Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. Neuro Science Technology Degree Examination – 03-Jan-2022

Time: Three Hours **Max. Marks: 80 Marks**

Advanced Neuro Sciences Technology - I
Q.P. CODE: 2845

Your answers should be specific to the questions asked
Draw neat labeled diagrams wherever necessary

LONG ESSAYS (Answer any Two) **2 x 10 = 20 Marks**

1. Write in detail about action potential. Add a note on neuromuscular junction disorders.
2. Describe in detail about peripheral neuropathies.
3. What do you understand by somatosensory evoked potentials? Describe the test protocol and its normative data.

SHORT ESSAYS (Answer any Six) **6 x 5 = 30 Marks**

4. VEP
5. Blink reflex
6. Myasthenia gravis
7. Median SSEP
8. AIDP and CIDP. Add a note on GBS
9. MEP
10. BAER
11. Motor Neuron Disease.

SHORT ANSWERS (Answer any Ten) **10 x 3 = 30 Marks**

12. Maintenance of electrodes.
13. Filter setting used for EPs.
14. Inflammatory demyelinating neuropathy.
15 Progressive polyradiculoneuropathy.
16. Mononeuropathy.
17. Miller Fisher syndrome.
18. Meralgiaparesthetica
19. Axonal reflex
20. Temporal dispersion
21. Patient preparation for EPs
22. FNC
23. Metabolic disorders.

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Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. Neuro Science Technology Degree Examination – 05-Jan-2022

Time: Three Hours **Max. Marks: 80 Marks**

Advanced Neuro Sciences Technology - II
Q.P. CODE: 2846

Your answers should be specific to the questions asked
Draw neat labeled diagrams wherever necessary

LONG ESSAYS (Answer any Two) **2 x 10 = 20 Marks**

1. Describe the different types of epileptiform activities. Describe the characteristic discharge patterns seen in different types of seizures.
2. Detail on pediatric polysomnography
3. What are the causes of dementia? Describe the clinical features of Alzheimer's disease.

SHORT ESSAYS (Answer any Six) **6 x 5 = 30 Marks**

4. DMD
5. Concentric needle
6. Jitter blocking
7. MSLT
8. Breach effect
9. Glascow coma scale
10. Facioscapulohumeral MD
11. Explain any three parasomnias

SHORT ANSWERS (Answer any Ten) **10 x 3 = 30 Marks**

12. Cataplexy
13. Myotonia
14. Dystonia
15 Neurogenic pattern
16. Types of EMG needles
17. Mμ rhythm
18. Hypsarrhythmia
19. Gamma rhythm
20. CJD
21. Subacute sclerosing panencephalitis
22. Jacksonian march
23. Pediatric montage

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Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. Neuro Science Technology Degree Examination – 07-Jan-2022

Time: Three Hours **Max. Marks: 80 Marks**

Systemic Diseases
Q.P. CODE: 2847

Your answers should be specific to the questions asked
Draw neat labeled diagrams wherever necessary

LONG ESSAYS (Answer any Two) **2 x 10 = 20 Marks**

1. Etiopathogenesis, clinical features and management of Parkinsonism.
2. Sleep disorders
3. Pathophysiology, clinical features and management of Migraine.

SHORT ESSAYS (Answer any Six) **6 x 5 = 30 Marks**

4. Management of ischemic stroke
5. Describe antimycobacterial drugs.
6. Lumbar puncture
7. Aphasia.
8. Cervical spondylosis
9. Clinical features and management of Botulism
10. Beri beri
11. Status epilepticus

SHORT ANSWERS (Answer any Ten) **10 x 3 = 30 Marks**

12. Three causes of peripheral neuropathy
13. Three cause for muscle cramps
14. Name three Antiplatlets
15 Classification for inflammatory Myopatheis
16. Three causes of Macrocephaly
17. Three mitochondrial diseases affecting central nervous system
18. Three causes of Intracranial bleed
19. Three antidepressants
20. Branches of facial nerve
21. Three viral causes of meningitis
22. Three adverse effects of valproate
23. Three causes of Vertigo

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Neuro Sciences Technology Degree Examination – 14-Jan-2022

Time: Three Hours **Max. Marks: 100 Marks**

BASIC ELECTROENCEPHALOGRAPHY (EEG) – (RS-3)

Q.P. CODE: 3307

Your answers should be specific to the questions asked.
Draw neat labeled diagrams wherever necessary

LONG ESSAYS (Second Question Choice) **2 x 10 = 20 Marks**

1. Define epilepsy, classification of epilepsy.
2. Enumerate the stages of sleep. Write a brief note on sleep disorders.
   OR
   Essay on digital signal processing and add a not eon advantages of DSP and filters.

