Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.P.T Degree Examination – 30-Oct-2026

Time: Three Hours **Max. Marks: 100**

EXERCISE THERAPY (RS-5)
Q.P. CODE: 2740

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

LONG ESSAYS (Second Question Choice) **2 x 10 = 20 Marks**

1. Explain in detail about the chemical and mechanical events during muscle contraction and relaxation. Add note on principles of motor unit recruitment
2. Define Hydrotherapy. Add note on techniques, principles, indications and contraindications of hydrotherapy

   OR

   Define gait. Explain in detail about the parameters of gait

SHORT ESSAYS (Question No 3 & 12 choice) **10 x 5 = 50 Marks**

3. Explain the types of muscle contraction. Add a note on type-I muscle fiber

   OR

   Enumerate the neuromuscular adaptation to resistance training
4. Grades of Maitland and Kaltenborn techniques of joint mobilization
5. List the causes of impaired balance. Add note on types of balance retraining
6. Explain the procedure for checking the MMT for abdominal muscles
7. Enumerate the pathological gait
8. Diagonal patterns of movement for upper limb and lower limb in PNF
9. Explain in detail about Jacobson's and Mitchel's method of relaxation
10. Describe bad posture and factors affecting posture
11. Physiological and therapeutic effects of friction massages
12. Explain Isokinetic regimens

    OR

    Frontal plane spine deformity and its correction exercises

SHORT ANSWERS **10 x 3 = 30 Marks**

13. True and apparent limb length measurement of lower limb
14. Strength and endurance
15. Contract relax and hold relax
16. Properties of water
17. Classification of massage techniques
18. Merits and demerits of group exercises
19. Determinants of aerobic exercises
20. List any two equilibrium and non-equilibrium test
21. Multiple angle isometrics
22. Define motor unit and draw a labelled diagram

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