

NeuroSurgery (M.Ch) :

POST GRADUATE DEGREE STANDARD

1. BASIC GENERAL SCIENCES AND INVESTIGATIVE NEURO SURGERY

I BASIC SCIENCES

- (a) Physics
- (b) Electricity, AC & DC
- (c) Light
- (d) Sound
- (e) Electro Magnetism
- (f) Ultrasound
- (g) Laser

II COMPUTER SCIENCE

III STATISTICS

2 BASIC NEUROSCIENCES

I NEURO ANATOMY

- (a) Surgical Anatomy
- (b) Micro surgical Anatomy
- (c) Endoscopic Anatomy

II NEUROPHYSIOLOGY

III NEUROPATHOLOGY

IV NEUROCHEMISTRY

V NEUROPHARMACOLOGY

3. NEURO RADIOLOGY

I Tomography of skull and spine

II CT Scan

III MRI & MRA & MR Spectroscopy

IV PET / SPECT

V Angiography

VI Myelography

VII Others

(a) EEG

(b) EMG

(c) Nerve Conduction Study

(d) Evoked Potential

(e) Electrocorticography

(f) Brain Mapping

(g) Ultrasonography of Brain

(h) Transcranial Doppler

4. INTERVENTIONAL NEURORADIOLOGY

5. CLINICAL NEUROLOGY

I Basic Neurology

II Neurological Disease

III Congenital Malformation

IV Developmental Anomaly

V Elicitation Interpretation of Neurological Symptoms and signs

VI Brain death

PAPER - II

Clinical Neuro Surgery, practice of Neuro Surgery and Recent Advances 1. History

2. Diagnostic Aids

a) Intracranial Pressure Monitoring

b) Intra Operative Monitoring.3. Developmental Anomalies

4. Trauma

5. Bacterial infections

6. Parasitic and Fungal infections

7. Vascular diseases

8. Spine & Spinal cord

9. Intracranial Tumors

10. Stereotaxy

11. Movement disorders

12. Cerebral Palsy

13. Epilepsy

14. Functional & Sedative Neuro Surgery

15. Pain

16. Miscellaneous a) Neuro Anaesthesia b) Pre & Post operative care

17. Recent Developments in Neurosurgery

a) Neuro Endoscopy

b) Gene Therapy

c) Immuno Therapy

d) Neuro Navigation.

18. Neuro Rehabilitation

19. Medico Legal Aspects in Neurosurgery.

20. Paediatric Neuro surgery.