



MT-9006

Seat No. _____

Second Year B. Physiotherapy Examination

January – 2018

Exercise Therapy – 2 & Kinesiology

Time : 3 Hours]

[Total Marks : 100

SECTION – I

- 1 Long Essay : (Any Two) 20**
- 1 Describe the determinants of stretching intervention. Describe various adjuncts of stretching.
 - 2 Define Posture. Classify various postural deviation of spine with its relevant treatment.
 - 3 What are the indications contraindications of postural drainage ? What are the assistive devices for the same ? Add the note on postural drainage of left lower lobe.
- 2 Short Notes : (Any Two) 10**
1. Stress testing
 2. Frenkle's Exercise
 3. Stages of coughing
- 3 Write any five : 10**
1. Principles of stability
 2. Uses of hydrotherapy
 3. Types of muscle work
 4. Concave convex rule
 5. Relaxation techniques
 6. Inhibitory techniques
- 4 MCQs : 10**
1. In PNF knee flexion is the component of _____
 - a. Flexion – Abduction – External Rotations
 - b. Flexion – Adduction – External Rotation
 - c. Extension – Adduction – Internal Rotations
 - d. Extension – Abduction – External Rotation
 2. Leg lowering from extended knee position, quadriceps works _____
 - a. Concentrically
 - b. Eccentrically
 - c. Statically
 - d. Isokinetically

3. What should be the temperature of water in hydrotherapy unit ?
 - a. 27* – 35*C
 - b. 22*C – 42*C
 - c. 32*C – 35*C
 - d. None of above
4. For the group therapy, maximum number of patients in group is about _____
 - a. 4 – 6
 - b. 6 – 8
 - c. 8 – 10
 - d. More than 10
5. Valsalva maneuver should be avoided for _____
 - a. Patients with hypertension
 - b. Geriatric patients
 - c. Patients who undergone abdominal surgery
 - d. All of the above
6. Delayed onset muscle soreness peaks at _____
 - a. 1 – 2 days
 - b. 2 – 3 days
 - c. 1 week
 - d. None of above
7. Ballistic stretching is helpful for _____
 - a. Musculoskeletal patients
 - b. Neurological patients
 - c. Athlets
 - d. All of above
8. Double support phase is present in the _____ phase of gait cycle
 - a. Beginning of stance
 - b. End of stance
 - c. Both of above
 - d. Mid stance
9. The principle of Frenkle's Co – Ordination exercise is/are _____
 - a. Precision
 - b. Attention
 - c. Repetition
 - d. All of above
10. Poor posture _____
 - a. Energy consuming, so gives rise to early fatigue
 - b. Looks aesthetically ugly
 - c. Gives rise to painful masculoskeletal problem
 - d. All of above

SECTION – II

- 5 Long Essay : (Any **Two**) **20**
1. Define gait. Describe about the phases of gait cycle in walking.
 2. Discuss the kinetics & kinematics of lumbar spine.
 3. Scapula humeral rhythm & its clinical significance.
- 6 Short Essay : (Any **Two**) **10**
1. Pelvic tilt
 2. Prehension activities of hand
 3. Facet Joints: its importance in spinal movements
- 7 Write any **five** : **10**
1. Stress – strain curve
 2. Lumbo – pelvic rhythm
 3. Ulnar variance
 4. Function of anterior cruciate ligament
 5. Screw home mechanism
 6. Relation between line of gravity & centre of gravity
- 8 MCQs : **10**
1. In biaxial joint, bony component moves in :
 - a. 4 plane
 - b. 2 plane
 - c. 3 plane
 - d. 1 plane
 2. Load – deformation curve provides information about :
 - a. Elasticity
 - b. Plasticity
 - c. Ultimate strength
 - d. All of above
 3. The muscle work done by muscle during an _____ is called negative work :
 - a. Concentric contraction
 - b. Eccentric contraction
 - c. Isometric contraction
 - d. Isokinetic contraction
 4. Superior facet joint of thoracic region faces :
 - a. Superiorly & medially
 - b. Superiorly & laterally
 - c. Anteriorly & medially
 - d. Anteriorly & inferiorly

5. Sternoclavicular joint allows _____ degree of freedom ?
- 3*
 - 6*
 - 4*
 - 2*
6. Glenohumeral joint is a;
- Ball & socket joint
 - Hinge joint
 - Gomphosis joint
 - Ovoid joint
7. What are the angulation in femur called ?
- Angle of inclination
 - Carrying angle
 - Angle of torsion
 - Both (a) & (c)
8. During posterior pelvic tilt, symphysis pubis moves _____
- Laterally
 - Posteriorly
 - Superiorly
 - Inferiorly
9. The LOG passes through the body of _____
- L5
 - S1
 - S2
 - None of above
10. Stance phase makes up approximately _____ of gait cycle
- 50%
 - 40%
 - 60%
 - 80%