# Rajiv Gandhi University of Health Sciences, Karnataka

**II Year B.Sc. Neuro Science Technology Degree Examination – 29-May-2024**

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

## Basic Electroencephalography

## Q.P. CODE: 2841

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 down the principle, indications and descriptive notes on normal rhythms in EEG
2. a) Write down in detail about the physiology of sleep and stages of sleep in EEG
   b) Essay on hydrocephalous
3. Write down in detail about the types of montages. Essay on Alzheimer

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

4. Abnormal background activity EEG
5. Absence seizure
6. a) Types of needles used in EEG
   b) Video EEG
7. Referential montage in EEG
8. Write a short note types of CIDP
9. **Factors affecting EEG**
10. Drugs used for epilepsy
11. a) Activation procedure
    b) Uses of EEG

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

12. BETS
13. PLEDs
14. a) **Cone Waves**
    b) **Triphasic sharp waves**
15. Scalp electrode
16. Partial seizure
17. Transistor
18. Common mode rejection ratio
19. a) Tympanic electrode
    b) EC Gartefact
20. Photic stimulation
21. Nasopharyngeal electrode
22. Impedance
23. Delta wave

# Rajiv Gandhi University of Health Sciences, Karnataka

**II Year B.Sc. Neuro Science Technology Degree Examination – 04-Jun-2024**

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

## Basic of Nerve Conduction Study (NCS)
## Q.P. CODE: 2842

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 down in detail about the anatomy of radial nerve and a short on wrist drop
2. a) Describe the nerve conduction studies technique explain resting membrane potential and action potential compound muscle action potential, sensory action potential
   b) Discuss about the anatomy of trigeminal nerve with a neat labelled diagram and add a note trigeminal neuralagia
3. Essay on Brainstem auditory evoked potentials, auditory pathway
   Or
   **Write in detail on computer applications in nerve conduction studies.**

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

4. Neat labelled diagram of brachial plexus
5. Axillary nerve
6. a) Guillan Bare Syndrome
   b) NCS findings in CTS
7. Tarsal tunnel syndrome
8. Lumbosacral plexus
9. Explain about Rheobase and Chronaxie
   Or
   **Wallerian degeneration**
10. H reflex
11. a) F-wave and its clinical implications
    b) Latency amplitude and conduction velocity

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

12. Tinel's sign
13. Femoral nerve
14. a) Obturator nerve
    b) Indications for NCS
15 Temporal dispersion
16. Treatment protocol for GBS
17. Collision technique
18. Branches of facial nerve
19. a) Axonal reflex
    b) Reflex arc
20. Electrode placement of sural nerve
21. Demyelinating features of NCS
22. Define SNAP
23. Multiple sclerosis

# Rajiv Gandhi University of Health Sciences, Karnataka

**II Year B.Sc. Neuro Science Technology Degree Examination – 06-Jun-2024**

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

## Applied Anatomy and Physiology Related to Neuroscience Technology
## Q.P. CODE: 2843

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. Essay on function, divisions, connections and applied anatomy of cerebellum.
2. Describe formation, circulation and function of cerebrospinal fluid. Add a note on hydrocephalus.
3. Essay on ANS and its applied anatomy.

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

4. Classify nervous system.
5. Sense of hearing.
6. Signs of cerebellar dysfunction.
7. Basal ganglia.
8. Hormones of anterior and posterior lobes of pituitary gland.
9. Pyramidal tract.
10. Occipital lobe.
11. Auditory pathway.

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

12. Name the parts of corpus collapsum.
13. Hypoxia.
14. Segments of spinal cord.
15 GBS.
16. TIA.
17. Upper trunk lesion.
18. Circle of willis.
19. Mid brain.
20. Rhomboid fossa – boundries.
21. Block diagram of EEG.
22. Hormone regulation.
23. Applied anatomy of pons.

