

Sardar Patel University  
Ph.D Entrance Examination  
Session 2014-15

**PHYSIOTHERAPY.**

(10 Marks)

SECTION I,

1. Manifestations of cerebellar injury not includes:  
A) Exaggerated tendon reflexes                      B) Dysarthria  
C) Dysmetria    D) Head tremor
2. Posture and balance maintained by which lobe of cerebellum:  
A) Anterior    B) Middle  
C) Posterolateral    D) All of the above
3. Lemniscal sensory system transmits all except:  
A) Touch    B) Temperature  
C) Vibration    D) Two point discrimination
4. Gracilis and cuneate nuclei are located in  
A) Pons    B) Midbrain  
C) Medulla    D) Spinal cord
5. Gait and posture assessment is for:  
A) Identify structural deformity                      B) Identify gait deviation from normal  
C) To find out the type of support                      D) All of the above
6. The dominant hemisphere can be assessed by:  
A) Handedness    B) CT scan  
C) Gait    D) None of the above
7. Mental functions are assessed by:  
A) Level of consciousness                      B) Orientation  
C) Memory and IQ    D) Emotional state  
E) All of the above
8. Communication is assessed by:  
A) Receptive ability    B) Expressive ability  
C) Both    D) None
9. The child should be carried:  
A) In hands    B) In lap  
C) In shoulders    D) In back
10. The 4 years boy who is having quadriceps power 0, hamstring 4, hip Ext. 4, flexor 3. He is indicated for:  
A) Osteotomy    B) Tendon transfer from hamstring  
C) Tendon lengthening    D) Limb length procedure

SECTION II

(40 Marks)

Q.1 Illizarov is indicated to:

- A) Correct the flexion deformity
- B) Lengthen the limb
- C) Tendon transfer
- D) Arthrodesis

Q.2 Triple arthrodesis is done in following except for:

- A) Talocalcaneal
- B) Talonavicular
- C) Calcaneocuboid
- D) Tibiofibular

Q.3 Tonic labyrinthine is elicited by positioning the baby:

- A) In supine more development of extensor pattern and in prone developing flexor pattern
- B) In supine the more development of flexor pattern and in prone the extensor pattern
- C) In supine less tone in flexors
- D) In side lying increases flexor tone

Q.4 In the following which is not a normal primitive reflex:

- A) Grasp reflex
- B) Moro reflex
- C) ATNR
- D) STNR
- E) Tonic labyrinthine
- F) D and E
- G) All of the above

Q.5 The restless child can be treated with:

- A) Baclofen
- B) Diazepam
- C) Antibiotics
- D) Yoga and meditation

Q.6 Positive signs which are abnormal signs in cerebral palsy includes the following except for:

- A) Persistence of primitive reflex
- B) Impaired postural tone
- C) Loss of intrinsic tone
- D) Writing reaction

Q.7 The body weight is borne during standing by:

- A) Calcaneum
- B) Talus
- C) Forefoot
- D) Toes

Q.8 The cause for elevated pelvis and anterior the standing is:

- A) Spinal extensor pattern
- B) Poor abdominal flexors
- C) Excess work of hiking muscle
- D) All of the above

Q.9 Hemiplegic patient will clear the ground by involved with:

- A) Push off
- B) Suspension of foot
- C) Assistance by normal side
- D) None

- Q.10 Recovery of motor function will be within:
- A) 3-6 months of onset                      B) 1 month of onset  
C) 1 year of onset                            D) Never
- Q.11 Cerebellar function is assessed by the following except for:
- A) Co-ordination                              B) Equilibrium  
C) Gait    D) Muscle strength
- Q.12 Gait should be assessed by:
- A) Step length                                  B) Stride length  
C) Cadence                                      D) Determinants  
E) Time factor                                  F) All of the above
- Q.13 After brain injury the following changes may occur except for:
- A) Phylogenetic regression                  B) Abnormal tone and postural reflex  
C) Presence of primitive reflexes            D) None
- Q.14 Motor evaluation includes:
- A) Muscle strength                              B) Muscle length  
C) Speed of movement                          D) Endurance of the muscle  
E) All of the above
- Q.15 In axonotmesis the recovery is:
- A)  $\cong$  100%                                      B)  $\cong$  80%  
C)  $\cong$  70%                                        D)  $\cong$  50%
- Q.16 The neurotmesis is always associated with:
- A) Open wounds                                B) Open fracture  
C) Fracture and dislocation                  D) All of the above
- Q.17 The common cause of neurotmesis is:
- A) Glass or knife cut                          B) Common fracture  
C) Crush injury                                  D) All of the above
- Q.18 The diagnosis of peripheral nerve lesion is confirmed with:
- A) History                                        B) Site of injury  
C) EMG    D) Sensory changes  
E) Muscle power                                F) Attitude of segment  
G) None of the above                          H) All of the above

