

**Second Year Bachelor of Occupational Therapy  
Regular/Supplementary Examinations October 2023**

**Biomechanics, Applied anatomy and Applied Physiology**

**Time: 3 Hours**

**Total Marks: 100**

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Draw table/diagrams/flow charts wherever necessary*

**Elaborate on**

**(2x20=40)**

1. Explain the biomechanics of the shoulder complex.
2. Explain the structure and function of the central nervous system.

**Write notes on**

**(8x5=40)**

3. Role Intervertebral Disc.
4. Explain the role of the wrist in optimizing extrinsic hand muscle length tension.
5. Describe the patella as an anatomic pulley.
6. Describe in detail the properties of the muscle
7. Elaborate on the determinants of the gait cycle.
8. Functional Position of hand.
9. Write in detail about the structure and function of the muscles associated with the hip joint.
10. Explain the evaluation procedure for range of motion measurements.

**Short Answers**

**(10x2=20)**

11. Techniques of Transfers.
12. Maintenance of blood pressure
13. Determinants of cardiac performance
14. Features of classic tennis elbow
15. Prehension.
16. Action of lumbricals
17. Newton's second law
18. Types of equilibrium
19. Center of gravity
20. Saddle joint

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