



BRAINWARE UNIVERSITY

Term End Examination 2024-2025

Programme – B.Physiotherapy-2021/B.Physiotherapy-2022/B.Physiotherapy-2023

Course Name – Exercise Therapy - II

Course Code - BPTC302

(Semester III)

Full Marks : 60

Time : 2:30 Hours

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

Group-A

(Multiple Choice Type Question)

1 x 15=15

1. Choose the correct alternative from the following :

- (i) Select among the following in which the load remains constant during training session
 - a) DeLorme
 - b) Watkin
 - c) McQueen
 - d) Zinovief
- (ii) Identify the one which is not a type of contracture
 - a) Arthrogenic contracture
 - b) Myostatic contracture
 - c) Pseudomyostatic contracture
 - d) None of the these
- (iii) Choose the full form of SNAG
 - a) Sustained natural apophyseal glide
 - b) Sustained neural apophyseal glide
 - c) Systematic natural apophyseal glide
 - d) Sustained natural active glide
- (iv) Record the maximum weight that can be used in Cervical Traction
 - a) 1/3 rd of Body Weight
 - b) 1/5 th of Body Weight
 - c) 1/6 th of Body Weight
 - d) Half of body Weight
- (v) Determine the one which is a predisposing factor of impaired balance
 - a) Obesity
 - b) Old Age
 - c) Gender
 - d) None of these
- (vi) Identify the primary concept of the Specific Adaptation to Imposed Demands (SAID) Principle.
 - a) The body adapts specifically to the type of demand placed on it.
 - b) Muscles will recover completely between workouts.
 - c) Muscles will strengthen only when exercised regularly.
 - d) Exercising one muscle group will benefit the entire body.
- (vii) Identify the energy system is used for short, high-intensity activities.
 - a) Fat oxidation system
 - b) Aerobic system
 - c) Anaerobic glycolysis
 - d) Phosphagen system
- (viii) Determine the role of multistage testing in exercise programs.

- a) To determine an individual's exercise capacity and endurance
- b) To assess muscle flexibility
- c) To evaluate energy expenditure
- d) To monitor bone density
- (ix) Indicate which is not a component of normal gait.
 - a) Stance phase
 - b) Swing Phase
 - c) Balance Control
 - d) Double limb support
- (x) Identify the normal range of steps per minute for an adult during walking.
 - a) 30-50 steps
 - b) 50-70 steps
 - c) 80-100 steps
 - d) 140-160 steps
- (xi) Identify the other name of "savasana".
 - a) Jacobson's method
 - b) Mitchell's method
 - c) rood's method
 - d) vojta
- (xii) State that endurance develops in response to the application of -
 - a) repetitive contraction
 - b) Maximum resistance
 - c) minimum resistance
 - d) no resistance
- (xiii) Identify the true statement for resisted exercise.
 - a) Can be applied both manually and mechanically
 - b) any form of active movement that is resisted
 - c) includes aeribic exercise
 - d) all of these
- (xiv) Explain the physiological effects of soft tissue manipulation.
 - a) remove dead cells
 - b) improve circulation
 - c) both 1 & 2
 - d) none of these
- (xv) The myocardial oxygen consumption typically change during aerobic exercise likely as-
 - a) Increases
 - b) Decreases
 - c) Fluctuate
 - d) Remain same

Group-B

(Short Answer Type Questions)

3 x 5=15

- 2. Determine the contraindications of stretching exercises. (3)
- 3. Interpret the endpoints requiring termination of the exercise stress testing. (3)
- 4. Interpret the determinants of Resistance exercise. (3)
- 5. Discuss the factors which predispose to Poor posture. (3)
- 6. Illustrate the phases of gait cycle according to the RLA method. (3)

OR

- Distinguish features of the space walk or sensory ataxia. (3)

Group-C

(Long Answer Type Questions)

5 x 6=30

- 7. Explain about the NAGs and SNAGs during giving mobilization of the spine. (5)
- 8. Explain the physiological adaptations of resistance training in muscle performance and other systems. (5)
- 9. Write an aerobic exercise program using model of FIIT-VP for a patient with chronic illness. (5)
- 10. Explain the neurophysiological response of muscle to stretch. (5)
- 11. Describe about the physiology of in-coordination. (5)
- 12. Explain the core stabilization exercises and its benefits. (5)

OR

- Explain the motor strategies for balance control. (5)
