the management of osteoarthritis (OA) knee.

SHORT ESSAY 6 X 10 = 60 Marks

3. Discuss the role of primary health centre in childhood health promotion.
4. Guidelines to develop a home program for a person with bilateral transfemoral amputation
5. Education of a person with Guillain Barre Syndrome (GBS) with emphasis on safety and physical activity
6. What is the role of work hardening program in a person with a back injury sustained at work?
7. Critique the role of Accredited Social Health Activists (ASHA) workers in disability screening
8. Elucidate the role of physiotherapy in fall prevention in the elderly

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Master of Physiotherapy Degree Examination – APRIL-2018

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

Paediatric

Q.P. CODE: 8128

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 development of locomotion in detail.
2. Explain the recent advances in efficiency of physiotherapy on children with asthma

SHORT ESSAY 6 X 10 = 60 Marks

3. Role of physiotherapist neonatal ICU
4. Biomechanics of Child Chest
5. Sensory Integration
6. Complications of ventilator support
7. High risk babies and their interventions
8. Congenital Torticollis and their physiotherapy management

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