

Question Paper

Exam Date & Time: 10-Jun-2019 (02:00 PM - 05:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

SECOND SEMESTER MPT (PART - I) DEGREE EXAMINATION - JUNE 2019
SUBJECT: FOUNDATIONS OF SPECIALTY: NEUROSCIENCES (MPT 602.2)
(2018 SCHEME)

Monday, June 10, 2019 (14.00 - 17.00)

Marks: 100

Duration: 180 mins.

Answer all the questions.

- 1) Explain the principles of motor control and motor learning and its application in patients with stroke. (25)
(8+8+9 = 25 marks)
- 2) Discuss the clinical reasoning and decision-making process for patients with neurological dysfunction. (25)
- 3) Discuss the properties of a good measurement tool. Describe the measurement tools and its properties available for evaluating balance with neurological dysfunction. (25)
(5+20 = 25 marks)
- 4A) Sympathetic nervous system. (5)
- 4B) Cellular mechanism of neural plasticity. (5)
- 4C) Survival reflex in newborn. (5)
- 4D) Role of muscle spindle in the maintenance of tone. (5)
- 4E) Common CT and MRI findings in stroke. (5)

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SECOND SEMESTER MPT (PART - I) DEGREE EXAMINATION - JUNE 2019
SUBJECT: FOUNDATIONS OF SPECIALTY: PEDIATRICS (MPT 602.6)
(2018 SCHEME)
Monday, June 10, 2019 (14.00 - 17.00)

Marks: 100

Duration: 180 mins.

Answer all the questions.

- 1) Discuss developmental reflexes and its clinical implication. (25)
- 2) Discuss in detail the gross and fine motor development from birth to first year of life. (25)
- 3) Discuss in detail the Dynamic Systems Theory and its implication on motor developmental trajectory. (25)
- 4A) Explain Neurulation with labelled diagrams. (5)
- 4B) Explain the salient features of Rashtriya Bal Swasthya Karyakram. (5)
- 4C) Briefly discuss different antenatal screening procedures for Trisomy 21. (5)
- 4D) Enumerate physical growth measurement and indices. (5)
- 4E) Physiotherapy evaluation of 6 month old child with developmental delay. (5)

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MANIPAL ACADEMY OF HIGHER EDUCATION

SECOND SEMESTER MPT (PART - I) DEGREE EXAMINATION - JUNE 2019
SUBJECT: FOUNDATIONS OF SPECIALTY: CARDIOPULMONARY SCIENCES (MPT 602.1)
(2018 SCHEME)

Monday, June 10, 2019 (14.00 - 17.00)

Answer ALL the questions.
Draw diagrams wherever necessary.

Marks: 100

Duration: 180 mins.

- 1) Explain in the detail the indications, physiological basis and various techniques used in lung expansion therapy. (25)
(5+10+10 = 25 marks)
- 2) Explain in detail indications, contraindications and techniques of humidification therapy with rationale. (25)
(5+5+15 = 25 marks)
- 3) Explain in detail biomechanics of respiration & the pathomechanics seen in a case of severe kyphoscoliosis. (25)
(15+10 = 25 marks)
- 4A) Neuro regulation of respiration. (5)
- 4B) Explain the pathophysiological changes seen in ARDS. (5)
- 4C) Write in detail about blood supply to heart. (5)
- 4D) Assessment of wound. (5)
- 4E) Bronchodilators. (5)

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MANIPAL ACADEMY OF HIGHER EDUCATION

SECOND SEMESTER MPT (PART - I) DEGREE EXAMINATION - JUNE 2019
SUBJECT: FOUNDATIONS OF SPECIALTY: COMMUNITY PHYSIOTHERAPY (MPT 602.4)
(2018 SCHEME)
Monday, June 10, 2019 (14.00 - 17.00)

Marks: 100

Duration: 180 mins.

Answer all the questions.

