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34 (2) EXTH 2.3

2020

EXERCISE THERAPY

Full Marks : 100

Time : Three hours

The figures in the margin indicate full marks for the questions.

1. Multiple Choice Questions : 1×20=20
- (A) Upward movement in water is due to :
- (a) Gravity
 - (b) Buoyancy ✓
 - (c) Hydrostatic pressure
 - (d) None.
- (B) Normal ROM of shoulder extension is :
- (a) 0-20°
 - (b) 0-40°
 - (c) 0-30°
 - (d) 0-60° ✓

Contd.

(C) In which Grade does a patient completes a minimum of 25 heels rises through full ROM without a rest in plantar flexion of ankle :

- (a) Grade 3
- (b) Grade 2
- (c) Grade 1
- (d) Grade 5. ✓

(D) Which of these is the derived position from kneeling?

- (a) Standing
- (b) Stoop sitting
- (c) Lunge sideways
- (d) ✓ Kneel sitting.

(E) Which of these muscles helps in the rotation movement of the scapula?

- ✓ (a) Levator Scapulae and Serratus Anterior
- (b) Pectoralis major
- (c) Scalene
- (d) Deltoid (posterior fibres).

(F) Which of these exercise helps in strength training?

- (a) Assisted Exercise
- (b) Active Exercise
- (c) Free Exercise
- (d) Resistance Exercise.

(G) Joint Mobilization is contraindicated for :

- ✓ (a) Hyper mobility
- (b) Joint stiffness
- (c) Painful joints
- (d) None.

(H) Types of Isometric Exercise

- (a) Static Exercise
- ✓ (b) Multiple-setting Exercise
- (c) Close-chain Exercise
- (d) Isokinetic Exercise.

(I) D1 extension is :

- (a) Extension - adduction
- ✓ (b) Extension - abduction
- (c) Flexion - adduction
- (d) Flexion - abduction.

(J) The pelvic tilt is said to be normal in standing position when angle measures

- (a) 60-70
- (b) 30-40
- (c) 50-60
- (d) 50-70.

(K) To achieve an effective stretch for the costal fibres of pectoralis major, shoulder must be abducted

- (a) below 90°
- (b) above 90°
- (c) 90°
- (d) All of the above.

(L) Gravity :

- (a) It is the force by which all bodies are attracted to the earth.
- (b) It is the force of the body on an object.
- (c) It is vertical line through COG.
- (d) None.

(M) Individual muscle fibre may not be isolated and tested separately

- (a) true
- (b) false
- (c) only few
- (d) None.

(N) Thrust :

- (a) high velocity
- (b) low velocity
- (c) high velocity, short amplitude motion
- (d) low velocity, high amplitude motion.

(O) Types of Goniometer :

- (a) Metal Goniometer
- (b) Universal Goniometer
- (c) Plastic Goniometer
- (d) Semi-circle Goniometer.

(P) Which of these ropes helps in 3-dimension movements of the limb?

- (a) triple rope
- (b) double rope
- (c) single rope
- (d) pulley rope.

(Q) PFT helps :

- (a) to test diffusion capacity in lungs
- (b) to test lung volume and capacity
- (c) to test airways integrity
- (d) None.

(R) Normal muscle power is integrated by

- (a) Grade 1
- (b) Grade 3
- (c) Grade 0
- (d) Grade 4.

(S) Drainage of fluid can be done by

- (a) Pounding
- (b) Effleurage
- (c) Hacking
- (d) Stroking.

(T) Which of the following is a non-equilibrium test?

- (a) Heel to shin
- (b) One-leg stand
- (c) Tandem standing
- (d) Double support.

2. Short essay type : 5×10=50

- (a) Principles of Resistance Exercise.
- (b) Types of Stretching Exercise.
- (c) Effects and uses of active Exercise.
- (d) Define posture. Write about postural mechanism.
- (e) Detailed out the true limb length measurement procedure.
- (f) Explain 3 and 4 point Gait training.
- (g) Explain the different general relation technique with diagrams.
- (h) Define Suspension therapy. Write its principle.
- (i) What is the indication and contraindication of hydrotherapy?
- (j) Discuss the goniometry procedure for shoulder abduction and elbow flexion.

3. Short answers : 2×5=10

- (a) Explain PRE and DeLorme regimes.
- (b) Discuss two asanas.

- (c) Explain *two* properties of water.
- (d) Effects of group exercise.
- (e) What are the causes of impaired balance ?

4. Essay type : (Answer **any two** out of **three**)
10×2=20

- (a) Define Hydrotherapy. Explain the different properties of water. Write down the precautions and indication of it.
- (b) Define Resistance Exercise. Write down its guiding principles. Explain the types of Resistance Exercise.
- (c) Define Aerobic Exercise. Explain the determinants of Aerobic Exercise. Enlist physiological changes that occur with training.