

**Write short notes on:**

1. a) Describe the clinical features and diagnosis of spondylolisthesis. 5+5  
b) Write a note on Pars repair.
2. a) Vacuum assisted closure of wound. 5+5  
b) Lumbar disc prosthesis.
3. a) Rehabilitation of paraplegic patient. 5+5  
b) SCIWORA.
4. a) Skeletal metastasis. 5+5  
b) Vertebroplasty operative technique.
5. a) Lumbar canal stenosis. 5+5  
b) Role of stem cell in spinal pathology.
6. a) Classify cervical spine surgery. 5+5  
b) Discuss management of acute cervical spine surgery.
7. a) Torticollis. 5+5  
b) Cervical rib syndrome.
8. a) Describe the anatomy of lumbar intervertebral disc. 5+5  
b) How will you evaluate and manage lumbar disc lesion in a 45-year-old male patient?
9. a) Define, classify and discuss pathological changes in scoliosis. 5+5  
b) How will you treat a case of adolescent idiopathic dorsolumbar scoliosis in a 14-year-old girl?
10. a) Techniques and complications of closed cervical traction reduction. 5+5  
b) Classify spinal orthoses. How is halo skeletal fixator applied?