# TILAK MAHARASHTRA VIDYAPEETH, PUNE

### BACHELOR OF PHYSIOTHERAPY (B. P. T.) EXAMINATION: JULY - 2022

## SECOND YEAR

**Subject: Physiotherapy In Neuro Science (BPT-402)** 

| Date   | : 12/07/2022   | Total Marks: 8                            | 30 Tii                                     | ne: 10.00 am to 1.00 pm |  |  |  |  |  |
|--|--|---|--|-------------------------|--|--|--|--|--|
| Instruction:   |  |   |  |                         |  |  |  |  |  |
|  | To answer the Multiple Choice Questions (MCQs) use the separate answer sheet provided by the                           |   |  |                         |  |  |  |  |  |
|  | Vidyapeeth.  For answering the Multiple Choice Ouestions (MCQs) put the tick mark in the respective column.  A B C D √ |   |  |                         |  |  |  |  |  |
| 3. Multiple Choice Questions (MCQs) are to be solved within first 20 minutes of the session.   |  |   |  |                         |  |  |  |  |  |
| 4. Return your answer sheet of Multiple Choice Questions (MCQs) when first 20 minutes' time is |  |   |  |                         |  |  |  |  |  |
| over.  SECTION - A   |  |   |  |                         |  |  |  |  |  |
| Q.1  | Select the most appropr  |   |  | (20)                    |  |  |  |  |  |
| 1.   | Rhythmic initiation technique is used in one of the following condition  |   |  |                         |  |  |  |  |  |
|  | a) Spinal cord injury  | b) Stroke                                 | c) Parkinsonism                            | d) None                 |  |  |  |  |  |
| 2.   |  |   |  |                         |  |  |  |  |  |
|  | a) Globulin  | b) Albumin                                | c) Dystrophin                              | d) Protodystrophin      |  |  |  |  |  |
| 3.   | ,  |   |  |                         |  |  |  |  |  |
|  | a) Spinal cord injury  | b)Motor neuron disease                    | c) Parkinsonism                            | d) Multiple Sclerosis   |  |  |  |  |  |
| 4  |  |   |  |                         |  |  |  |  |  |
| 4.   | 4. Which of the following sentence is true for Hydrocephalus?  |   |  |                         |  |  |  |  |  |
|  | a) Fontanallae are wide open   | b)Pupil gazing<br>downwards               | c) Weakness in lower limbs                 | d) All of the above     |  |  |  |  |  |
| 5.   | Lhermitte's sign is seen in  |   |  |                         |  |  |  |  |  |
|  | a) Multiple sclerosis  | b) Poliomyelitis                          | c) ALS                                     | d) Muscular dystrophy   |  |  |  |  |  |
| 6.   | 6. Knuckle bender splint is used in  |   |  |                         |  |  |  |  |  |
|  | a) Median nerve injury   | b)Radial nerve injury                     | <ul><li>c) Axillary nerve injury</li></ul> | d) ulnar nerve injury   |  |  |  |  |  |
| 7.   | Parkinsons patients usua   | ons patients usually present with gait.   |  |                         |  |  |  |  |  |
|  | a) circumductory   | b) waddling                               | c) festinating                             | d) reciprocating        |  |  |  |  |  |
| 8.   | BBS score range which  | rate risk of fall is—                     |  |                         |  |  |  |  |  |
|  | a) 24-36   | b) 36-45                                  | c) 46-56                                   | d) 30-40                |  |  |  |  |  |
| 9.   | When the spinal cord accompanies CSF in the bulge, the condition is known as   |   |  |                         |  |  |  |  |  |
|  | a) Spina Bifida  | b) Myelomeningo-<br>coele                 | <ul><li>c) Spina Bifida occulta</li></ul>  | d) Meningocoele         |  |  |  |  |  |
| 10.  | GBS is a   |   |  |                         |  |  |  |  |  |
| 11.  | <ul><li>a) Degenerative disorder</li><li>Which of the following</li></ul>  | b) Metabolic disorder is a deep sensation | c) Demyelinating disorder                  | d) None of the above    |  |  |  |  |  |
|  | a) Stereognosis  | b) Pressure                               | c) Graphesthesia                           | d) Vibration            |  |  |  |  |  |

