

BIOMECHANICS

(2010 Scheme)

Time : 3 hrs

Max marks : 100

- Answer all questions
- Draw diagrams wherever necessary

Essays

(2x10=20)

1. Describe in detail the anatomy of lumbar vertebra and add a detailed note on kinetics and kinematics of lumbar region.
2. Discuss in detail the structure and function of extensor mechanism of fingers

Short notes

(10x5=50)

3. Lateral pelvic tilt
4. Pes planus
5. Functional position of wrist and hand
6. Dynamic stability of gleno-humeral joint
7. Scoliosis
8. Effects of immobilization
9. General properties of connective tissues
10. Ideal posture
11. Structure of superior radio-ulnar joints
12. Power grip

Answer briefly

(10x3=30)

13. Motor unit
14. Newton's law of reaction
15. Unilateral stance
16. Functions of anterior cruciate ligament
17. Hook grip
18. Rib cage
19. Active tension of muscle
20. Spurt muscles
21. Center of gravity
22. Intrinsic muscles of foot