- Q.19 GBS will produce the following except:
- A) Weakness of facial muscles      B) Weakness of masticating muscles  
 C) Weakness of ocular muscles      D) Weakness of upper backs and neck muscles
- Q.20 The gait in GBS is:
- A) Ataxic      B) Stepping gait high  
 C) Athetoid dance      D) Limping gait
- Q.21 Autonomic dysfunction is:
- A) Very common      B) Present in acute phase  
 C) Permanent one      D) Temporary one
- Q.22 In the GBS patients the progress is:
- A) Poor      B) Moderate  
 C) Good      D) Slow but steady
- Q.23 The intelligence will be:
- A) 70-85      B) 50  
 C) Normal      D) 30
- Q.24 The causes for constipation in myopathy is:
- A) Lack of ambulant      B) Bowel dysfunction  
 C) Lack water content
- Q.25 Bladder incontinence will be present in:
- A) Early stage      B) Ambulant stage  
 C) Wheelchair phase      D) Bedridden phase  
 E) Ventilator dependent phase
- Q.26 Vomiting is common because of:
- A) Peptic ulcer      B) Compression of sup-mesenteric vessels  
 C) Due to lumbar lordosis      D) Immobility
- Q.27 Respiratory disorder like the following is common:
- A) TB      B) Ca  
 C) Pneumonia      D) Bronchitis
- Q.28 The disability scale is named as:
- A) VAS scale      B) Berg scale  
 C) Yahr scale      D) Glasgow Coma Scale
- Q.29 The following are used to relax except:
- A) Yoga      B) Slow rocking movement  
 C) Positioning      D) Cryotherapy

- Q.30 Relaxation is achieved by:  
 A) Distal to proximal B) Proximal to distal  
 C) Proximal relaxation D) Distal relaxation
- Q.31 Hypermetric movements may be more marked in:  
 A) Small fast aimed movement B) Postural adjustment  
 C) Slow movement D) A and B
- Q.32 The cause for kinetic tremor in parkinson's is:  
 A) Prolonged agonist burst B) Delayed antagonist burst  
 C) Disturbance in acceleration and deceleration relationship  
 D) All of the above
- Q.33 The cause for undershooting sign is:  
 A) Co-contraction of muscle B) Unable to control termination of movement  
 C) Muscle weakness D) A and B
- Q.34 The dysmetria may present due to:  
 A) Preceptuo-motor deficits B) Difficulty in judging velocity  
 C) Predicting movement outcome D) All of the above
- Q.35 Multiple Sclerosis(MS) requires:  
 A) Short term management B) Long term management  
 C) No physical therapy D) None
- Q. 36 The patient must rest in side/prone lying to prevent:  
 A) Respiratory compliments B) Flexor contracture  
 C) Orthopnoea D) None of the above
- Q.37 During second stage of (MS)the patient will be:  
 A) In need of walking aid B) In need of walking chair  
 C) Confined to bed D) Not have any change
- Q.38 The treatment of MS includes the following except for:  
 A) Management of spasticity B) Coordination exercise  
 C) Respiratory therapy D) To maintain joint range  
 E) Progressive resisted exercise
- Q.39 The conus medullary injury results in:  
 A) Spastic paraplegia B) Paraparesis  
 C) Flaccid paralysis D) No paralysis
- Q.40 The following are immediate care to SCI:  
 A) Maintenance of fluid B) Maintenance of vital signs  
 C) Maintenance of electrolyte balance D) All of the above

SECTION III

(5x5=25)

1. What is sub-maximal exercise testing. Explain with an example.
2. What is postural dysfunction. Explain the concept of Positional Release technique for treating neck pain.
3. P-CTSiB. Explain
4. Evidence based Physiotherapy. Explain with examples
5. Write in brief about malpractice and negligence.

SECTION IV

(25 Marks)

Elaborate the importance of manual therapy in physiotherapy. Explain its application in the field of a) Musculoskeletal conditions b) Neurological conditions

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