

MASTER OF PHYSIOTHERAPY (MPT)
SEMESTER -IV EXAMINATION, JUNE-2026

(MPT2 401) NEUROLOGICAL DISORDERS- CLINICAL SCIENCES-II

[Time allotted: Three Hours]

[Max Marks: 100]

Note: Read all the instructions carefully

Answer all questions in serial order. Draw suitable diagrams wherever necessary

Q. 1. Objective type questions: (Attempt All)

(10 x 02 = 20)

(Very short/ short answer/ MCQ/ One liners/ Fill in the blanks/ True/False)

- a. The classic pill-rolling tremor in Parkinson's disease is usually:
 - i. Present at rest and decreases with movement
 - ii. Present during movement and decreases at rest
 - iii. Equal during rest and movement
 - iv. Absent during both rest and movement
- b. Which of the following is not a common complication of acute polio?
 - i. Respiratory failure
 - ii. Myocarditis
 - iii. Post-polio syndrome
 - iv. Paralytic ileus
- c. In which malformation do the brain structures appear to be displaced or malrotated, often leading to developmental delay and intellectual disability?
 - i. Chiari malformation
 - ii. Agenesis of the corpus callosum
 - iii. Polymicrogyria
 - iv. Periventricular nodular heterotopias
- d. Which of the following medications is not typically used in the multidrug therapy regimen for leprosy?
 - i. Rifampicin
 - ii. Dapsone
 - iii. Clofazimine
 - iv. Isoniazid
- e. The surgical treatment of choice for most intradural extramedullary spinal cord tumors is:
 - i. Chemotherapy
 - ii. Radiation therapy
 - iii. Laminectomy with tumor resection
 - iv. Spinal fusion
- f. A patient presents with ptosis, diplopia, and weakness that worsens with activity and improves with rest. Which disorder is most likely?
 - i. Myasthenia gravis
 - ii. Lambert-Eaton syndrome
 - iii. Amyotrophic lateral sclerosis
 - iv. Carpal tunnel syndrome
- g. Peripheral nerves contain a mix of
 - i. Motor neurons
 - ii. Sensory and motor neurons
 - iii. Motor and sympathetic neurons
 - iv. Motor, sensory and sympathetic neurons
- h. Which prenatal diagnostic tool is most commonly used to detect cerebral malformations?
 - i. Amniocentesis
 - ii. Chorionic villus sampling
 - iii. Fetal MRI
 - iv. Triple screen blood test
- i. The most common cause of intracranial abscess is:
 - i. Direct trauma
 - ii. Hematogenous spread from a distant infection
 - iii. Sinusitis or otitis media
 - iv. Congenital malformations
- j. Cranial nerves I, II and VIII are.....
 - i. Pure motor
 - ii. Mixed
 - iii. Pure sensory
 - iv. Autonomous

Q. 2. Short notes/ Short answer type questions (Attempt any Five)

(05 x 04 = 20)

- a. What is the primary goal of spinal decompression surgery? CO3PO1
- b. Stereotactic surgery: 2 indications and 2 contraindications CO1PO1
- c. Describe phantom pillow test CO1PO1
- d. Deformities seen in leprosy patient CO3PO4
- e. Differentiate between kernigs sign and brudzinkis sign CO1PO2
- f. Specific deformities seen in polio: UL and LL CO2PO6
- g. Causes of dementia CO3PO4

P.T.O....

Q. 3. Structured questions (Attempt any Three)

(03 x 10 = 30)

- a. i) Describe the pathophysiology of poliomyelitis CO1PO2
ii) Its impact on the nervous system CO2PO1
iii) Clinical manifestations associated with the disease. CO1PO2
- b. What is the difference between lumbar and cisternal puncture. Various complications in both punctures. Write technique used in both. CO4
- c. i) Discuss the various types of spinal cord tumors including their classification based on location and histological features. CO1PO2
ii) Describe the common clinical presentations and diagnostic approaches used to identify these tumors. CO1PO2
iii) Explain the surgical and radiological treatment in such case. CO4PO6
- d. i) Discuss the indications used in spinal surgery. CO1PO2
ii) Explain the preoperative and postoperative care considerations for patients undergoing spinal surgery. CO2PO4
iii) How do surgical outcomes and patient recovery vary based on the type of spinal surgery performed? CO4CO3PO1PO6

Q. 4. Long Answer/ Essay type questions (Attempt any Two)

(02 x 15 = 30)

- a. i) Describe the diagnostic methods used to confirm leprosy. CO1PO2
ii) Explain the potential complications and long-term outcomes of leprosy. CO3PO6
- b. i) Explain the clinical features used to confirm hydrocephalus CO1PO2
ii) Explain the various treatment options in such case. CO4PO6
- c. i) Physical investigations done in muscular dystrophy. CO2PO4
ii) Treatment approaches in such case CO3PO4