SHORT ESSAYS (Question No 5 & 10 choice) **10 x 5 = 50 Marks**

3. Photic stimulation.
4. Montages.
5. Spike and wave complexes.
   OR
   Electrical silence.
6. Dementia.
7. Impedance.
8. SSPE.
9. Narcolepsy.
10. Polyspikes
    OR
    Intra Operative Monitoring.
11. CMR.
12. Advantages and disadvantages of EEG

SHORT ANSWER **10 x 3 = 30 Marks**

13. Voltage.
14. Alpha Rhythm.
15. Calibration.
16. EMG artefacts.
17. Sampling rate.
18. Management of Ischemic stroke.
19. PLEDS.
20. Central sleep apnea.
21. Block diagram of EEG.
22. Mu rhythm.

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Neuro Sciences Technology Degree Examination – 17-Jan-2022

Time: Three Hours **Max. Marks: 100 Marks**

BASICS OF NERVE CONDUCTION STUDY (NCS) – (RS-3)

Q.P. CODE: 3308

Your answers should be specific to the questions asked.
Draw neat labeled diagrams wherever necessary

LONG ESSAYS (Second Question Choice) **2 x 10 = 20 Marks**

1. Principle, procedure and techniques of nerve conduction study.
2. Anatomy, course and branches of radial nerve with diagram. Add a note on its clinical conditions.

   OR

   Essay on sacral plexus and its injuries with diagram.

SHORT ESSAYS (Question No 5 & 10 choice) **10 x 5 = 50 Marks**

3. CTS.
4. Ulnar Nerve conduction studies.
5. Action potential.

   OR

   Common peroneal nerve.
6. H-Reflex.
7. CIDP.
8. Patient preparation for NCS.
9. Electrical safety and safety rules.
10. Nerve Injury.

    OR

    Cervical Radiculopathy.
11. Brachial plexus.
12. Femoral nerve conduction.

SHORT ANSWER **10 x 3 = 30 Marks**

13. Phalen's maneuver.
14. Claw hand.
15. Conduction block.
16. Recording techniques for Sural NCS.
17. Conduction velocity.
18. Inching technique.
19. Musculocutaneous nerve.
20. Management of Cubital tunnel syndrome.
21. Etiology of brachial plexopathy.
22. Stimulator.

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Neuro Sciences Technology Degree Examination – 19-Jan-2022

Time: Three Hours **Max. Marks: 100 Marks**

Applied Anatomy and Physiology Related to Neuroscience Technology (RS-3)

Q.P. CODE: 3309

Your answers should be specific to the questions asked.
Draw neat labeled diagrams wherever necessary

LONG ESSAYS (Second Question Choice) **2 x 10 = 20 Marks**

1. Essay on function, divisions, connections and applied aspects of cerebellum.
2. Blood supply of the brian. Add a note on Circle of Willis.
   OR
   Write an essay on spinal cord.

SHORT ESSAYS (Question No 5 & 10 choice) **10 x 5 = 50 Marks**

3. Nervous system.
4. Frontal Lobe.
5. Difference between UMN and LMN lesions.
   OR
   Histology of Cerebrum.
6. Functions of Thalamus.
7. Facial Nerve.
8. Sympathetic Nervous system.
9. Visual pathway.
10. Cavernous sinus.
    OR
    Histology of peripheral nerve.
11. Action potential.
12. Subarachnoid cisterns.

SHORT ANSWER **10 x 3 = 30 Marks**

13. Electrical synapse.
14. Arch cerebellum.
15. Oculomotor nerve.
16. Name the ventricle of brian.
17. Parts of Carpus collosum
18. Spina bifida.
19. Name any four sulci of cerebrum.
20. Dopamine.
21. Wernicke's are.
22. Wilsons's disease.

