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RE-9006

Seat No. _____

Second Year B. Physiotherapy Examination

February - 2019

Exercise - II

Time : **3** Hours] [Total Marks : **100**

SECTION - I

1 Long Essay : (Any **Two**) **2×10=20**

(1) Write in detail about structure and functional classification of joint.

(2) Define Progressive Resistive exercise. Differentiate between isotonic,isometic and isokinetic exercise.

(3) Explain Manual muscle testing and fundamental-principle of muscle testing. Write about shoulder flexors testing technique.

2 Short Essay : (Any **Two**) **2×5=10**

(1) Mechanism of Respiration.

(2) Power grip

(3) Passive movement

3 Very Short Essay : (Any **Five**) **2×5=10**

(1) Posture

(2) Quadriceps lag

(3) Axis and Plane

(4) Concave convex rule

(5) Relaxation technique

(6) Buoyancy

4 Multiple Choice Questions : (MCQs) **10×1=10**

(1) _____ order lever is the lever of speed.

(A) 1^{st} (B) 2^{nd}

(C) 3^{rd} (D) None of the above

(2) In normal standing line of gravity passes _____ the knee joint.

(A) Through (B) In front of

(C) Behind (D) Lateral

(3) Forced passive movement is contraindication for _____ joint mobilitation.

(A) Shoulder (B) Elbow

(C) Hip (D) All of the above

(4) Which is the important factor to gain bone density?

(A) Weight bearing resistance training

(B) Resistance training

(C) Weight bearing aerobic exercise

(D) None of above

(5) Stiff knee gait is characterized by _____

(A) Lurching (B) Hand to knee gait

(C) Steppage gait (D) Hip hiking

(6) In which range muscle is most efficient?

(A) Outer (B) Inner

(C) Outer part of middle (D) Inner part of middle

(7) Stretching is the

(A) Relaxed passive movement

(B) Sudden Passive movement

(C) Slow and sustained forced passive movement

(D) None of above

(8) End feel of _____ is bony.

(A) Elbow extension (B) Knee extension

(C) Hip extension (D) Shoulder extension

(9) Glenohumeral anterior glide can improve

(A) Extension range

(B) Abduction range

(C) Flexion range

(D) Extension and external rotation

(10) During elbow flexion in sitting, Triceps _____

(A) Work concentrically (B) Works eccentrically

(C) Work static (D) Does not work

SECTION - II

5 Long Essay : (Any **Two**) **2×10=20**

(1) Discuss in detail indication and contraindication of postural drainage. Enlist various positions of the same.

(2) Discuss Mat exercise functional re-education for stroke patient.

(3) What is stretching? Explain its principles. How will you stretch the hamstring ?

6 Short Essay : (Any **Two**) **2×5=10**

(1) Describe gait.

(2) Therapeutic uses of aerobic exercise.

(3) Stages of coughing.

7 Very Short Essay : (Any **Five**) **5×2=10**

(1) Fatigue

(2) Anatomical pulley

(3) Pain gate

(4) Endurance.

(5) Co-contraction

(6) Scapulo humeral Rhythm.

8 Multiple Choice Question : (MCQs) **10×1=10**

(1) Pulleys are used to

(A) Make work easy

(B) Gain mechanical efficiency

(C) Alter direction of motion

(D) All of above

(2) Active fixation can be achieved by

(A) Co-contraction of muscle

(B) Straps

(C) Manual pressure

(D) None of the above

(3) Low resistance high repetition exercise is used to improve muscle _____

(A) Strength (B) Volume

(C) Endurance (D) Co-ordination

(4) Movement in pendular suspension takes place in _____ plane

(A) Inclined plane (B) Horizontal plane

(C) Sagittal (D) Frontal

(5) Progression of Frenkel's exercise is made by alteration of

(A) Speed-Quick to slow

(B) Range-wider to smaller

(C) Complexity of exercise

(D) All of the above

(6) Groove in PNF refers to

(A) Maximum resistance

(B) Repetition

(C) Diagnonal pattern

(D) Proprioceptive stimuli

(7) In Thomas test position limitation of hip adduction range indication shortiening of

(A) Tensor facia lata (B) Ilip tibial band

(C) Iliopsoas (D) Rectus femoris

(8) The upword movement inside the water is easy. The movement is assisted by

(A) Gravity (B) Hydrostatic pressure

(C) Water current (D) Buouyancy

(9) The dangers of hyderotherapy is

(A) Slippage and fall (B) Drowning

(C) Infection (D) All of the above

(10) Which is the most important variable to improve muscle force generation capacity?

(A) Duration (B) Load

(C) Frequency (D) Sets