FINAL EXAM
DECEMBER 2011

NATIONAL BOARD OF EXAMINATIONS

NEUROSURGERY (DIRECT COURSE- PART I)

PAPER- I

Time : 3 hours
Max. Marks : 100

NS1/D/11/22/I

Attempt all questions in order.
Each question carries 10 marks.

Write short notes on:

1.	a. Describe surgical anatomy of superior orbital fissure. b. Discuss clinical features of lesion involving superior orbital fissure.	6+4
2.	a. Draw a diagram of muscle spindle. b. Discuss the mechanism of spasticity.	3+7
3.	a. Describe the cistern around brain stem. b. Discuss Galenic system of veins.	5+5
4.	a. Describe mechanism of gaze eye movements (saccadic with smooth pursuit). b. Discuss clinical significance and pathogenesis of optico-kinetic nystagmus.	5+5
5.	a. Describe structure of a neuron. b. Discuss neuroglial control of neuronal function.	4+6
6.	a. Discuss pathophysiology of cranial neuralgias. b. Entrapment neuropathy.	5+5
7.	a. Enumerate fungal infections of brain. b. Discuss mode of transmission, clinical features and management of Cryptococcus infection of brain	4+6
8.	a. Enumerate brain herniations. b. Discuss pathology of central herniation.	2+8
9.	a. Hypothalamic pituitary axis b. Describe clinical features of hypothalamic dysfunction	5+5
10.	a. Describe physiology of micturition. b. Discuss neuro-physiological basis of neurogenic bladders.	4+6

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NEUROSURGERY (DIRECT COURSE - PART I)

PAPER- II

Time : 3 hours
Max. Marks : 100

NS1/D/11/22/II

Attempt all questions in order.
Each question carries 10 marks.

1.	a. Describe neurological complications of cyanotic heart disease. b. Discuss mechanism of brain involvement in cyanotic heart diseases.	6+4
2.	a. Describe pathology of soft tissue anomalies at cranio-vertebral junction. b. Discuss pathogenesis of hydromyelia.	6+4
3.	a. Describe persistent vegetative states. b. Discuss pathogenesis of Locked-in syndrome.	5+5
4.	a. Describe pathology of intra-ventricular tumors. b. Discuss histomorphology of choroid plexus carcinomas.	6+4
5.	a. Describe the tumors of posterior pituitary. b. Discuss persistent hyponatremic states.	6+4
6.	a. Describe causes of unilateral Foot Drop. b. Describe pathology of lesion causing Foot Drop.	6+4
7.	a. Enumerate skull fractures. b. Describe pathogenesis of growing fracture of skull.	3+7
8.	Discuss pathophysiology of causalgia.	10
9.	a. Describe pathology of normal pressure hydrocephalus. b. Discuss conductance to bulk flow of CSF.	7+3
10.	a. Enumerate calvarial lesions. b. Discuss pathology of Aneurysmal Bone Cysts.	6+4

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