

2015

PAPER : 4.2

NEUROPHYSIOTHERAPY

Full Marks: 100

Time: 3 Hours

*The figures in the margin indicate full marks
for the questions.*

1. Answer any two of the following : $2 \times 10 = 20$

- a) Describe in detail the medical and P.T. management of T4 spinal cord injury with bladder and bowel involvement.
- b) Describe the developmental milestones for a normal baby in all possible fields in detail.
- c) Describe perceptual disorders and its management.

2. Give short answer to any ten of the following : $10 \times 5 = 50$

- (a) Sensory integration approach.
- (b) Types of spina bifida, and management of each type.
- (c) Explain the rehabilitation protocol for motor involvement of a multiple sclerosis patient.
- (d) Explain possible complications and management for a patient with AVM (arterio venous malformation).
- (e) Kinetic and kinematic analysis of gait.
- (f) NDT for a spastic paraplegic CP patient aged 5 years.
- (g) Explain post polio residual paralysis (PPRP) and its rehabilitation protocol.
- (h) Axillary nerve palsy and its management.
- (i) Constraint induced movement therapy.
- (j) Describe the physiotherapy treatment needed for improving gait and balance in Parkinson's disease patients.
- (k) Hydrotherapy pool exercises for L2 incomplete spinal cord injury patient.
- (l) Explain P.T. management for schizophrenic patients.

P.T.O.

- (2) *a result of exhalation*
and along the paths of
(2) posterior circulation a
3. Give very short answer to any three of the following : 1×3=3
 a) Battle's sign *modic* *in mid brain*
 b) APGAR score *cells*
 c) Deformity present in ulnar nerve palsy.
 d) Define thoracic outlet syndrome.
 e) Waddling gait.
 f) Write a note on risk babies.
 g) Define Eaton Lambert syndrome. *immune disorder* *weakness*
4. Choose the correct answers from the clues given : 1×20=20
- a) Dopamine is synthesized by-
 i) Globus Pallidus *Substantia nigra*
 ii) Subthalamic nucleus *Putamen*
 iii) Subthalamic nucleus *Putamen*
- b) Anterior cerebral artery lesion will result in-
 i) Ipsilateral lower limb sensory loss.
 ii) Ipsilateral upper limb sensory loss.
 iii) Contralateral lower limb sensory loss.
 iv) None
- c) Apraxia is a result of lesion in-
 i) Frontal lobe. *Parietal lobe.*
 ii) Parietal lobe. *Internal capsule.*
 iii) Occipital lobe. *Internal capsule.*
- d) Clonus is a sign of-
 i) Lower motor neurone lesion
 ii) Upper motor neurone lesion
 iii) Peripheral nerve injury
 iv) Na-K deficiency
- e) The differentiating feature of poly neuropathy from poliomyelitis is-
 i) Muscle weakness
 ii) Muscle atrophy
 iii) No sensory involvement.
 iv) Symmetrical muscle involvement.
- f) An uniform resistance at all points of range during relaxed passive movement is known as _____ spasticity.
 i) Clasp knife *lead pipe*
 ii) Lead pipe *clasp knife*
 iii) Cog wheel *All of the above.*

- (3)
- g) Transient ischemic attack usually defined if neurological deficit recovers within _____
 i) 24 hours. *48 hours*
 ii) > 10 days *> 1 month.*
- The causes of primary brain damage is following except for-
- i) Skull fracture
 ii) Diffuse white matter lesion
 iii) Contusion of grey matter
 iv) Hemorrhage
- j) Uthoff's phenomenon is present in-
 i) Parkinson's disease *Multiple sclerosis*
 ii) ALS *Polio*
 iii) Polio *ALS*
- j) Which of the following is not a brain stem reflex-
 i) STNR
 ii) ATNR
 iii) Positive supporting reflex.
 iv) Crossed extension
- k) Segmental demyelination is the predominant pathology-
 i) Ischemic neuropathy.
 ii) Nutritional neuropathy
 iii) Lead poisoning
 iv) GBS.
- l) Ape thumb deformity occurs due to involvement of-
 i) Ulnar nerve *Median nerve*
 ii) Radial nerve *Axillary nerve.*
 iii) Median nerve *Ulnar nerve*
 iv) Axillary nerve *Radial nerve*
- m) The features of autonomic dysreflexia are-
 i) Tachycardia, hypertension, headache.
 ii) Bradycardia, hypertension, headache.
 iii) Pallor, tachycardia, headache.
 iv) All of the above
- n) Fluctuation of muscle tone is found in-
 i) Spastic CP
 ii) Flaccid CP
 iii) Athetoid CP
 iv) All of above.

P.T.O.

(4)

- o) Blocked practice is ____
- i) Different tasks done one by one.
 - ii) Consistent practice of single task.
 - iii) Varying tasks one by one
 - iv) None
- p) Motor behaviour follows sensory stimuli is the assumption of ____ approach.
- i) Bobath
 - ii) Brunstrom
 - iii) Rood's
 - iv) PNF
- q) There are ____ stages of recovery according to Brunstrom approach-
- i) 4
 - ii) 5
 - iii) 6
 - iv) 7
- r) Key point of control described in ____ approach
- i) Brunstrom
 - ii) Bobath
 - iii) Rood's
 - iv) PNF
- s) For severe head injury the duration of coma is-
- i) > 3 hours
 - ii) > 6 hours
 - iii) > 12 hours
 - iv) > 24 hours
- t) Frenkel's exercise should be prescribed for-
- i) Cerebellar ataxia.
 - ii) Vestibular ataxia
 - iii) Sensory ataxia
 - iv) All of the above