

**Tanta University  
Faculty of medicine  
Neurosurgery department  
Semester pathology  
Time allowed: 3 hours**

**Answer the following questions:**

**I: Brain stem neoplasms; Surgical pathology (30 marks)**

**II:**

**A: surgical pathology of hematogenously induced spine infection and possible route of spread (15 marks)**

**B: Surgical pathology of peripheral nerve injuries (20 marks)**

**III**

**A: Pathology & pathophysiology of traumatic brain cell injury (15 marks)**

**B: Vasospasm; pathogenesis and complications (20 marks)**