

**ORTHOPAEDICS**  
**PAPER-I**

TIME: 3 HOURS  
MAX. MARKS: 100

ORTHO/J/20/27/I

**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 question(s) of Part A attempted in answer sheet(s) of part B or Vice versa shall not be evaluated.
- Answer sheets 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 sheets.
- 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.

**Write Short notes on:**

**PART A**

- |    |  |       |
|----|--|-------|
| 1. | Describe the anatomy of brachial plexus. Classify brachial plexus injuries and discuss the clinical methods to identify the level of lesion. How will you differentiate pre-ganglionic lesion from post-ganglionic lesion? | 4+4+2 |
| 2. | Write briefly on the role of interventional radiology in orthopedics. Support with at least two examples in detail.  | 5+5   |
| 3. | a) Blood supply of the femoral head.<br>b) Safe surgical dislocation of the hip and how it maintains the blood supply to the hip.  | 4+6   |
| 4. | a) What is the pathogenesis of claw hand?<br>b) What are the other conditions which can cause a claw hand deformity apart from ulnar nerve palsy?<br>c) Briefly describe the tendon transfers used to correct claw hand.   | 3+3+4 |
| 5. | a) Describe different zones of articular cartilage with diagram.<br>b) Pathogenesis of primary osteoarthritis of knee.   | 5+5   |

**P.T.O**

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**Please read carefully the important instructions mentioned on Page '1'**

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- Answers to question(s) of Part A attempted in answer sheets of Part B or vice versa shall not be evaluated.

**PART B**

- |     |   |       |
|-----|---|-------|
| 6.  | a) Spinal shock.  | 4+6   |
|     | b) Electrodiagnostic tests in management of peripheral nerve injuries with special reference to H wave and F reflex.                                  |       |
| 7.  | a) Describe the histology of a physis.  | 3+3+4 |
|     | b) Enumerate the common orthopedic conditions related to disorders of physis.   |       |
|     | c) Management of post traumatic unilateral physeal bar in a growing child.  |       |
| 8.  | a) How is joint reaction force created at the hip joint and what are the factors which affect it?   | 6+4   |
|     | b) How does use of a cane, affect joint reaction force at the hip?  |       |
| 9.  | a) Draw the diagram of the normal parameters of the lower extremity alignment and label the normal values of each parameter, by drawing a Scannogram. | 5+5   |
|     | b) Functional and surgical anatomy of the distal humerus.   |       |
| 10. | a) What is the concept of spinal stability? Describe checklist for the diagnosis of clinical instability in the lower cervical spine.                 | 5+5   |
|     | b) Canadian C-Spine Rule.   |       |

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