



Avinashilingam Institute for Home Science and Higher Education for Women

Deemed to be University Estd. u/s 3 of UGC Act 1956, Category 'A' by MHRD (now MoE)

Re-accredited with 'A++' Grade by NAAC. CGPA 3.65/4, Category I by UGC

Coimbatore - 641 043, Tamil Nadu, India

Bachelor's Degree Examination – May 2025

II Semester

Class : I UG

Major : Audiology and Speech Language Pathology

Time: 3 Hours

Max. Marks: 100

22BASC09 Neurology

Course Outcomes:

On the successful completion of the course, students will be able to

CO1: Understand the basics of anatomy of special organs in human body.

CO2: Know the importance of structure and organisation of upper limb and lower limb and arthrology and arthrokinematics.

CO3: Provide students insight into normal structural anatomy of thorax and organs in it.

CO4: Aware of structural and functional knowledge of head and neck structures.

CO5: Understand the anatomical organisation of central nervous system, brain, spinal Cord, nerves and peripheral nervous system.

Part A

10 x 1 = 10

Choose the Correct Answer

- Identify the structure on a coronal section at the caudate-head level and are related to consolidated descending sensorimotor fibers. CO1 K1
 - Corpus Callosum, genu
 - Septum pellucidum
 - Caudate nucleus, Head
 - Internal Capsule
- Neurulation is a process in which the neural tube in the embryo eventually matures into the brain and spinal cord. Primary neurulation defects leads to _____. CO1 K1
 - Anencephaly
 - Spina Bifida occulta
 - Meningocele
 - Meningomyelocele
- In the Circle of Wills, the posterior communicating arteries connect the internal carotid arteries with the _____ artery. CO1 K1
 - Anterior communicating artery
 - Vertebral artery
 - Basilar artery
 - Posterior spinal artery
- Extrafusal muscle fibers are innervated by _____ neurons CO2 K1
 - alpha motor
 - alpha sensory
 - gamma motor
 - gamma sensory
- The sensory function of the facial nerve involves the mediation of taste sensation from the _____ of the tongue and the nasopharynx CO2 K1
 - Posterior one-third
 - Posterior third
 - Anterior two-thirds
 - Anterior one-third
- A condition indicating that the individuals with ____ diagnosis should have prominent deficits in language, in the absence of other cognitive or behavioral impairment, for the first two years of the disease. CO5 K1
 - Dementia
 - Amyotrophic Lateral Sclerosis
 - Aphasia
 - Primary Progressive Aphasia
- Pellagra is defined by the systemic disease resulting from _____ deficiency. CO3 K1
 - mycin
 - niacin
 - vitamin K
 - vitamin B12
- The process where the muscles are deprived of lower motor neuron input resulting in the generation of slow repetitive action potentials and contract regularly is called ____ CO3 K1
 - Atrophy
 - Fibrillation
 - Fasciculations
 - Paresis

9. Neurological cells have their own specific purpose, primarily providing the structural support and environmental maintenance for the work of neurons. After cerebral injury, _____ clean up the debris caused by cellular deterioration. CO2 K1
 a. Astrocytes b. Oligodendrocytes c. Microglia d. Ependyma cells
10. Hemiballismus refers to the acquired wild flinging movements involving one side of the body secondary to a lesion in the _____ nucleus. CO4 K1
 a. Thalamu b. Epithalamus c. Hypothalamus d. Subthalamus

Part B

5 x 6 = 30

Answer ALL questions

Each answer should not exceed 400 words or two pages

- 11.a. Write a short note on the neural organisation. CO1 K2
 (or)
- 11.b. Discuss about speech and language areas of brain. CO2 K2
- 12.a. List the pyramidal and extrapyramidal pathways of nervous system. CO2 K3
 (or)
- 12.b. Write a short note on sensory and motor examination. CO2 K2
- 13.a. Describe the signs and symptoms of meningitis associated with speech and hearing disorders. CO3 K2
 (or)
- 13.b. Explain the cause of dyskinetic dysarthria. CO3 K2
- 14.a. Describe the types of cerebrovascular diseases leading to various types of speech-hearing disorders. CO4 K2
 (or)
- 14.b. Write a short note on phenylketonuria and wilson's disease. CO4 K2
- 15.a. Give a small description of one test to assess mastication and deglutition. CO5 K2
 (or)
- 15.b. List out the general management principles and options for adults with neurogenic speech, language, and hearing disorders. CO5 K2

Part C

5 x 12 = 60

Answer ALL questions

Each answer should not exceed 800 words or four pages

- 16.a. Describe in detail the blood supply to the brain. CO1 K2
 (or)
- 16 b. Describe cerebral cortex and its lobes with a neat diagram. CO2 K2
- 17.a. Discuss cranial nerves with its origin and functions. CO1 K2
 (or)
- 17.b. Discuss the importance of screening and bedside neurological examination. CO2 K2
- 18.a. Describe in detail the source and circulation of CSF and discuss the etiopathogenesis of hydrocephalus. CO3 K2
 (or)
- 18.b. Discuss the different types of dysarthria with its signs and symptoms. CO3 K2
- 19.a. Write a short note on trauma to the central nervous system. CO4 K2
 (or)
- 19.b. Describe the pathophysiology and the clinical features of Alzheimer's disease and Parkinsonism disease. CO5 K2
- 20.a. Discuss the demyelinating conditions and its impact on speech and language. CO4 K2
 (or)
- 20.b. Explain in detail any two childhood language disorders associated with neurologic disorders. CO5 K2
