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Total number of printed pages-11

34 (4) NOUPT 4-2

2019

NEURO PHYSIOTHERAPY

Full Marks : 100

Time : Three hours

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

Essay Type : ***(answer any two)*** 2×10=20

1. Write a detailed assessment and Physiotherapy management of a 70 year old male suffering from Parkinson's Disease.
2. Discuss in detail about clinical features and physiotherapy treatment of a spinal cord injury case at T₁₀ spinal level.
3. Describe various techniques of rehabilitating a hemiplegic gait.

Contd.

Short Essay type : **(answer any ten)** 5×10=50

1. Sensory Integration
2. Balance training in cerebellar ataxia
3. Discuss the physiotherapy management of an unconscious traumatic brain injury case.
4. Pathophysiology of Multiple Sclerosis
5. GCS and its interpretation
6. Define hydrocephalus, its causes and clinical manifestations
7. Circle of Willis with labelled diagram
8. Care of anesthetic hand and foot
9. Bladder training program
10. Role of Physiotherapy in NICU.

34 (4) NOUPT 4-2/G 2

11. Gait in cerebral Palsy

12. Define Yoga, its classification and uses in Neurophysiotherapy.

Short answer type : **(answer any five)**

5×2=10

1. Gower's sign
2. ASIA Scale
3. Voluntary Control Testing
4. Signs of increased Intracranial Pressure
5. STNR
6. CSF circulation
7. Chiari malformation

34 (4) NOUPT 4-2/G 3

Contd.

Multiple choice questions : 1×20=20

1. Poliomyelitis is caused by viral infection in —
 - (a) Posterior horn cell
 - (b) Anterior horn cell
 - (c) Muscle
 - (d) Peripheral nerves.
2. Where Wernicke's area is located in the brain and what purpose does it have ?
 - (a) Frontal lobe controls the motor aspect of speech.
 - (b) Parietal lobe controls the motor aspect of speech.
 - (c) Temporal lobe controls the motor aspect of speech.
 - (d) Temporal lobe controls language and comprehension.
3. Which of the following spinal cord pathways is responsible for pain and temperature ?
 - (a) Dorsal columns
 - (b) Lateral spinothalamic
 - (c) Anterior spinothalamic
 - (d) Spinocerebellar.
4. Which of the following TBI's is not considered as primary brain injury ?
 - (a) Diffuse axonal injury
 - (b) Focal injury
 - (c) Hypoxic-ischemic injury
 - (d) Coup-contrecoup injury
5. Which of the following is NOT commonly presented with damage to the 'middle cerebral artery' ?
 - (a) Homonymous hemianopia
 - (b) Motor speech disorder
 - (c) Ataxia of contralateral limbs
 - (d) Urinary incontinence

6. Choose the answer which is **WRONGLY** matched with the person related to it—

- (a) PNF—Kabat
- (b) SI—Jean Ayers
- (c) MRLP—Carr and Shepherd
- (d) None of the above.

7. The Spinal segment for knee jerk is—

- (a) L₂, L₃, L₄
- (b) L₂, L₃, S₁
- (c) L₄, L₅
- (d) None of the above.

8. In case of ulnar nerve injury _____ is used.

- (a) Aeroplane splint
- (b) Opponens splint
- (c) Cock-up splint
- (d) Knuckle bender splint

9. Bebath approaches focus mainly on—

- (a) Key point of control
- (b) Tonic influencing postures
- (c) Handling
- (d) All of the above.

10. If the baby is placed in supine, on dropping head backwards, if the baby responds by abduction, extension of upper limb, this reflex is known as—

- (a) Moro
- (b) Landau
- (c) Parachute
- (d) Startle

11. Reflex creeping and reflex rolling are the terms used in—

- (a) Vojta therapy

- (b) NDT
 - (c) Roods approach
 - (d) Sensory Integration
12. Which of the following is incorrect regarding development of nervous system ?
- (a) Neural crest becomes peripheral nervous system
 - (b) Neural tube becomes central nervous system
 - (c) Somites becomes spinal vertebra
 - (d) None of the above.
13. Choose the WRONGLY matched pair -
- (a) C₃ - Sternocleidomastoid
 - (b) C₄ - Trapezius
 - (c) C₇ - Triceps and extensors of wrist
 - (d) None of the above.

14. Cervical traction is contraindicated in -
- (a) Cervical Spondylosis
 - (b) Cervical disc prolapse
 - (c) Both (a) and (b)
 - (d) None of the above
15. Mental imagery cannot be used in damage to -
- (a) Basal Ganglia
 - (b) Cerebellum
 - (c) Reticular formation
 - (d) Brainstem.
16. Find the incorrect one -
- (a) Hoehn and Yahr scale is used for assessment of disability in Parkinson's disease.
 - (b) Rigidity is velocity dependent
 - (c) Parkinson's disease is due to degeneration of nigrostriatal pathways

(d) Tremor, rigidity and bradykinesia are the cardinal features of Parkinson's disease.

17. Which of the following are used in vestibular rehabilitation ?

- (a) Epleys maneuver
- (b) Gaze Stabilization exercises
- (c) Semonts maneuver
- (d) All of the above.

18. In hemiplegics, locomotor training utilizing a body weight support system and treadmill is best used to develop -

- (a) Rhythmicity and pattern of locomotion
- (b) Strength of the lower extremity
- (c) Fitness training
- (d) None of the above.

19. Which of the following tool is used to measure PAIN ?

- (a) McGill Pain Questionnaire

(b) NPRS

(c) Chronic Pain Index

(d) All of the above.

20. Which one of the following is NOT a characteristic feature of motor neuron disease ?

- (a) Degeneration of Anterior horn
- (b) Degeneration of Corticospinal tract
- (c) Degeneration of brain stem motor neurons

(d) None of the above.