



**Abhinav Bindra Sports Medicine and Research Institute**

**BPT 1<sup>ST</sup> Internal Examination January 2026 (3rd Sem)**

**Question Code: IJ304**

**Date: 08. 01. 2026**

**Time: 09:00 AM-12:00 PM**

**Subject Code: 23ABP304**

**Subject: Biomechanics**

**F.M.: 80 marks**

**A) Long Questions- Answer Any 3 ( $3 \times 15$  Marks)**

1. Explain anatomy of thoracic cavity
2. Explain the biomechanics behind respiratory movements
3. Explain anatomy of hip joint
4. Explain the biomechanics of shoulder joint
5. Explain anatomy of knee complex

**B) Short Questions- Answer all ( $6 \times 5$  Marks)**

1. Force systems in biomechanics
2. Wheels, axes & lever applications in biomechanics
3. Dynamic stabilisers of shoulder joint
4. Pump handle movement
5. Bucket handle movement
6. Screw home mechanism of knee joint
7. Mechanics of hip joint

**C) Objective type Questions- Answer all ( $5 \times 1$  Mark)**

1. Capitus fovea
2. Centre edge angle
3. Angle of inclination
4. Angle of torsion
5. Define biomechanics