

Total number of printed pages-10

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) Massage affects skin by increasing metabolism which stimulates the cells of:

- (a) Stratum spinosum
- (b) Stratum granulosum
- (c) Stratum basale
- (d) Stratum corneum

Contd.

(B) The pressure and squeezing movement of _____ are the most effective in reducing oedema.

- (a) effleurage
- (b) petrissage
- (c) vibration
- (d) None

(C) The Kaltenborn treatment plan on the _____ articular surface.

- (a) convex
- (b) concave
- (c) None
- (d) Others

(D) _____ maximum heart rate is a minimal level stimulus for eliciting a conditioning response in healthy young individuals.

- (a) 60 per cent
- (b) 65 per cent
- (c) 70 per cent
- (d) Others

(E) Maximum HR can be estimated using the formula $HR = \text{---} - \text{age}$

- (a) 200
- (b) 210
- (c) 220
- (d) Others

(F) Aerobic exercise refers to prolonged _____ resistance dynamic activity utilising large muscle group.

- (a) high
- (b) low
- (c) mild
- (d) extreme

(G) For shoulder joint mobilization the resting position is _____ degree of abduction.

- (a) 60
- (b) 10
- (c) 20
- (d) 55

(H) _____ training program, the amount of resistance applied to the muscle is incrementally and progressively increased.

- (a) Strength
- (b) Endurance
- (c) Power
- (d) None

(I) Testing at the end range of motion with muscle providing isometric contraction is called as :

- (a) Resistance test
- (b) Break test
- (c) Contractility test
- (d) Make test

(J) Bhujangasana is a type of :

- (a) Pranayam
- (b) Cobra pose
- (c) Asana
- (d) Yoga

(K) What are the organisation of group exercise ?

- (a) Selection of patient
- (b) Grading of groups
- (c) Techniques of instruction
- (d) All of the above

(L) A muscle that demonstrates contractility would be graded as :

- (a) Trace (1/5)
- (b) Fair (3/5)
- (c) Good (4/5)
- (d) Normal (5/5)

(M) Which of the following are not postural re-education ?

- (a) Relaxation
- (b) Mobility
- (c) Strengthen the muscle power
- (d) Over-use activities

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

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

(O) While walking with unilateral stick, it is placed in the -

- (a) same side of the affected limb
- (b) opposite side of the affected limb
- (c) in any of the sides
- (d) None of the above

(P) Muscle-setting is a type of:

- (a) Resistance Exercise
- (b) Isometric Exercise
- (c) Dynamic Exercise
- (d) All of the above

(Q) Which of these transfer heat 25 times faster than air?

- (a) Hydromechanics
- (b) Light
- (c) Thermodynamics
- (d) Water

(R) Which of these ropes helps in three-dimension movement of the limb?

- (a) Triple rope
- (b) Single rope
- (c) Double rope
- (d) Pulley rope

(S) Upward movement in water is due to:

- (a) Gravity
- (b) Buoyancy
- (c) Hydrostatic pressure
- (d) Centre of Gravity

(T) Push-up is an example of:

- (a) Closed kinematic chain
- (b) Active free weight-bearing exercise
- (c) Resisted exercise
- (d) Open kinematic chain

2. Write Short Essay Type Questions :

5×10=50

- (a) Define PNF. Explain hold relax and contract relax.
- (b) Explain the Principle of Resistance Exercise.
- (c) Determinants of Aerobic exercise — Explain in details.
- (d) What is equilibrium and non-equilibrium test?
- (e) What is Grades of MMT? Explain the MMT of ankle planter flexion.
- (f) Define balance. Explain the physiology of balance.
- (g) Define coordination. State the Principles of Coordination Exercises.

(h) Define hydrotherapy. Explain the different properties of water and the uses of special equipment.

(i) Define relaxation. Explain the uses and techniques of *any two* relaxation methods.

(j) State the Principles of Goniometry and the types of Goniometer.

3. Write Short Answer Type Questions :

2×5=10

- (a) Stretching of iliopsoas muscle
- (b) Break test
- (c) PRE Regimes
- (d) Anthropometric measurement
- (e) Open and closed kinematic chain exercises

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

(a) Define Mobilization. Explain the various grades of mobilization. Write the indication, contraindication and the effects of it. Mention few of the school of thoughts.

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- (b) Classify Massage. Mention the physiological and therapeutical uses of each technique.
- (c) What is stretching? Mention the types of stretching. Explain various techniques. Write the indications and contraindications of stretching.