Rajiv Gandhi University of Health Sciences, Karnataka

III Semester Bachelor of Occupational Therapy Degree Examination – 18-May-2023

Time: Three Hours Max. Marks: 100

BIOMECHANICS (GENERAL & UE) and ERGOTHERAPEUTICS (OS/RS)
Q.P. CODE: 3420

Your answers should be specific to the questions asked
Draw neat, labeled diagrams wherever necessary

LONG ESSAYS (Answer any Two) 2 x 10 = 20 Marks

1. Define Posture. Explain sagittal and frontal plane analysis.

2. Name the rotator cuff muscles and explain scapula-humeral rhythm.

3. Describe the lever systems with examples from human body.

SHORT ESSAYS (Answer any Ten) 10 x 5 = 50 Marks

4. Define mechanical advantage with example.

5. Enumerate the abnormal postures seen in sagittal plane.

6. Define parallel force system with examples.

7. Define force. Explain types of forces.

8. What are annular pulleys? What is their function?

9. How does the structure and function of annular ligament differ from that of the other elbow joint ligaments?

10. What is claw hand and what causes it?

11. Which types of prehension do not require the thumb?

12. What is a force vector? Give examples.

13. Name the static stabilisers of the shoulder joint.

14. Name the types of motions with examples.

15. Define moment arm. How does it affect the ability of force to rotate a segment?

SHORT ANSWERS (Answer any Ten) 10 x 3 = 30 Marks

16. Define LOG, COG and BOS.

17. State the three Newton's laws.

18. What is closed packed position of a joint?

19. List the types of motions and normal ROM at Shoulder joint.

20. Enumerate the bones and joints forming the shoulder complex.

21. What is carrying angle?

22. Attachment and functions of flexor retinaculum of the wrist.

23. What is positive ulnar variance?

24. What is the difference between osteokinematics and arthrokinematics?

25. Define with a neat diagram, the angle of inclination of humerus.

26. Enumerate the movements occurring at superior and inferior radioulnar joint joints.

27. What are structures passing through the carpal tunnel?

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