# Rajiv Gandhi University of Health Sciences, Karnataka

**II Year B.Sc. Neuro Science Technology Degree Examination – 10-Jun-2024**

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

## Pharmacology Related to Neuroscience Technology
## Q.P. CODE: 2844

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. Classify antitubercular drugs. Discuss the mechanism of action, therapeutic uses and adverse effects of Rifampicin.
2. Classify antianginal drugs. Discuss the therapeutic uses and adverse effects of Nitroglycerine.
3. Classify opiod analgesics. Discuss the therapeutic uses and contraindications of Morphine.

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

4. Therapeutic uses and adverse effects of Glucocorticoids.
5. Therapeutic uses and adverse effects of Heparin.
6. Phase II Biotransformation reactions.
7. Therapeutic uses and adverse effects of ACE inhibitors.
8. Therapeutic uses and adverse effects of Sodium Valporate.
9. Gabapentin.
10. Plasma protein binding.
11. Techniques of local anaesthesia.

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

12. Rational of combining Lignocaine with Adrenaline.
13. Name the Heparin Antagonist with its source and route of administration.
14. Therapeutic Index.
15 Name any three Mydriatics.
16. Discuss the mechanism of action and mention one specific use of Dapsone.
17. Name any three antiretroviral drugs.
18. Mention any three uses of Aspirin.
19. Name any three general anesthetic agents.
20. Mention three uses of Doxycycline.
21. Name any three skeletal muscle relaxants.
22. Mention three uses of Amoxicillin.
23. Mention three uses of Neostigmine.

# Rajiv Gandhi University of Health Sciences, Karnataka

**II Year B.Sc. Neuro Sciences Technology Degree Examination – 29-May-2024**

**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 in detail on EEG changes in sleep.
2. Write in detail about international 10-20 system.
   **OR**
   Write in detail on Intraoperative changes during Epilepsy surgery.

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

3. Video EEG.
4. Parkinson's disease.
5. Common mode rejection.
   **OR**
   Activation procedure in EEG.
6. Factors and drugs affecting EEG.
7. Hydrocephalus.
8. Signal to noise ratio.
9. Ischemic stroke.
10. Pen mechanism.
    **OR**
    Management of seizure.
11. Glass cow coma scale.
12. Non physiological artifacts.

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

13. Draw a neat diagram of monopolar montage.
14. Neuro transmitters in EEG.
15. Cone waves.
16. Contraindication of Hyperventilation.
17. Clinical features in Parkinson's disease.
18. Paper speed.
19. Sampling rate.
20. Conduction Block.
21. Ground artifacts and Glassokinetic artifacts.
22. Frontal Intermittent Rhythmic Delta Activity (FIRDA).

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# Rajiv Gandhi University of Health Sciences, Karnataka

## II Year B.Sc. Neuro Sciences Technology Degree Examination – 04-Jun-2024

**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. Describe in detail about Trigeminal Nerve.
2. What is Electromyography? Describe the principles of needle Electromyography.
   **OR**
   Describe in detail about Brachial plexus.

   Or
   **Write in detail on the anatomy and nerve conduction studies of median nerve with its clinical correlations.**

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

3. Peripheral neuropathy.
4. Nerve conduction in facial palsy.
5. Entrapmement Neuropathies.
   **OR**
   Sural nerve.
6. Nerve conduction in peroneal Nerve.
7. Cubital tunnel syndrome.
8. Phrenic nerve stimulation.
   Or
   **Traumatic demyelination**
9. Peripheral neuropathy.
   Or
   **Nerve conduction study of ulnar nerve**
10. **Repititive nerve stimulation**
    **OR**
    Median nerve.
11. H reflex.
12. F waves.

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

13. Jitter.
14. Fibre density.
15. CMAP.
16. Temporal dispersion.
17. Wallerian degeneration.
18. Axonal motor neuron disease.

19. Blink reflex.
    Or
    **Saturday night palsy.**
20. Spontaneous activity in EMG.
21. Tarsal tunnel syndrome.
22. Tibial neuropathy.

