

**MANIPAL UNIVERSITY****DM (NEUROLOGY) DEGREE EXAMINATION – JULY 2012****SUBJECT: PAPER I: BASIC SCIENCES RELATED TO NEUROLOGY**

Saturday, July 07, 2012

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

**✍ All questions carry TEN marks each.**

1. Discuss the genesis and conduction of Action Potential in a nerve cell
2. Describe the various stages of sleep
3. Describe the functions of ventral visual pathway
4. Describe the principal postural reflexes with their respective level of integration
5. Describe the various dopaminergic pathways in brain
6. Discuss the physiological role of Serotonin in brain. Add a note on serotonin receptors
7. Discuss the various muscular dystrophy associated proteins in muscle cells
8. Discuss the various intracranial pressure waves and its significances
9. Draw a diagram of Pons at the level of facial Colliculus
10. Describe the Anatomy and functions of Prefrontal lobe



## MANIPAL UNIVERSITY

## DM (NEUROLOGY) DEGREE EXAMINATION – JULY 2012

SUBJECT: PAPER II: CLINICAL NEUROLOGY DISEASES OF CENTRAL NERVOUS SYSTEM - BRAIN

Monday, July 09, 2012

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ **Answer ALL questions.**

1. Discuss the pathology in Alzheimer's disease and Binswanger's disease.

(10 marks)

2. **Write short notes on:**

- 2A. Non Systemic Vasculitic Neuropathy
- 2B. Immunoblots in Limb Girdle Dystrophies
- 2C. Utility of SSR
- 2D. SFEMG
- 2E. Quantitative EMG

(10×5 = 50 marks)

3. **Write short notes on:**

- 3A. Microarrays in Neurology
- 3B. Critical Illness Neuromyopathy
- 3C. Sildenafil
- 3D. Neuroleptic Malignant Syndrome

(10×4 = 40 marks)



**MANIPAL UNIVERSITY****DM (NEUROLOGY) DEGREE EXAMINATION – JULY 2012****SUBJECT: PAPER III: CLINICAL NEUROLOGY – DISEASES OF SPINAL CORD, NERVES, NERVE-MUSCLE JUNCTION, MUSCLES, AUTONOMIC NERVOUS SYSTEM AND NEUROPSYCHIATRY**

Wednesday, July 11, 2012

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

**☞ All questions carry TEN marks each.**

1. Inflammatory myopathies
2. Pronator teres syndrome
3. Progressive external ophthalmoplegia
4. Remitting relapsing multiple sclerosis
5. Spinal muscular atrophies
6. Critical illness neuropathy
7. Neurogenic bladder
8. Periodic paralysis
9. Hyper CPKemia
10. Psychogenic movement disorders



## MANIPAL UNIVERSITY

### DM (NEUROLOGY) DEGREE EXAMINATION – JULY 2012

#### SUBJECT: PAPER IV: ALLIED BRANCHES RELATED TO NEUROLOGY, RECENT ADVANCES IN NEUROSCIENCES

Friday, July 13, 2012

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

**All questions carry TEN marks each.**

1. Intravenous immunoglobulins and plasmapheresis in neurological disorders
2. Recent advances in the management of advanced Parkinson's disease
3. Antithrombotic agents
4. Hashimoto's encephalopathy
5. Therapeutic monitoring in epilepsy
6. Post streptococcal neurological syndromes
7. Episodic ataxias
8. Amyloid beta protein
9. fMRI
10. EEG recording in sleeps

