REV-01
BPT/25/30

2025/06

SET A

BACHELOR OF PHYSIOTHERAPY
SECOND SEMESTER
EXERCISE THERAPY - I
BPT – 203 [REPEAT]

[USE OMR SHEET FOR OBJECTIVE PART]

Duration: 3 hrs. **Full Marks: 70**

Objective

Time: 30 min. **Marks: 20**

Choose the correct answer from the following: ***1×20=20***

1. Base of Support (BOS) is defined as:
   a. The point where the body's weight is concentrated
   b. The area beneath a person that includes every point of contact with the supporting surface
   c. The center point between two limbs
   d. The maximum range of motion of a joint

2. Parallel bars in a gymnasium are mainly used for:
   a. Stretching
   b. Balance and gait training
   c. Upper limb strengthening
   d. None of the above

3. What role do external intercostal muscles play in respiration?
   a. Lower the ribs during expiration
   b. Contract to push the diaphragm upward
   c. Elevate the ribs during inspiration
   d. Relax the chest wall

4. Which walking aid provides the most support for a patient?
   a. Single-point cane
   b. Quad cane
   c. Walker
   d. Crutches

5. Isometric exercises involve:
   a. Joint movement through full ROM
   b. No change in muscle length or joint angle
   c. Rapid concentric and eccentric movements
   d. Alternating movements across joints

6. In axial suspension, where is the point of suspension typically located?
   a. Above the head
   b. At the joint axis
   c. Below the feet
   d. At the center of gravity

7. When does massage therapy is contraindicated?
   a. In cases of acute inflammation or infection
   b. After a mild muscle strain
   c. In individuals who are under stress
   d. When there is general muscle soreness

8. Goniometry is primarily used to measure:
   a. Muscle strength
   b. Joint range of motion
   c. Nerve conduction velocity
   d. All of the above

9. In which position is a patient placed to relieve pressure on the sacrum?
   a. Lateral
   b. Supine
   c. Prone
   d. Sitting

10. Suspension therapy is especially useful for:
   a. Patients with muscle spasms who need full rest
   b. Patients seeking cardiovascular endurance only
   c. Improving core stability and posture
   d. None of the above

11. Which muscle group primarily contracts during knee flexion?
   a. Chest
   b. Quadriceps
   c. Biceps
   d. Hamstrings

12. What happens to the diaphragm during expiration?
   a. It contracts and flattens
   b. It relaxes and moves upward
   c. It contracts and moves downward
   d. It remains stationary

13. Jacobson's Progressive Muscle Relaxation (PMR) involves:
   a. Static stretching of large muscles
   b. Rapid muscle contractions
   c. Alternately tensing and relaxing different muscle groups
   d. Mindful breathing without movement

14. The Delorme technique follows which pattern of loading?
   a. Decreasing resistance
   b. Constant resistance
   c. Increasing resistance
   d. Random resistance

15. When measuring ankle dorsiflexion, the movable arm of the goniometer is aligned with:
   a. The anterior surface of the tibia
   b. The 5th metatarsal
   c. The medial malleolus
   d. The posterior heel

16. A person who can jog for 45 minutes without exhaustion likely has good:
   a. Anaerobic capacity
   b. Muscular power
   c. Cardiovascular endurance
   d. Balance and coordination

17. The therapist's role in Active Assisted Exercise (AAE) is to:
   a. Provide support and assistance while allowing the patient to contribute to the movement
   b. Encourage the patient to exert full effort throughout the exercise
   c. Completely perform the movement for the patient
   d. Only observe and monitor the patient's performance

18. What device is commonly used to measure static muscle power in the hand and forearm?
   a. Goniometer
   b. Tensiometer
   c. Dynamometer
   d. Flexo meter

19. In patients with a mild limb length discrepancy (less than 2 cm), the most likely treatment is:
    a. Surgical shortening of the longer limb
    b. Use of shoe lifts or orthotic insoles
    c. Full limb amputation of the shorter limb
    d. Immediate corrective surgery

20. Which of the following is an example of an open chain resisted exercise?
    a. Leg press
    b. Seated knee extension with weight
    c. Squat
    d. Pull-up

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Descriptive

Time : 2 hrs. 30 min. Marks : 50

[Answer question no.1 & any four (4) from the rest]

1. Classify active movements. Discuss the types, techniques and clinical applications of free exercises in physiotherapy. 2+7=10

2. Define relaxation. Discuss the techniques of general relaxation in details with diagrams. 2+8=10

3. Explain the types of physiological breathing. Write down elaborately about the types ofmovements in thoracic cage duration normal respiration. 5+5=10

4. Define passive movement, indication, contraindications and its effects? Describe the procedure of performing passive movement of shoulder joint? 5+5=10

5. What is Anthopometric measurement? Write Different types of measurements of anthopometry. Explain the BMI classification and girth measurements. 2+3+5 =10

6. Explain the Delorme and Oxford techniques of progressive resistance exercise? Explain the derive position of lying with diagram? 5+5=10

7. Discuss the various types of walking aids? Explain 3- point gait and 4- point gait with diagram? **5+5=10**

8. Write short notes on:(Any two) **5+5=10**
   - **a.** Limb length measurements
   - **b.** COG and BOS
   - **c.** Procedure for measuring joint range of motion of wrist joint using a universal goniometer

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