

**Q.P. Code: 123014**

**Reg. No.:**.....

**First Year BPT Degree Regular/Supplementary Examinations**  
**August 2019**

**Paper III – Biomechanics and Kinesiology**  
**(2016 Scheme)**

**Time: 3 hrs**

**Max marks: 100**

- Answer all questions
- Draw diagrams wherever necessary

**Essays**

**(2x15=30)**

1. Describe a typical lumbar vertebra. Add notes on the functions of the intervertebral discs in the lumbar spine.
2. Describe biomechanics of shoulder joint. Discuss stability and mobility function of shoulder joint complex.

**Short Essays**

**(4x10=40)**

3. Define gait. Explain gait cycle in detail.
4. List ligaments around the hip joint. Add notes on its function.
5. Describe axes and planes in detail.
6. Explain hand biomechanics. Add notes on prehension activities.

**Short Answers**

**(10x3=30)**

7. Hysteresis
8. Role of serratus anterior in shoulder stabilisation
9. Friction and its uses
10. Define motion. List types of motion
11. Joint lubrication
12. Center edge angle
13. Base of support
14. Parallel force system
15. Stability and mobility muscles
16. Syndesmosis

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