



**HAT-10601**

Seat No. \_\_\_\_\_

**Final Year B. Physiotherapy Examination**

**July - 2017**

**Physiotherapy in Neuromuscular Conditions**

Time : **3 Hours ]**

[ **Total Marks : 100**

**SECTION - I**

- 1 Answer any two : 10×2=20**
- (a) Discuss the secondary impairment in patient with spinal cord lesion.
  - (b) Discuss the assessment and treatment of balance impairment in brief.
  - (c) Enumerate all the cranial nerves along with their functions.
- 2 Answer in brief : (any two) 5×2=10**
- (a) Write a note on meningitis.
  - (b) Types of spina bifida
  - (c) Diabetic polyneuropathy
- 3 Short answers : (any 5) 2×5=10**
- (a) Name few motor programming deficits
  - (b) Functions of spinothalamic tracts
  - (c) Name the terminal branches of brachial plexus
  - (d) What is autonomic dysreflexia?
  - (e) Difference between intentional tremor and resting tremor
  - (f) Define stage 2 and 3 of sequential recovery stages of brunstrom for stroke patients.
- 4 Multiple choice questions : 1×10=10**
- (1) All of the below muscles are supplied by Median nerve except
    - (i) 1<sup>st</sup> lumbrical
    - (ii) 2<sup>nd</sup> lumbrical
    - (iii) 3<sup>rd</sup> lumbrical
    - (iv) Opponens pollicis
  - (2) Myotome for hip flexion is
    - (i) L2
    - (ii) L3
    - (iii) L3-4
    - (iv) L1

- (3) Compression of median nerve as it passes beneath the flexor retinaculum is called
- Flexor withdrawal
  - Carpal tunnel syndrome
  - Brown sequard syndrome
  - None of the above
- (4) A progressive hereditary disorder of peripheral nerves that is characterised by gradual progressive distal weakness and wasting, mainly affecting peroneal muscles in the leg is known as
- Charcot-Marie-Tooth disease
  - HMSN
  - None of the above
  - Both (i) and (ii)
- (5) \_\_\_\_\_ is a type of motor neuron disease
- Peroneal muscular atrophy
  - Acute transverse myelitis
  - Progressive bulbar palsy
  - None of the above
- (6) A disorder of neuromuscular junction caused by an impaired ability of acetylcholine to induce muscle contraction is known as
- Muscular dystrophy
  - Myasthenia gravis
  - Myositis ossificans
  - Multiple sclerosis
- (7) Area of primary motor cortex is located in
- Precentral gyrus
  - Postcentral sulcus
  - Postcentral gyrus
  - Precentral sulcus
- (8) \_\_\_\_\_ is not a symptom of anterior cerebral artery syndrome.
- Contralateral hemiplegia (L.L > U.L)
  - Urinary incontinence
  - Akinetic mutism
  - Broca's aphasia
- (9) Following the examiner's finger which moves up and down and side to side, keeping the head in mid position is test to examine the function of
- Trigeminal nerve
  - Facial nerve
  - Oculomotor nerve
  - Optic nerve
- (10) Under or over shooting while reaching for the target is also known as
- Diplopia
  - Dysmetria
  - Dysarthria
  - None of the above

## SECTION – II

- 5 Answer any two : **10×2=20**
- (a) Discuss the physiotherapy management of a patient with Rt MCA infarct.
  - (b) Discuss the physiotherapy management of a patient with cerebellar ataxia
  - (c) Discuss the physiotherapy management of a patient with post-polio residual paralysis
- 6 Answer in brief : (any **two**) **5×2=10**
- (a) Write a note on Complex regional pain syndrome
  - (b) Enumerate motor impairment in multiple sclerosis
  - (c) Write a note on herpes zoster
- 7 Short answers : (any **5**) **2×5=10**
- (a) Name the different lobes of cerebellum
  - (b) Define policeman's tip hand deformity
  - (c) Modified ashworth scale grade 3 and grade 4
  - (d) Define dermatome and myotome
  - (e) What is charcot's joint?
  - (f) Enumerate the branches of internal carotid artery
- 8 Multiple choice questions : **1×10=10**
- (1) Reflex flexion of patient's thumb when distal phalax of 3<sup>rd</sup> or 4<sup>th</sup> finger is flicked by examiner is called
    - (i) Hoffman reflex      (ii) Palmar reflex
    - (iii) Plantar reflex      (iv) Grasp reflex
  - (2) A lesion of inferior frontal cortex, causing non-fluent hesitant speech that is characterised by poor grammer and reduced word output is known as
    - (i) Global aphasia      (ii) Spastic dysarthria
    - (iii) Wernick's aphasia      (iv) Brocha's aphasia
  - (c) A degenerative disease of substantia niagra which results in depletion of dopamine levels is known as
    - (i) Alzheimer's disease
    - (ii) Parkinson's disease
    - (iii) Motor neuron disease
    - (iv) None of the above

- (4) Types of spina bifida includes
- (i) Spina bifida occulta
  - (ii) Spina bifida cystica
  - (iii) Both (i) and (ii)
  - (iv) None of the above
- (5) Causes of CVA includes .
- (i) Haemorrhage            (ii) Atherosclerosis
  - (iii) Embolism            (iv) All of the above
- (6) A condition characterised by brief attacks of severe, stabbing facial pain could be
- (i) Facial palsy            (ii) Trigeminal neuralgia
  - (iii) Epilepsy            (iv) None of the above
- (7) Axillary nerve originates at the level of
- (i) Trunks of brachial plexus
  - (ii) Roots of brachial plexus
  - (iii) Cords of brachial plexus
  - (iv) Terminal branch of brachial plexus
- (8) Tibialis anterior muscle in the leg is supplied by
- (i) Deep peroneal nerve
  - (ii) Tibial nerve
  - (iii) Sciatic nerve
  - (iv) None of the above
- (9) Following are the symptoms of cerebellar lesion except
- (i) Hypotonia            (ii) Dysmetria
  - (iii) Dysarthria            (iv) Dysphasia
- (10) A patient with spinal cord injury at the level of C8 has following function intact.
- (i) Wrist function and hand control
  - (ii) Hip flexion
  - (iii) Knee extension
  - (iv) Abdominals
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