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**II Year B.Sc. Neuro Sciences Technology Degree Examination – 06-Jun-2024**

**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. Write in detail on the mechanism of muscle contraction
2. Describe the origin, course, termination and functions of corticospinal tract(pyramidal tract) with the help of a labelled diagram
   **OR**
   Name the endocrine glands. Describe thyroid gland in detail

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

3. Visual pathway
4. Cerebellum
5. Arterial supply of brain
   **OR**
   Synaptic transmission of Neurons
6. Meninges of brain
7. Motor unit
8. Pons
9. Functions of Medulla oblongata
10. Sympathetic nervous system
    **OR**
    Blood supply of spinal cord
11. Physiology of Neuromuscular junction
12. Cerebrospinal fluid

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

13. Bell's Palsy
14. Divisions of Autonomic nervous system
15. Add a note on membrane potentials
16. Functions of oculomotor nerve
17. Draw a neat diagram of brachial plexus

18. Areas of Frontal lobe
19. Ventricles of brain
20. Difference between pyramidal and extra pyramidal system
21. Motor control
22. Functions of brain stem

## II Year B.Sc. Neuro Sciences Technology Degree Examination – 10-Jun-2024

**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. Discuss the mechanism of action, adverse effects and uses of Pancuronium.
2. Classify oral antidiabetic drugs. Discuss the mechanism of action, adverse effects and uses of any one of them.

   **OR**

   Classify Non-steroidal anti-inflammatory drugs. Discuss the mechanism of action, adverse effects and uses of aspirin.

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

3. Phenytoin.
4. Amoxicillin.
5. Drugs used in Glaucoma.

   **OR**

   Drug tolerance.
6. Lignocaine.
7. Levodopa.
8. Name four antihypertensive drugs. Write the mechanism of action and adverse effects of any one of them.
9. Diazepam.
10. Adverse drug reactions.

    **OR**

    Furosemide.
11. Central neurotransmitters.
12. Name two glucocorticoids. Write their adverse effects.

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

13. List three antibiotics used in anaerobic infection.
14. List three uses of warfarin.
15. What is a receptor? Give two examples.
16. Name three coagulants.
17. List three adverse effects of carbamazepine.
18. Write three uses of Neostgmine.

19. List three intravenous anaesthetics.
20. List three anti-tubercular drugs.
21. Mention three antifungal drugs.
22. Uses of Morphine.

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**II Year B.Sc. Neuro Sciences Technology Degree Examination – 21-Nov-2024**

**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. International 10-20 system.
2. Essay on analogue to digital EEG
   **OR**
   Basics of electronics.

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

3. EEG filters.
4. Video EEG.
5. Normal EEG Rhythms.
   **OR**
   Drugs affecting EEG.
6. Classical 3Hz/Sec spike and wave complexes.
7. EEG in Coma.
8. Neurotransmitters.
9. GTCS.
10. Glasgow coma scale.
    **OR**
    Sleep transients in EEG
11. Obstructive sleep apnea.
12. Write a note on EKG artefacts.

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

13. Paper speed.
14. Name any three invasive electrodes.
15. FIRDA.
16. Block Diagram of EEG.
17. Cataplexy,
18. Gain.
19. Name any 3 Neurotransmitters in CNS.

20. Treatment for Parkinson's disease.
21. Potential difference.
22. Glassokinetic artefacts.

**II Year B.Sc. Neuro Science Technology Degree Examination – 26-Nov-2024**

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

## Basic of Nerve Conduction Study (NCS)

## Q.P. CODE: 2842

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 on sciatic Nerve conduction
2. Write in detail on Stimulation parameters in NCS
3. **Write in detail on ulnar Nerve Conduction**

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

4. Computer application in NCS
5. Axonal neuropathy
6. Facial nerve conduction
7. Recording techniques in NCS
8. H- reflex
9. Sural nerve Conduction
10. Radial sensory nerve conduction
11. SNAP

