Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Neuro Science Technology Degree Examination – SEP-2018

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. Enumerate the stages of sleep.
2. International 10-20 system
3. Essay on data acquisition and storage

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

4. Sampling rate
5. Anti-epileptic drugs
6. Advantages and disadvantages of EEG
7. Abnormal EEG rhythms
8. Normal EEG rhythms
9. REM sleep.
10. Short note on artifacts and mention EKG/ECG artifact.
11. OSA. Add a note on CPAP.

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

12. Patient preparation for EEG.
13. Block diagram of EEG
14. Alpha rhythm in EEG
15 Snoring
16. Block diagram of DIODE
17. EEG as time series
18. Restless Leg Syndrome (RLS)
19. Blink artifact
20. Central sleep apnea
21. Patient preparation for PSG.
22. Aneurysm.
23. Lumbar puncture

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Neuro Science Technology Degree Examination – SEP-2018

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. Classify Evoked Potentials
2. Essay on EMG, Discuss in detail about the types of EMG needle electrodes with suitable diagrams.
3. Visual Evoked Potential

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

4. F – Response
5. Short note on sympathetic divisions of ANS
6. Muscular dystrophy
7. H-Reflex
8. Electrical safety and safety rules
9. Impedance
10. Radial nerve.
11. Short essay on signal

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

12. Axillary nerve function and its muscle supply.
13. Maintenance of electrodes
14. Single fiber EMG
15 Spina bifida
16. Axonal Neuropathy.
17. Patient preparation for VEP
18. Demyelinating neuropathy
19. MUAP
20. CTS
21. Maintenance of electrodes.
22. MS Office
23. Creation of files and folders

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Neuro Science Technology Degree Examination – SEP-2018

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 ANS and its applied anatomy
2. Essay on function, divisions, connections and applied anatomy of cerebellum
3. Essay on cerebrum. Mention a note on brocha and wernicke's areas and its clinical conditions.

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

4. Cranial nerves and its functions
5. Hormones of anterior and posterior lobes of pituitary gland
6. Thyroid gland
7. Diseases of parathyroid gland
8. Thymus gland
9. Role of hypothalamus
10. Functions of autonomic nervous system
11. NMJ and its disorders

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

12. Structure, function and types of neuron
13. Blood brain barrier
14. Segments of spinal cord and add a note on disorders of spinal cord
15 Hormone regulation
16. Tests for Thyroid function
17. Block diagram of EEG
18. EEG calibration
19. Divisions of ANS
20. Spina bifida
21. Pineal gland
22. Circle of Willis
23. CSF

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Neuro Science Technology Degree Examination – SEP-2018

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 Opioid analgesics. Mention the uses and contraindications of Morphine.
2. Classify Beta blockers. Write the therapeutic uses and adverse effects of propronolol.
3. Classify Antihypertensive drugs. Enumerate the therapeutic uses and adverse effects of calcium channel blockers.

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

4. Furosemide
5. Heparin
6. Statins
7. Tetracycline
8. Aspirin – uses and contraindications
9. Nifedipine
10. Oral route of drug administration
11. Chemoprophylaxis

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

12. Uses and adverse effects of salbutamol.
13. Name the antidote in the overdose of (a) Morphine (b) Diazepam.
14. Mechanism of action and one use of Diazepam
15 Name three drugs prescribed in Bronchial Asthma.
16. Name two antianginal drugs and indicate one side effect.
17. How do you treat metabolic acidosis?
18. Name one plasma expander and mention its two uses.
19. What is bio availability?
20. Rationale of using Ethanol in Methanol poisoning
21. Mention three advantages of combining antimicrobial drugs.
22. Name three neuromuscular blocking drugs.
23. Mention three important routes of drug excretion.

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Neuro Science Technology Degree Examination – MARCH-2018

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 diuretics. Explain in detail the role of diuretics in ocular disorders.
2. Classify General Anesthetics. Explain in detail about preanaesthetic medication.
3. Define biotransformation. Discuss about phase I and phase II biotransformation reactions

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

4. Drug Synergism.
5. Ethambutol.
6. Sublingual route of drug administration.
7. Adverse effects and contraindications of Morphine.
8. Chemoprophylaxis.
9. Succinyl choline.
10. Iron Preparations.
11. Therapeutic uses of Glucocorticoids.

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

12. Define first order and zero order kinetics.
13. Define Teratogenicity. Give two examples.
14. Name three passive Mydriatics.
15. Name two Angiotensin receptor blockers and mention its one advantage over ACE Inhibitors.
16. Mention any three uses of Nitroglycerine.
17. Mention any three uses of Diazepam.
18. Mention three advantages of combination of Antimicrobials.
19. Mention the drug of choice in anaphylactic shock with its dose and route of administration.
20. Name three drugs used in Leprosy
21. Mention three indications for Heparin.
22. Name three drugs administered via transdermal therapeutic system.
23. Name two Aminoglycosides antibiotics and mention its two specific adverse effects.

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