REV-01
BPT/121/40/45

2025/06

SET B

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

[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. 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
2. 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
3. What device is commonly used to measure static muscle power in the hand and forearm?
   a. Goniometer
   b. Tensiometer
   c. Dynamometer
   d. Flexo meter
4. 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
5. 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
6. 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
7. The Delorme technique follows which pattern of loading?
   a. Decreasing resistance
   b. Constant resistance
   c. Increasing resistance
   d. Random resistance

8. 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

9. 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

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

11. 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

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

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

14. 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

15. 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

16. 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

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

18. 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

19. 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

20. 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

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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 5+5=10
   a. Limb length measurements
   b. COG and BOS

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