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34 (2) EXTH 2.3

2018

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) The degrees of freedom of MCPJ of finger :
- (a) 1
 - (b) 2
 - (c) 3
 - (d) 4.
- (B) In normal standing, line of gravity passess ————— the knee joint.
- (a) in front of
 - (b) behind
 - (c) through
 - (d) lateral to.

Contd.

(C) Stretching is :

- (a) Slow and sustained forced passive movement
- (b) Sudden but controlled forced passive movement
- (c) Manipulation
- (d) Relaxed passive movement.

(D) Joint mobilisation is contraindicated for :

- (a) Soft tissue tightness
- (b) Joint stiffness
- (c) Loose body inside joint
- (d) Bursitis.

(E) PNF was developed by :

- (a) Kabat and Knott
- (b) Knott and Vass
- (c) Carr and Shepherd
- (d) Dardiner and Hollis.

(F) Eccentric muscle work refers to :

- (a) Lengthening and narrowing of muscle
- (b) Antagonistic group of muscle work to control movement
- (c) Consumption less O_2
- (d) All of above.

(G) Traction for upper cervical spine problem should be given with neck in :

- (a) Neutral
- (b) Slight extension
- (c) Slight flexion
- (d) 24° flexion.

(H) Movement in pendular suspension takes place :

- (a) Horizontal plane
- (b) Inclined plane
- (c) Sagittal plane
- (d) Frontal plane

(I) Resistance used in PNF :

- (a) Maximum
- (b) Minimum
- (c) Maximal
- (d) None.

(J) Electrogoniometer was developed by :

- (a) Schenker
- (b) Moore
- (c) Kapsish
- (d) None of above.

(K) Both crutches followed by affected leg, then unaffected leg is :

- (a) 3 point gate
- (b) 2 point gate
- (c) 4 point gate
- (d) 5 point gate.

(L) Glenohumeral posterior glide increases

- (a) Extension, Internal rotation
- (b) Flexion, Extension
- (c) Abduction, Adduction
- (d) Flexion, Internal rotation.

(M) Which is not a tapotement technique ?

- (a) Clapping
- (b) Beating
- (c) Rounding
- (d) Petrissage.

(N) D_2 flexion is :

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

(O) Trunk rotation to right side is produced by —

- (a) Internal oblique of right side and external rotation of left
- (b) Both internal oblique and external rotation of right side
- (c) Internal oblique of left side and external rotation of right
- (d) Both internal oblique and external rotation of left side.

(P) DOMS peaks at —

- (a) 1-2 days
- (b) 2-3 days
- (c) 1 week
- (d) None of above.

(Q) The benefits of correct Therapist's position —

- (a) Stress on therapist's back is reduced
- (b) Little energy expenditure as body wt. is used
- (c) Direction, pressure, rhythm of movements are controlled
- (d) All of above.

(R) Karvonen's formula :

- (a) Exercise heart rate =
 $HR_{rest} + 60-70\% (HR_{max} - HR_{rest})$
- (b) Exercise heart rate =
 $HR_{rest} + 70-60\% (HR_{max} - HR_{rest})$
- (c) Exercise heart rate = $220 - Age$
- (d) None of above,

(S) Muscle is most efficient in :

- (a) Outer range
- (b) Outer part of middle
- (c) Inner part of middle
- (d) Inner.

(T) PNF techniques in cerebellar ataxia :

- (a) Repeated contraction
- (b) Hold and relax
- (c) Rhythmic initiation
- (d) Rhythmic stabilization.

2. Short essay type : 5×10=50

- (a) What is hold relax and contract relax ?
- (b) Principles of PNF.
- (c) Determinants of stretching.
- (d) Effect and uses of Mulligan mobilisation.
- (e) Explain crutch walking.
- (f) Techniques of MMT for spine.
- (g) Discuss goniometry procedure for upper limb.
- (h) Write about effleurage technique of massage.
- (i) Write about causes of decreased muscle performance.

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- (j) What is limb length discrepancy ? Write about true limb length and apparent limb length.
3. Short answer : 2×5=10
- (a) Define strength, power endurance.
 - (b) What is open kinematic and closed kinematic chain exercises ?
 - (c) Define co-ordination. Write *two* tests for co-ordination.
 - (d) What are the indications of Passive Movements ?
 - (e) Discuss *any two* asanas.
4. Essay type : (Answer **any two** out of **three**)
10×2=20
- (a) Write an essay on schools of manual therapy.
 - (b) What are aerobic exercises ? What are the determinants of aerobic exercises ? Enlist physiological changes that occur with training.
 - (c) What is massage ? Write a note on principles and techniques of massage manipulations.