## Total number of printed pages-9

34(2) EXTH 2.3

## 2019

## **EXERCISE THEORY**

Paper: 34 (2) EXTH 2.3

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) Multiple-angle is a type of which exercise
    - (a) Isometric
    - (b) Isotonic
    - (c) Isokinetic
    - (d) None.

Contd.

(B)	The ability to perform low-intensity, repetitive or sustained activities over a prolonged period of time is defined as—	(E)	Normal Range of Goniometer measurement for Hip-abduction is
	(a) Strength		(a) 0-20°
	(b) Endurance		(b) 0-45° (c) 0-60°
	(c) Power		(c) 0-60° (d) 0-90°
	(d) None.	(F)	Tendency to assume a new and greater
(C)	Friction occurring between molecules of liquid resulting in resistance to flow is known as	(-7	length after passive stretch is known as:
	(a) Buoyancy	·	(a) Elasticity
	(b) Hydrostatic Pressure		(b) Plasticity
	(c) Viscosity		(c) Both
	(d) Surface Tension.	-200	(d) None.
(D)	During Posterior Tilt, the vertebral column moves in	(G)	massage is used to mobilise lung secretion.
	(a) Hyper extension		(a) Effleurage
	(b) Flexion		(b) Clapping
	(c) Side flexion		(c) Hacking
	(d) None.		(d) All of the above
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	(a) Normal gait		Movement is:
	(b) NWB gait		(a) recent fractures
	(c) FWB gait		(b) immediately after any joint surgery
	(d) PWB gait.		(c) malignant tumour
( <b>I</b> )	Tests for doing MMT starts from—  (a) Grade 1		(d) All of the above.
	(b) Grade 2 (c) Grade 3	(M)	Patellofemoral Medial gliding increases the
	(d) Grade 4		(a) Knee Extension ROM
(J)	Electrogoniometer was designed by—		(b) Knee Flexion ROM
	<ul><li>(a) Karpovich and Karpovich</li><li>(b) Fox and Van Breeman</li><li>(c) Schenker</li></ul>	*	<ul><li>(c) Ankle dorsiflexion</li><li>(d) None of the above.</li></ul>
(K)	(d) Mr. Moore.  Nodding of head is an example of lever.	(N)	The length of 3-Ring sling is:  (a) 75 cm
	(a) 1st		(b) 65 cm
	(b) 2nd		(c) 55 cm
	(c) 3rd (d) 4th		(d) 40 cm
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(H) Shadow walking is a type of —

(L) Contraindication of Relaxed Passive

Contd.

Movement is:

- (O) In the wing standing derived position, both the hands are placed on:
  - (a) Pelvic side of the either side
  - (b) Elbow is flexed and hands placed on same side
  - (c) Upper limbs are kept parallel and right angle to body
  - (d) Elbow is flexed and hands are placed on the body on the opposite side.
- (P) For the flexion of the elbow joint, the axis of Goniometer is on:
  - (a) lateral epicondyle of humerus
  - (b) medial epicondyle of humerus
  - (c) olecranon process of ulna
  - (d) None of the above.
- (Q) Which of the following activities doesn't belong to Pranayama:
  - (a) Dhauti
  - (b) Puraka
  - (c) Rechak
  - (d) Kumbhak

- (R) The normal human cadence is calculated by:
  - (a) No. of steps/min
  - (b) No. of steps completed in one gait cycle
  - (c) No. of steps in one stance phase
  - (d) None.
- (S) Movement that occurs the distal segment of a limb moving freely in space is called:
  - (a) Open kinematic chain
  - (b) Closed kinematic chain
  - (c) Functional exercise
  - (d) None.
- (T) PNF techniques used for stretching are:
  - (a) Hold and Relax
  - (b) Contract Relax
  - (c) Slow Reversal
  - (d) All.

- 2. Short Essay-type Questions: 5×10=50
  - (a) Define Suspension Therapy. Write about the various principles of Suspension Therapy.
  - (b) Explain the various causes of Incoordination.
  - (c) Define Hydrotherapy. Mention its contraindications.
  - (d) Write about the physiological response to Aerobic exercise.
  - (e) Classification of Massage Technique.
  - (f) Maitland Mobilization.

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- (g) Define PNF. Explain the techniques used in PNF.
- (h) Differences between Individual and Group Exercises.
- (i) MMT of Gluteus Medius Muscle.
- (j) What are the various fundamental positions? Describe the muscle work in hanging position.

3. Short Answers:

- $2 \times 5 = 10$
- (a) Passive stretching of Hamstring Muscle
- (b) Dynamic Power Test
- (c) Classification of free exercise
- (d) Active and inactive posture
- (e) Overload principle.
- 4. Essay-type Questions:
  Answer **any two** out of **three**. 10×2=20
  - (a) What are Mobility Aids? Describe the parts of Axillary crutch and its measurement.Explain the gait pattern of crutch walking.
  - (b) Define Stretching. Explain various techniques of stretching. And write the contraindications of stretching.
  - (c) Define Balance. Write about the components of balance. Discuss the causes of impaired balance.