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Neuro Sciences Technology Degree Examination – 21-Jan-2022

Time: Three Hours **Max. Marks: 100 Marks**

PHARMACOLOGY (RS-3)

Q.P. CODE: 3310

Your answers should be specific to the questions asked.
Draw neat labeled diagrams wherever necessary

LONG ESSAYS (Second Question Choice) **2 x 10 = 20 Marks**

1. Classify antiepileptics. Discuss the mechanism of action, adverse effects and uses of phenytoin sodium.
2. Classify oral antidiabetic drugs. Discuss the mechanism of action, adverse effects and uses of any one of them.

   OR

   Name four Glucocorticoid preparations. Discuss the uses and adverse effects of glucocorticoids.

SHORT ESSAYS (Question No 5 & 10 choice) **10 x 5 = 50 Marks**

3. Reversible anticholinesterases.
4. Antiplatelet drugs.
5. Angiotensin – converting enzyme (ACE) inhibitors.

   OR

   Ketoconazole.
6. Central neurotransmitters.
7. Heparin.
8. Frusemide.
9. Uses of opioid analgesics.
10. Centrally acting muscle relaxants.

    OR

    Levodopa.
11. Plasma half life.
12. Uses and adverse effects of aspirin.

SHORT ANSWER **10 x 3 = 30 Marks**

13. Name three drugs used in angina.
14. List three drugs used in alcohol dependence.
15. List three antitubercular drugs.
16. List three anti-inflammatory drugs.
17. List three drugs used as preanaesthetic medication.
18. List three oral anticoagulants.
19. List three CNS stimulants.
20. Mention three adverse effects of carbamazepine.
21. Mention three uses of diazepam.
22. Name three Mydriatics.

Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. Neuro Science Technology Degree Examination – 05-Jul-2022

Time: Three Hours **Max. Marks: 80 Marks**

ADVANCED NEURO SCIENCES TECHNOLOGY - I
Q.P. CODE: 2845

Your answers should be specific to the questions asked
Draw neat labeled diagrams wherever necessary

LONG ESSAYS (Answer any Two) **2 x 10 = 20 Marks**

1. Explain Parkinson disorder in detail
2. Define RNST pictorial presentation of RNST in presynaptic and post synaptic disorders and explain the disorders in detail
3. Describe the stimulation and recording parameters for evaluation Somatosensory evoked potential and add note on median SSEP with suitable diagram

SHORT ESSAYS (Answer any Six) **6 x 5 = 30 Marks**

4. Normal waveforms of BAER with its generators
5. VEP
6. Types of stoke
7. Normal CMCT measurement
8. Normal tibial SSEP
9. Neuro muscular junction
10. Wilson’s disease
11. Abnormal patterns of blink reflex

SHORT ANSWERS (Answer any Ten) **10 x 3 = 30 Marks**

12. Treatment for myasthenia gravis
13. Bell’s phenomena
14. Tarsal tunnel syndrome
15 Branches of trigeminal nerve
16. Factors affecting VEP
17. Collision technique
18. Increment response
19. Types of polyneuropathy
20. Latency and conduction velocity
21. Collision technique
22. Types of MEP
23. Trigeminal neuralgia

Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. Neuro Science Technology Degree Examination – 07-Jul-2022

Time: Three Hours **Max. Marks: 80 Marks**

ADVANCED NEURO SCIENCES TECHNOLOGY - II
Q.P. CODE: 2846

Your answers should be specific to the questions asked
Draw neat labeled diagrams wherever necessary

LONG ESSAYS (Answer any Two) **2 x 10 = 20 Marks**

1. What is needle electromyography and discuss about the inference pattern and how does EMG differ from neuropathy and Myopathy
2. Discuss about Polysomnography in detail
3. Discuss in detail about the types of muscular dystrophy

SHORT ESSAYS (Answer any Six) **6 x 5 = 30 Marks**

4. What are fasciculation, fibrillation and positive sharp waves?
5. Explain resting membrane potential and action potential
6. JITTER and blocking
7. Types of needles used in EMG
8. Define aphasia and its types
9. Patient counseling in EMG
10. Short note on deep breathing test
11. Paediatric PSG

SHORT ANSWERS (Answer any Ten) **10 x 3 = 30 Marks**

12. Define REM sleep
13. Vertex sharp waves
14. Somnambulism
15 CPAP
16. R-R interval
17. Three test for autonomic nervous system
18. Stages of sleep
19. Sympathetic skin response
20. Cataplexy
21. Types of muscle disorder where EMG is performed
22. Enumerate parameters recorded in EMG
23. Short note on MUP

Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. Neuro Science Technology Degree Examination – 11-Jul-2022

Time: Three Hours **Max. Marks: 80 Marks**

Systemic Diseases
Q.P. CODE: 2847

Your answers should be specific to the questions asked
Draw neat labeled diagrams wherever necessary

LONG ESSAYS (Answer any Two) **2 x 10 = 20 Marks**

1. Describe the etiopathogenesis clinical features and management of subarachnoid haemorrhage
2. Describe the clinical features, management, complications of tubercular meningitis
3. Etiopathogenesis, clinical features and management of botulism

SHORT ESSAYS (Answer any Six) **6 x 5 = 30 Marks**

4. Facial nerve-anatomy and its testing
5. Post exposure prophylaxis for rabies
6. Migraine
7. Hydrocephalus
8. Pathophysiology of myasthenia gravis
9. Treatment of Parkinson's disease
10. Describe different types of seizure
11. Bed sores

SHORT ANSWERS (Answer any Ten) **10 x 3 = 30 Marks**

12. Three causes of syncope
13. Three drugs for status epilepticus
14. Lumbar puncture contraindications
15 Three causes of spastic paraplegia
16. Three drugs used for multiple sclerosis
17. Three causes of aphasia
18. Three causes of microcephaly
19. Name three anticoagulants
20. Three causes of toxic myopathies
21. Three causes for loss of consciousness
22. Three causes of Dementia
23. Name three antipsychotic drugs

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Neuro Sciences Technology Degree Examination – 18-Jul-2022

Time: Three Hours **Max. Marks: 100 Marks**

BASIC ELECTROENCEPHALOGRAPHY (EEG) – (RS-3)

Q.P. CODE: 3307

Your answers should be specific to the questions asked.
Draw neat labeled diagrams wherever necessary

LONG ESSAYS (Second Question Choice) **2 x 10 = 20 Marks**

1. Write the international 10-20 system of electrode placements of standard EEG and diagram.
2. Enumerate the EEG artifacts, their recognition and elimination.
   OR
   Neurophysiological basis of EEG.

SHORT ESSAYS (Question No 5 & 10 choice) **10 x 5 = 50 Marks**

3. Alpha blocking.
4. EEG in hypoxic brain injury.
5. Progressive myoclonic epilepsy.
   OR
   Photic drive.
6. Polysomnography.
7. Usefulness of EEG recording in ICU.
8. EEG patterns in absence seizures.
9. Various activation methods.
10. Infantile spasms (west syndrome).
    OR
    Glasgow coma scale.
11. FIRDA.
12. Benign rolandic epilepsy.

SHORT ANSWER **10 x 3 = 30 Marks**

13. EEG in brain death.
14. Sleep spindles.
15. Sphenoidal electrodes.
16. Alpha wave.
17. Burse suppression.
18. Breach rhythm.
19. EEG in CJD.
20. Febrile seizures.
21. Hot water epilepsy.
22. EEG in hepatic failure.

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Neuro Sciences Technology Degree Examination – 20-Jul-2022

Time: Three Hours **Max. Marks: 100 Marks**

BASICS OF NERVE CONDUCTION STUDY (NCS) – (RS-3)

Q.P. CODE: 3308

Your answers should be specific to the questions asked.
Draw neat labeled diagrams wherever necessary

LONG ESSAYS (Second Question Choice) **2 x 10 = 20 Marks**

1. Draw a diagram of the brachial plexus and describe its electrophysiological evaluation.
2. Nerve conduction in cranial neuropathies.
   OR
   Name a disorder of the anterior horn cells and describe its electrophysiological evaluation.

SHORT ESSAYS (Question No 5 & 10 choice) **10 x 5 = 50 Marks**

3. Phrenic nerve stimulation.
4. F wave.
5. Peripheral neuropathy.
   OR
   Brachial Plexus.
6. Nerve conduction in carpal tunnel syndrome.
7. Nerve conduction techniques.
8. Repetitive nerve stimulation.
9. Normal values for common nerve conduction studies.
10. Electro diagnosis of C5-6 Radiculopathy.
    OR
    Resting membrane potential.
11. CMR
12. Inching technique.

