REV-01
BPT/15/20

2025/11

SET A

BACHELOR OF PHYSIOTHERAPY
FIFTH SEMESTER
CLINICAL NEUROLOGY & PSYCHIATRY
BPT – 502 [REPEAT]

[USE OMR SHEET FOR OBJECTIVE PART]

Duration: 3 hrs. **Full Marks: 70**

(Objective)

Time: 30 min. **Marks: 20**

Choose the correct answer from the following: ***1X20=20***

1. The term spinal injury refers to:
   a. Injury to spinal cord
   b. Injury to spinal column
   c. Injury to brain along with spinal cord
   d. Both A & B

2. Which part of the brain is primarily associated with ballismus?
   a. Cerebellum
   b. Basal ganglia
   c. Brainstem
   d. Cerebral cortex

3. In which category of spinal injury according to ASIA Scale, the bladder and bowel function is preserved?
   a. A
   b. B
   c. C
   d. Both B and C

4. What symptom is NOT typically associated with dystonia?
   a. Muscle spasms
   b. Tremors
   c. Stiffness
   d. Loss of coordination

5. Which is the most common cause of traumatic brain injury(TBI) in childhood?
   a. Assault
   b. Road Traffic Accident
   c. Falls
   d. Rugby

6. The first symptom commonly seen in generalized tetanus is:
   a. Opisthotonus
   b. Dysphagia
   c. Trismus (lockjaw)
   d. Spastic paralysis

7. Bleeding between arachanoid mater and piamater is called:
   a. Sub dural Heammorhage
   b. Sub arachanoid Heammorhage
   c. Intracranial Bleed
   d. Intracerebral Bleed

8. Which of the following drugs is commonly used in treatment of hemiballismus?
   a. Haloperidol
   b. Levodopa
   c. Baclofen
   d. Propranolol

9. Most common form of head injury is:
   a. Contusion
   b. Concussion
   c. Coup Countra coup
   d. Accelaration Deacclaration

10. Which form of poliomyelitis causes paralysis of respiratory and pharyngeal muscles?
    a. Bulbar poliomyelitis
    b. Asthma
    c. Polyradiculitis
    d. COPD

11. Which of the following is not a part of brainstem?
    a. Midbrain
    b. Pons
    c. Cerbellum
    d. Medulla Oblongata

12. Which of the following is the primary neurotransmitter that is deficient in Parkinson's disease?
    a. Serotonin
    b. Dopamine
    c. Acetylcholine
    d. Norepinephrine

13. Which type of neuron is responsible for carrying signals from the CNS to Muscles?
    a. Sensory Neuron
    b. Motor Neuron
    c. Interneuron
    d. Afferent Neuron

14. SMA is caused by a mutation in which gene?
    a. CFTR gene
    b. SMN1 gene
    c. Dystrophin gene
    d. Fibrillin-1 gene

15. Which of the following scale is used to assess Head Injury?
    a. Ashworth Scale
    b. MMT
    c. Berg Balance Scale
    d. GCS

16. Which type of SMA presents in infancy and is the most severe form?
    a. Type I (Werdnig–Hoffmann)
    b. Type II
    c. Type III (Kugelberg–Welander)
    d. Type IV (Adult-onset)

17. In which Structure damage is Dysdiadokokinesia Seen?
    a. Cerebrum
    b. Cerebellum
    c. Pons
    d. Medulla Oblongata

18. Which part of the spinal cord is primarily affected in tabes dorsalis?
    a. Anterior horn
    b. Posterior column and dorsal roots
    c. Lateral corticospinal tracts
    d. Spinothalamic tract

19. The most common clinical manifestation of hydrocephalus in infants is :
    a. Diplopia
    b. Increased head Circumference
    c. Ataxia
    d. Papilledema

20. Which of the following antibiotics is most commonly used to eliminate Clostridium tetani?
    a. Amoxicillin
    b. Penicillin G
    c. Ciprofloxacin
    d. Linezolid

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Descriptive

Time : 2 hrs. 30 min. **Marks : 50**

[Answer question no.1 & any four (4) from the rest]

1. A 12-year-old boy is brought to the emergency department with complaints of high-grade fever for 3 days, followed by headache, vomiting, and two episodes of generalized tonic-clonic seizures. On examination, the child is drowsy, disoriented, and has neck stiffness with a positive Babinski sign on both sides. There are no focal motor deficits. His parents report that he had insect bites while playing outdoors a week ago. Write in detail about the condition. **10**

2. Explain Glasgow Coma Scale along with its clinical interpretation. **10**

3. A 5-year-old boy is brought to the pediatric clinic by his parents with complaints of frequent falls, difficulty in climbing stairs, and walking with a waddling gait. His parents report that he has been slower than his peers in achieving motor milestones, and over the past year, his weakness seems to have worsened. On examination, the child uses his hands to push himself up from the floor. There is pseudo-hypertrophy of the calf muscles, and proximal muscle weakness is evident in both lower limbs. His intelligence is mildly below average. A family history reveals that two maternal uncles had a similar condition and died in their teenage years.Write in detail about the condition. **10**

4. Explain ASIA Scale in detail along with its clinical application. **10**

5. Mr. James, a 68-year-old man, presents to his primary care physician with complaints of difficulty walking, tremors in his hands, and stiffness in his movements. He reports that the symptoms began subtly a couple of years ago, starting with a mild tremor in his right hand. Over the past year, his symptoms have progressed, and he now finds it challenging to perform everyday activities such as buttoning his shirt or writing.Upon examination, Mr. James exhibits a noticeable resting tremor in his right hand, rigidity in his limbs, and bradykinesia (slowness of movement). He also has a slightly stooped posture and a shuffling gait. His facial expression appears masked, with less spontaneous blinking. Cognitive function appears intact, though he reports some difficulty with concentration.Write in detail about the condition. **10**

6. Explain the nervous system along with its various classifications. Also explain the structure of Neuron along with a suitable diagram. **10**

7. A 55-year-old woman with a 10-year history of type 2 diabetes mellitus presents to the outpatient department with complaints of burning sensation, tingling, and numbness in both feet for the past 6 months. She reports that the symptoms are more pronounced at night and often disturb her sleep. Over the past few weeks, she has also noticed difficulty in maintaining balance while walking, especially in the dark. On examination, her blood pressure is 138/84 mmHg, and random blood sugar is 240 mg/dL. Neurological examination reveals decreased vibration and position sense in both feet, diminished ankle reflexes, and reduced sensation to pain and temperature in a stocking distribution. There are no motor deficits. Foot examination shows dry skin and minor callus formation but no ulcers. Laboratory investigations reveal an HbA1c of 9.2%. Write in detail about the condition. **10**

8. Explain the components of Neurological Assessment in detail. **10**

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