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

12. Anatomy of Radial nerve
13. Cubital tunnel syndrome
14. Duration
15 Root value of femoral nerve
16. Normal values of Peroneal nerve
17. Traumatic Demyelination
18. Muscle supply of Median nerve
19. Causes for Motor neuron disease
20. Muscle supply of Radial nerve
21. Types of Electrodes used in NCS
22. Sweep in NCS
23. Draw Brachial plexus

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# Rajiv Gandhi University of Health Sciences, Karnataka

**II Year B.Sc. Neuro Science Technology Degree Examination – 26-Nov-2024**

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

## Basic of Nerve Conduction Study (NCS)

## Q.P. CODE: 2842

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 on sciatic Nerve conduction
2. Write in detail on Stimulation parameters in NCS
3. **Write in detail on ulnar Nerve Conduction**

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

4. Computer application in NCS
5. Axonal neuropathy
6. Facial nerve conduction
7. Recording techniques in NCS
8. H- reflex
9. Sural nerve Conduction
10. Radial sensory nerve conduction
11. SNAP

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

12. Anatomy of Radial nerve
13. Cubital tunnel syndrome
14. Duration
15 Root value of femoral nerve
16. Normal values of Peroneal nerve
17. Traumatic Demyelination
18. Muscle supply of Median nerve
19. Causes for Motor neuron disease
20. Muscle supply of Radial nerve
21. Types of Electrodes used in NCS
22. Sweep in NCS
23. Draw Brachial plexus

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# Rajiv Gandhi University of Health Sciences, Karnataka

**II Year B.Sc. Neuro Sciences Technology Degree Examination – 26-Nov-2024**

**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. Electro physiology evaluation of brachial plexus.
2. Nerve conduction studies in polyneuropathies including AIDP & CIDP.
   **OR**
   Neuro conduction studies of lower limbs.

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

3. Trigeminal Nerve.
4. H reflex.
5. F waves.
   **OR**
   Sural nerve.
6. Facials nerve conduction.
7. Ulnar nerve.
8. Nerve conduction techniques.
9. **Compound muscle action potential.**
10. Nerve conduction of suprascapular nerve.
    **OR**
    Peroneal nerve.
11. EMG needle electrodes.
12. Electro diagnosing in wrist drop.

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

13. Tarsal tunnel syndrome.
14. Inching techniques.
15. **Traumatic demyelination.**
16. Small fibre neuropathy.
17. Median nerve neuropathy.
18. Late responses.
19. Diagram of brachial plexus.
20. Medium nerve conduction.
21. Saturday night palsy.
22. Brachial plexopathy.

# Rajiv Gandhi University of Health Sciences, Karnataka

**II Year B.Sc. Neuro Sciences Technology Degree Examination – 28 Nov. 2024**

**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 Autonomic Nervous system and its applied anatomy
2. Write in detail on the mechanism of muscle contraction.
   **OR**
   Name the endocrine glands. Describe thyroid gland in detail

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

3. Visual pathway
4. Cranial nerves and its functions
5. Arterial supply of brain
   **OR**
   Neurotransmitters in CNS
6. Signs of cerebellar dysfunction
7. Occipital lobe
8. Basal Ganglia
9. Functions of Medulla oblongata
10. Classify nervous system
    **OR**
    Action potential
11. Circulation of CSF
12. Functions of cerebellum

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

13. Auditory pathway
14. Floor of fourth ventricle
15. Hypoxia
16. Functions of limbic system
17. Causes for spinal cord injury
18. Bell's Palsy
19. Ventricles of brain
20. Schematic diagram of Neuron
21. Name the segments of spinal cord
22. Divisions of Trigeminal Nerve

# Rajiv Gandhi University of Health Sciences, Karnataka

**II Year B.Sc. Neuro Science Technology Degree Examination – 02-Dec-2024**

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

## Pharmacology Related to Neuroscience Technology
## Q.P. CODE: 2844

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. Define bioavailability. Discus the various factors affecting drug bioavailability.
2. Classify antihypertensive drugs. Discuss the mechanism of action and adverse effects of ACE inhibitors.
3. Classify Glucocorticoids. Discuss the therapeutic uses and adverse effects of Glucorticoids.