| 12.         | Kernicterus in early phase of life leads to  |                        |                         |                      |     |  |  |  |
|-------------|--|------------------------|-------------------------|----------------------|-----|--|--|--|
|             | a) Cerebral palsy  | b) Spina bifida        | c) Hydrocephalus        | d) DMD               |     |  |  |  |
| 13.         | scale is used to assess functional status of neonates  |                        |                         |                      |     |  |  |  |
|             | a) GCS   | b) TIMP                | c) APGAR                | d) GMFM              |     |  |  |  |
| 14.         | Babinski sign normally present up to age   |                        |                         |                      |     |  |  |  |
|             | a) Age 5 to 10   | b) Age 10 to 15        | c) Age 1 to 2           | d) Up to 6 months    |     |  |  |  |
| 15.         | Muscles not involved in either synergy   |                        |                         |                      |     |  |  |  |
|             | a) Supraspinatus   | b) Teres minor         | c) Teres major          | d) Rhomboid          |     |  |  |  |
| 16.         | Sensory Integration Therapy was introduced by  |                        |                         |                      |     |  |  |  |
|             | a) a. Dr. Kabat  | b) Dr. Ayres           | c) Dr. Peterson         | d) None of the abov  | e   |  |  |  |
| 17.         | denervated muscles can be stimulated by  |                        |                         |                      |     |  |  |  |
|             | a) Russian currents  | b) Faradic             | c) Interrupted galvanic | d) Didynamic current | nts |  |  |  |
| 18.         | plays an important role in the planning and pro-gramming of movement by selecting  |                        |                         |                      |     |  |  |  |
|             | and inhibiting specific  | motor synergies        |                         |                      |     |  |  |  |
|             | a) Basal Ganglia   | b) Cerebellum          | c) Internal             | d) Cerebral Cortex   |     |  |  |  |
| 19.         | capsule Frenkels exercises are designed to improve a   |                        |                         |                      |     |  |  |  |
|             | a) Balance   | b) Equilibrium         | c) Coordination         | d) Posture           |     |  |  |  |
| 20.         | Uthoff's symptom in MS is  |                        |                         |                      |     |  |  |  |
|             | a) Adverse reaction to   | b) Adverse reaction to | c) Adverse              | d) None of the abov  | e   |  |  |  |
|             | Heat   | cold                   | reaction to Both        |                      |     |  |  |  |
|             |  | SECTION                | <u>- B</u>              |                      |     |  |  |  |
| Q. 2        | Answer the following. ( any five)  |                        |                         |                      |     |  |  |  |
| 1)          | Answer the following. (any five)  Enumerate any 3 prenatal causes of cerebral palsy.                                     |                        |                         |                      |     |  |  |  |
| 2)          | Define and classify Muscle Tone.   |                        |                         |                      |     |  |  |  |
| 3)          | Glasgow Coma Scale   |                        |                         |                      |     |  |  |  |
| 4)          | Clinical features of Hydrocephalus   |                        |                         |                      |     |  |  |  |
| 5)          | Any 3 differences between-upper motor and lower motor Neuron Lesion.   |                        |                         |                      |     |  |  |  |
| 5)          | Any 3 clinical symptoms of multiple sclerosis  |                        |                         |                      |     |  |  |  |
| Q. 3        | Answer the following. (any three)  |                        |                         |                      |     |  |  |  |
| <b>Q.</b> 3 | Answer the following. (any three)  Write a note on the Physiotherapy management of spastic gait in a hemiplegic patient. |                        |                         |                      |     |  |  |  |
| 2)          | Explain the Diagnostic criteria of Motor Neuron Disease and Physiotherapy for any one impairment                         |                        |                         |                      |     |  |  |  |
| 3)          | Explain 3 principles of Motor Relearning Approach  |                        |                         |                      |     |  |  |  |
| <b>4</b> )  | Write in detail Physiotherapy treatment for Bells Palsy  |                        |                         |                      |     |  |  |  |

#### SECTION - C

- Q. 4. A 20 years old female, a college student has met with a RTA week before. She had a intracranial bleed on the left side. Patient is stable, conscious and well oriented.She is shifted to ward and is having right side paralysis.
  - a) Describe Assessment with ICIDH2.
  - b) Describe Short and Long term management
- Q. 5 A 54 year old bank manager suffered right MCA Cerebro-vascular accident 2 Weeks back, (15) MRI shows fresh infarct in right internal capsule and corona radiate. He cannot move his Left upper limb. On examination, he has increased tone in left shoulder flexors, external rotators, hip extensors, adductors, plantar flexors: Voluntary control is zero in upper limb and 2 in lower limb, he has left Facial palsy, he can stand with support. He has history of smoking since 20 years. He is hypertensive since 4 years controlled with medication. i) Explain lifestyle modifications for this patient. ii) Write short term and long term goals for PT management. iii) Write in detail PT management for the impairments.

#### OR

Q. 5 A 3year old female child was brought to the PT OPD with complains of difficulty in sitting up, standing and walking. On examination she has increased tone in her lower limbs and walk with a crossing pattern. Her mother reported that the child was born in the 7th month and had a delayed cry 1) ICIDH2 11) Detailed PT management