

**ORTHOPEDIC SURGERY**

**PAPER – IV**

ORTHO/D/13/27/IV

Time : 3 hours

Max. Marks : 100

**IMPORTANT INSTRUCTIONS**

- *This question paper consists of 10 questions divided into Part 'A' and Part 'B', each part containing 5 questions.*
- *Answers to questions of Part 'A' and Part 'B' are to be strictly attempted in separate answer sheet(s) and the main + supplementary answer sheet(s) used for each part must be tagged separately.*
- *Answers to questions of Part 'A' attempted in answer sheet(s) of Part 'B' or vice versa shall not be evaluated.*
- *Answer sheet(s) of Part 'A' and Part 'B' are not to be tagged together.*
- *Part 'A' and Part 'B' should be mentioned only on the covering page of the respective answer sheet(s).*
- *Attempt all questions in order.*
- *Each question carries 10 marks.*
- *Read the question carefully and answer to the point neatly and legibly.*
- *Do not leave any blank pages between two answers.*
- *Indicate the question number correctly for the answer in the margin space.*
- *Answer all the parts of a single question together.*
- *Start the answer to a question on a fresh page or leave adequate space between two answers.*
- *Draw table/diagrams/flowcharts wherever appropriate.*

**PART A**

1. What is bone cement? What are the indications and contra- indications for its usage? What are the methods of bone cementing? Mention its complications. 2+3+3+2
  
2. Write short notes on: 5+5
  - a) Spinal canal stenosis
  - b) Ehlers Danlos syndrome
  
3. Discuss physiology of normal articular cartilage and its biomechanical functions. Discuss the advances in articular cartilage tissue engineering and repair. 5+5
  
4. Write short notes on: 5+5
  - a) Highly cross linked polyethylene
  - b) PET Scan
  
5. Enumerate various methods for bone mineral measurement. Define its density in various conditions. Discuss management of osteoporotic fractures. 2+2+6

P.T.O.