SHORT ANSWER **10 x 3 = 30 Marks**

13. Jilter.
14. Blink reflex.
15. EMG needle electrodes.
16. Temporal dispersion.
17. PLEDS
18. Neurogenic pattern in EMG.
19. Artifacts in nerve conduction study.
20. Femoral nerve stimulation.
21. Positive sharp waves.
22. Erbis point stimulation – technique and utility.

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Neuro Sciences Technology Degree Examination – 22-Jul-2022

Time: Three Hours **Max. Marks: 100 Marks**

Applied Anatomy and Physiology related to Neuroscience Technology (RS-3)

Q.P. CODE: 3309

Your answers should be specific to the questions asked.
Draw neat labeled diagrams wherever necessary

LONG ESSAYS (Second Question Choice) **2 x 10 = 20 Marks**

1. Describe the origin, course, termination and functions of corticospinal tract. Add a note on Hemiplegia.

2. Blood supply of brain. Add a note on circle of Willis.
   OR
   Describe formation, circulation and functions of CSF. Add a note on hydrocephalus.

SHORT ESSAYS (Question No 5 & 10 choice) **10 x 5 = 50 Marks**

3. Parasympathetic nervous system.
4. Synaptic transmission.
5. Thalamus.
   OR
   Fasciculus Gracilis and Fasciculus cuneatus.
6. Arterial supply of the cerebellum.
7. Write a note on Temporal lobe with diagram.
8. Ventricle of Brain.
9. BBB
10. Parkinson's disease.
    OR
    External features of Pons.
11. Properties of reflexes.
12. 10^{th} cranial nerve.

SHORT ANSWER **10 x 3 = 30 Marks**

13. Functions of cerebellum.
14. Cauda equina.
15. Basilar artery.
16. Synapse.
17. Draw a neat labelled diagram of Neuron.
18. Blood supply of the medulla.
19. Classification of ANS.
20. Multiple sclerosis.
21. Babinski sign.
22. Red nucleus.

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Neuro Sciences Technology Degree Examination – 25-Jul-2022

Time: Three Hours **Max. Marks: 100 Marks**

PHARMACOLOGY (RS-3)

Q.P. CODE: 3310

Your answers should be specific to the questions asked.
Draw neat labeled diagrams wherever necessary

LONG ESSAYS (Second Question Choice) **2 x 10 = 20 Marks**

1. Classify skeletal muscle relaxants. Write the mechanism of action, adverse effects and uses of pancuronium.
2. Classify non-steroidal anti-inflammatory drugs (NSAIDs). Write the mechanism of action, uses and adverse effects of aspirin.

   OR

   Classify antiparkinsonian drugs. Write the mechanism of action and adverse effects of levodopa.

SHORT ESSAYS (Question No 5 & 10 choice) **10 x 5 = 50 Marks**

3. Warfarin – mode of action, indication and dose.
4. Define Miotics give example and indication of Miotics.
5. Pentothal sodium – Indication and adverse effect.

   OR

   Uses of prednisolone and dose.
6. Compare and contrast neostigmine and physostigmine.
7. Name three drugs in the treatment of angina. Write the mechanism of action of any one of them.
8. List four oral antidiabetic drugs. Write a note on any one of them.
9. Classify Aminoglycosides and explain the mode of action of aminoglycosides.
10. Penicillin G – indication and adverse effect.

    OR

    Mannitol – mode of action and indication.
11. Sodium valproate – mode of action and indication.
12. Neurotransmitters of autonomic nervous system.

SHORT ANSWER **10 x 3 = 30 Marks**

13. List three of uses of diazepam.
14. List three coagulants.
15. Name three adverse effects of phenytoin.
16. Name three general anaesthetics.
17. Name three antifungal drugs.
18. Name three drugs used in tuberculosis.
19. List three antiplatelet drugs.
20. List drugs used in status epilepticus.
21. Name three drugs used in Acquired Immunodeficiency Syndrome.
22. List three uses of lignocaine.

Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. Neuro Sciences Technology Degree Examination – 12-Dec-2022

Time: Three Hours **Max. Marks: 100**

ADVANCED TECHNIQUE- I (RS-3)

Q.P. CODE: 3311

Your answers should be specific to the questions asked
Draw neat labeled diagrams wherever necessary

LONG ESSAYS (Second Question Choice) **2 x 10 = 20 Marks**

1. Somato sensory evoked potentials. Describe test protocols and its normative data
2. Describe in detail about Brain Stem Auditory Evoked Response and its clinical conditions

   OR

   Describe Lumbar Plexus in detail

SHORT ESSAYS (Question No 5 & 10 choice) **10 x 5 = 50 Marks**

3. Facial nerve
4. Normal tibial SSEP
5. Types of stroke

   OR

   L5-S1 radiculopathy
6. Blink reflex and abnormal patterns
7. Patient preparation, materials required and normal waveforms in BAER
8. Acute Inflammatory Demyelinating Polyneuropathy (AIDP)
9. Visual Evoked Potential (VEP)
10. Wilson's disease

    OR

    Sacral plexus
11. Spinal cord compression and spinal cord injury
12. Normal CMCT measurements

SHORT ANSWER **10 x 3 = 30 Marks**

13. BAER in paediatrics
14. Meralgia paresthetica
15. Tarsal tunnel syndrome
16. Diabetic neuropathy
17. Tibial nerve
18. Trigeminal nerve
19. Clinical applications of SEP in multiple sclerosis
20. Cervical Spondylosis
21. Autonomic neuropathy
22. Hydrocephalus

Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. Neuro Sciences Technology Degree Examination – 14-Dec-2022

Time: Three Hours **Max. Marks: 100 Marks**

ADVANCED TECHNIQUE - II (RS-3)

Q.P. CODE: 3312

Your answers should be specific to the questions asked.
Draw neat labeled diagrams wherever necessary

LONG ESSAYS (Second Question Choice) **2 x 10 = 20 Marks**

1. What is electromyography? Describe the principles of electromyography.
2. Describe the stages of sleep. Describe NREM disorders.
   OR
   Electrophysiological evaluation of brachial plexus.

SHORT ESSAYS (Question No 5 & 10 choice) **10 x 5 = 50 Marks**

3. K complex.
4. Nocturnal seizures.
5. Fibre density.
   OR
   Cervical spondylosis.
6. Apraxia.
7. Jilter.
8. Inching technique.
9. Fasiculations.
10. Visual evoke potential.
    OR
    Capinograph.
11. Repetetive nerve stimulation.
12. EMG in Myopathic disorder.

SHORT ANSWER **10 x 3 = 30 Marks**

13. EMG in Myotonia.
14. Duchene Muscular Dystrophy.
15. Types of EMG needles.
16. Restless leg syndrome.
17. REM sleep disorder.
18. Dysarthria.
19. Central apnea.
20. Macro EMG.
21. Tilt trace testing.
22. Erb point stimulation.

Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. Neuro Sciences Technology Degree Examination – 16-Dec-2022

Time: Three Hours **Max. Marks: 100 Marks**

SYSTEMIC DISEASES (RS-3)

Q.P. CODE: 3313

Your answers should be specific to the questions asked.
Draw neat labeled diagrams wherever necessary

LONG ESSAYS (Second Question Choice) **2 x 10 = 20 Marks**

1. Describe in detail about hydrocephalus and its types.
2. Describe autonomic pathways and symptoms of autonomic dysfunction.
   OR
   Clinical features of upper motor neuron disease and discuss ALS.

SHORT ESSAYS (Question No 5 & 10 choice) **10 x 5 = 50 Marks**

3. Symptoms of vitamin B12 define.
4. Botulism.
5. Trigeminal neuralgia.
   OR
   Alzheimer's disease.
6. Herpes simplex encephalic.
7. Migraine.
8. Spinal muscular dystrophy.
9. West syndrome.
10. Treatment of status epilepticus in adults.
    OR
    Vertigo.
11. Embolic stroke.
12. Mitochondrial myopathy.

SHORT ANSWER **10 x 3 = 30 Marks**

13. Acetylcholine receptor antibody.
14. Treatment of myasthenia graves.
15. Cause of dementia.
16. Cervical Dystonia.
17. Loss of consciousness.
18. Treatment of writers cramp.
19. Causes of obstructive hydrocephalus.
20. Tension headache.
21. Chorea treatment.
22. Syncope and its types and Vasovagal syncope.