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Paper: Therapeutic exercise

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Q1: Define Therapeutic exercise? Discuss the aims of Therapeutic exercise?

(a) What is Rom?why we use Rom?

Ans: **Therapeutic exercise:**

“The goals of Therapeutic exercise is to return an injured patient to

A fully functioning, pain free state.”

Aims of Therapeutic exercise:

- Improve circulation
- Improve respiratory capacity
- Decrease stiffness
- Release contracted mobilize joints
- Improve muscle strength
- Improve co-ordination and promote confidence
- Promote relaxation.

Q:What is Rom?

Rom stands for “Range of motion”

“The full movement potential of a joint, usually it’s range of

Flexion and extension.”

Example:

A knee might lack 10 degree of full extension due to an injury.

Q:why we use range of motion?

- Rom helps in strength of joints, cartilage and improve fitness level.
- It helps to prepare the body for the movement
- It convert into larger joints and larger Movements.

Q2: what is aquatic exercise? Discuss the properties of water and it's clinical significance?

And: **Aquatic exercise:**

"It,s a Multi depth immersion pool or tank that factitate the application of various established Therapeutic interventions, including stretching,strengthening,joints, mobilization,balance And gait training and endurance training."

Properties of water:

- **Buoyancy:**

"It's a upward force that work opposite to gravity.

Clinical significance:

- Loss of weight and joint unloading
- Active motion with increased
- Three dimensional access to the patient.

- **Hydrostatic pressure:**

It,s a pressure exerted on immersed object.

Clinical significance:

- Reduce effusion
- Centralizes peripheral blood flow
- Assists venous return, avoid DVT
- That pressure allow exercise to the patient when it's near to the ground surface.

Viscosity:

It,s a friction occuring b/w molecules of liquids resulting in resistance to

Flow.

Clinical significance:

- Creates resistance with all active movements.
- Increaseing the surface area moving through water increases resistance.

Surface tension: surface of fluid act as a membrane under surface.

Q3: describe Maitland joint mobilization grading based on amplitude

Of movement?

Ans: Grade 1:

- SARO at the beginning of range of movement

Manage pain and spasm

Grade 2:

- LARO within mid-range of movement. Not reaching the limit
- Manage pain and spasm

Grade 1 & 2:

- Often used before & after treatment with grade 3 & 4.

Grade 3:

- LARO upto point of limit of the available motion & are stressed

Into the tissue resistance point.

- Used to gain motion within the joints
- Stretches capsule & CT structures

Grade 4:

- SARO at very end range of movement.
- Used to gain motion within the joint.

Grade 5:

- **Small amplitude .**
- **Quick thrust at the end of range.**
- **Viscosity vs force.**
- **Requires training.**