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

4. Therapeutic uses and adverse effects of Phenytoin Sodium
5. Therapeutic uses and adverse effects of Aspirin.
6. Phase I Biotransformation reactions.
7. Anti-Inflammatory agents.
8. Central sympatholytics.
9. Acyclovir.
10. Mannitol and urea.
11. Ciprofloxacin.

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

12. Drugs used as antiplatelet agents .
13. Name the potassium sparing diuretics.
14. Define Teratogenecity. Name two Teratogenic drugs.
15. Rationale of using nitrates in cyanide poisoning.
16. Mention three uses of mannitol.
17. Morphine is contraindicated in head injury. Justify.
18. Name any three antiretroviral drugs.
19. Name three drugs used in Hypertensive Emergency.
20. Mention three advantages of Doxycycline over Tetracycline.
21. Mention any three advantages of combination of antimicrobial drugs.
22. Rationale of using N-Acetyl cysteine in paracetamol poisoning.
23. Mention three uses of Heparin.

# Rajiv Gandhi University of Health Sciences, Karnataka

**II Year B.Sc. Neuro Sciences Technology Degree Examination – 02-Dec-2024**

**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 antiepileptic drugs. Write the mechanisms of action, therapeutic uses and adverse effects of sodium valproate.

2. Classify antihypertensive drugs. Write the therapeutic uses and adverse effects of thiazide diuretics.

   **OR**

   Classify oral antidiabetic drugs. Write the mechanism of action, therapeutic uses and adverse effects of sulfonylureas.

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

3. Intravenous route of drug administration.
4. Atropine mechanism of action and indication.
5. Paracetamol.

   **OR**

   Prednisolone.
6. Lignocaine.
7. Diazepam mode of action and indication.
8. Drugs used in Glaucoma.
9. Warfarin.
10. Levodopa.

    **OR**

    Mydriatics.
11. Organic nitrates mode of action and indication.
12. Classify β lactum antibiotics and their mode of action.

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

13. Name three skeletal muscle relaxants.
14. List three general anesthetics.
15. List three uses of aspirin.
16. Name three drugs used in treatment of HIV infection.
17. Mention three adverse effects of phenytoin.
18. **List 3 uses of opioid analgesics**
19. Name three antiplatelet drugs.
20. Enlist the drugs used to treat insomnia.
21. Enumerate three immunosuppressants.
22. Name three drugs used in bronchial asthma.

# Rajiv Gandhi University of Health Sciences, Karnataka

**II Year B.Sc. Neuro Science Technology Degree Examination – 02-Dec-2024**

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

## Pharmacology Related to Neuroscience Technology
## Q.P. CODE: 2844

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. Define bioavailability. Discus the various factors affecting drug bioavailability.
2. Classify antihypertensive drugs. Discuss the mechanism of action and adverse effects of ACE inhibitors.
3. Classify Glucocorticoids. Discuss the therapeutic uses and adverse effects of Glucorticoids.

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

4. Therapeutic uses and adverse effects of Phenytoin Sodium
5. Therapeutic uses and adverse effects of Aspirin.
6. Phase I Biotransformation reactions.
7. Anti-Inflammatory agents.
8. Central sympatholytics.
9. Acyclovir.
10. Mannitol and urea.
11. Ciprofloxacin.

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

12. Drugs used as antiplatelet agents .
13. Name the potassium sparing diuretics.
14. Define Teratogenecity. Name two Teratogenic drugs.
15. Rationale of using nitrates in cyanide poisoning.
16. Mention three uses of mannitol.
17. Morphine is contraindicated in head injury. Justify.
18. Name any three antiretroviral drugs.
19. Name three drugs used in Hypertensive Emergency.
20. Mention three advantages of Doxycycline over Tetracycline.
21. Mention any three advantages of combination of antimicrobial drugs.
22. Rationale of using N-Acetyl cysteine in paracetamol poisoning.
23. Mention three uses of Heparin.

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