



Second Year BPT Degree Supplementary Examinations - April 2016

**BIOMECHANICS  
(2010 Scheme)**

**Time : 3 hrs**

**Max marks : 100**

- Answer all questions
- Draw diagrams wherever necessary

**Essays**

**(2x10=20)**

1. Explain in detail the kinetic and kinematics of the cervical spine
2. Define posture and explain sagittal analysis of posture

**Short notes**

**(10x5=50)**

3. Biomechanics of lifting
4. Role of patella in knee joint
5. Planes and axis
6. Movements of pelvic girdle
7. Scapulo-humeral rhythm
8. Radio-ulnar joint
9. Resolution of forces
10. Describe COG and LOG
11. Young's modulus of elasticity
12. Define force and describe force of gravity

**Answer briefly**

**(10x3=30)**

13. Inertia
14. Palmar arches
15. Center edge angle.
16. Pronation twist
17. Concave convex rule
18. Newton's law of motion
19. Forward head posture
20. Waddling gait
21. Angle of pull of a muscle
22. Hallux valgus

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