

Reg. No.

MANIPAL UNIVERSITY

DM (NEUROLOGY) DEGREE EXAMINATION – JULY 2010

SUBJECT: PAPER I: BASIC SCIENCES RELATED TO NEUROLOGY

Monday, July 05, 2010

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

☞ All questions carry TEN marks each.

1. Describe the pain pathway and the central modulation of pain.
2. Describe the supra spinal control of stretch reflexes.
3. Describe the various types of memory and discuss the anatomical localisation and physiological basis of each type of memory.
4. Discuss the components and functions of blood brain barrier.
5. Describe the biochemistry of myelin.
6. What are monoamines? Describe the synthesis and metabolism of Dopamine.
7. Describe the deep venous system of brain.
8. Describe the various nuclei of Thalamus and its connections.
9. Describe the anatomy of Parietal Lobe.
10. Draw a diagram of Medulla at the level of Sensory decussating.



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MANIPAL UNIVERSITY**DM (NEUROLOGY) DEGREE EXAMINATION – JULY 2010****SUBJECT: PAPER II: CLINICAL NEUROLOGY DISEASES OF CENTRAL NERVOUS SYSTEM - BRAIN**

Tuesday, July 06, 2010

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

☞ All questions carry TEN marks each.

1. Discuss the advantages and disadvantages of various Triptans.
2. Discuss the pharmacological management of Alzheimer's dementia.
3. Discuss the management of Stroke during the 1st 3hrs.
4. Discuss the differential diagnosis and investigations of a 15 year old boy presenting with cerebellar ataxia of 15 days duration.
5. Discuss the differential diagnosis of limbic encephalitis.
6. Discuss the grey matter involvement in Multiple Sclerosis.
7. Discuss the role of amyloid protein in the pathogenesis of disease of brain.
8. Discuss the aetiology clinical presentation and management of reversible posterior leukoencephalopathy.
9. Discuss the neurological manifestations of inflammatory bowel disease.
10. Discuss the pre surgical workup for epileptic surgery.



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MANIPAL UNIVERSITY**DM (NEUROLOGY) DEGREE EXAMINATION – JULY 2010****SUBJECT: PAPER III: CLINICAL NEUROLOGY – DISEASES OF SPINAL CORD, NERVES, NERVE-MUSCLE JUNCTION, MUSCLES, AUTONOMIC NERVOUS SYSTEM AND NEUROPSYCHIATRY**

Wednesday, July 07, 2010

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ All questions carry TEN marks each.

1. Discuss the clinical approach to a patient with Acute transverse myelitis.
2. Describe the various types of vascular malformations of spinal cord.
3. Draw a diagram of Brachial plexus. Discuss the clinical approach to a patient with Brachial plexus lesion.
4. Discuss the entrapment neuropathies of lower limb.
5. Discuss the spectrum of acute inflammatory neuropathies.
6. Describe the structure of Acetyl Choline receptor. Add a note on slow channel syndrome.
7. What is MuSK antibodies? What is the clinical picture of this syndrome?
8. Discuss the differential diagnosis and investigation of a 50 yr old man presenting with progressive weakness and wasting of right hand muscles.
9. Discuss the pathogenesis, clinical features and investigation of critical illness neuropathy.
10. Discuss the pathogenesis, clinical features and treatment of neuroleptic malignant syndrome.



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MANIPAL UNIVERSITY**DM (NEUROLOGY) DEGREE EXAMINATION – JULY 2010****SUBJECT: PAPER IV: ALLIED BRANCHES RELATED TO NEUROLOGY, RECENT
ADVANCES IN NEUROSCIENCES**

Thursday, July 08, 2010

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

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

1. Discuss the genetics of Alzheimer's dementia.
2. What is heat shock protein? Discuss its importance of it in neurology.
3. Discuss the phases of B cell maturation and expression of CD markers.
4. What is melatonin? What is its role in health and disease?
5. Discuss the neurological complications of Hepatitis C virus.
6. Discuss the usefulness of intraoperative SSEP.
7. Discuss the protocol of Electrophysiological study in a suspected case of Eaton Lambert Syndrome.
8. What is motor unit potential? Discuss the characters of motor unit potential in health and disease.
9. Discuss the importances of Burst suppression pattern in EEG.
10. Discuss the differential diagnosis of multiple patchy hyper intense T2 weighted images in MRI.