- 1) Discuss the types of barriers for an individual with locomotor disability. Explain the principles of universal design. (25)
(10+15 = 25 marks)
2. Explain caregiving of chronic disabled under the following:
- 2A) Classification of care givers. (5)
- 2B) Problems related to caregiving. (10)
- 2C) Management strategies to alleviate caregiver burden. (10)
- 3) Explain the evaluation of permanent physical impairment as recommended by Government of India. (25)
- 4A) Importance of ICF core sets. (5)
- 4B) Limitations of CBR. (5)
- 4C) Hypothesis oriented algorithm for patient evaluation at the community. (5)
- 4D) Adapted physical activity. (5)
- 4E) Factors influencing acceptance and abandonment of assistive devices. (5)

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MANIPAL ACADEMY OF HIGHER EDUCATION

SECOND SEMESTER MPT (PART - I) DEGREE EXAMINATION - JUNE 2019
SUBJECT: FOUNDATIONS OF SPECIALTY: GERIATRICS (MPT 602.5)
(2018 SCHEME)
Monday, June 10, 2019 (14.00 - 17.00)

Marks: 100

Duration: 180 mins.

Answer all the questions.

- 1) Describe in detail successful ageing and the role of physiotherapy in prevention and management of accelerated ageing. (25)
(15+10 = 25 marks)
- 2) Explain assessment of fitness in the elderly. (25)
- 3) Describe the changes in metabolism that occur with ageing. Add a note on the influence of exercise on these changes. (25)
(15+10 = 25 marks)
- 4A) Welfare schemes and programs for the elderly in India. (5)
- 4B) Briefly describe some of the ethical dilemmas in end-of-life care. (5)
- 4C) Role of an interprofessional team in geriatric care. (5)
- 4D) Ageing and visual function. (5)
- 4E) Frailty and its implications for physiotherapy. (5)

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MANIPAL ACADEMY OF HIGHER EDUCATION

SECOND SEMESTER MPT (PART - I) DEGREE EXAMINATION - JUNE 2019
SUBJECT: FOUNDATIONS OF SPECIALTY: MUSCULOSKELETAL SCIENCES (MPT 602.3)
(2018 SCHEME)
Monday, June 10, 2019 (14.00 - 17.00)

Marks: 100

Duration: 180 mins.

Answer all the questions.

- 1) Explain in detail about peripheral and central pain mechanisms. Discuss the clinical methods to quantify pain. (25)
(5+5+15 = 25 marks)
- 2) Discuss the biomechanical properties of tendon. Write in detail on the anatomy of tendoachilles tendon and its healing and repair following an injury. (25)
(10+15 = 25 marks)
- 3) Write in detail about the assessment of lumbar spine and its structural differentiation using movement examination. (25)
- 4A) End feel. (5)
- 4B) Assessment of Knee Proprioception. (5)
- 4C) Functional anatomy of lateral ankle ligaments. (5)
- 4D) Onset of blood lactate accumulation. (5)
- 4E) Principles of stretching. (5)

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MANIPAL ACADEMY OF HIGHER EDUCATION

SECOND SEMESTER MPT (PART - I) DEGREE EXAMINATION - JUNE 2019
SUBJECT: FOUNDATIONS OF SPECIALTY: OBG (MPT 602.7)
(2018 SCHEME)
Monday, June 10, 2019 (14.00 - 17.00)

Marks: 100

Duration: 180 mins.

Answer all the questions.

- 1) Explain the physical and physiological changes during postmenopause period. (25)
(10+15 = 25 marks)
- 2) Explain in detail the postnatal Physiotherapy assessment of a 35-year-old lady with a chief complaint of low back pain and breast engorgement. (25)
- 3) Explain the physical and physiological changes during puberty in girls. (25)
(10+15 = 25 marks)
- 4A) Describe the causes of urinary dysfunction. (5)
- 4B) Discuss the various outcome measures to assess pelvic girdle pain syndrome in pregnancy. (5)
- 4C) Discuss ANY two methods of evaluation of pelvic floor muscle strength. (5)
- 4D) Explain the parts of breast and its function. (5)
- 4E) Discuss the changes in musculoskeletal system during pregnancy and its clinical implications. (5)

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