Rajiv Gandhi University of Health Sciences, Karnataka Second Year Master of Physiotherapy Degree Examination - 25-Nov-2024

[Time: 3 Hours] [Max. Marks: 100]

Measurement and Assessment in Movement - Paper -III (RS-4) O.P. CODE: 8149

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

Answer All The Questions

 $10 \times 10 = 100 \text{ Marks}$

- 1. Describe the systems based assessment that you would undertake in an obese woman of 53, prior to engaging in a low intensity exercise program. Justify your answer.
- 2. Describe physiological adaptations to exercise in musculoskeletal and endocrine system. Discuss the assessment methods that can be used addressing these systems.
- 3. Discuss the current guidelines on exercise prescription for decreasing the risk of falls. How do these guidelines impact your assessment of an older person who has been referred for exercise prescription?
- 4. Compare and contrast the biomechanical assessment that you would undertake in adolescent girl and an obese man of 55 year. Justify with respect to physiological changes between the two.
- 5. Compare and contrast the assessment of hand function using a standardised assessment form and instrumented analysis. Consider indications, challenges and desired outcome.
- 6. How can you analyse joint moments of gait? What are the indications for this analysis? What are the valid methods of clinical estimation and laboratory analysis?
- 7. A 57 year old lady reports to the department with a history of knee pain. All laboratory investigations are normal but with early degenerative changes seen on radiographs. Her BMI is 24 and she reports that since the Covid pandemic she has stopped walking. What are your hypotheses for her history? What assessments would you do as preliminary screening? Justify your choice of tests and measures.
- 8. What are the strengths and limitations of clinical coordination assessment tools? Explain with examples
- 9. What are the indications for instrumented gait evaluation in an amputee? Discuss strengths and limitations of instrumented and clinical assessment for prosthetic planning.
- 10. A 50 year old nurse a known case of chronic low back pain presents with new onset history of left hip pain. Your initial hypothesis is that it is related to early degenerative changes from biomechanical adaptation due to back pain and her occupation. How would you proceed with assessment? Justify

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