**IQRA NATIONAL UNIVERSITY**

**DEPARTMENT OF ALLIED HEALTH SCIENCES**

**Final-Term Examination (Spring-20) (DPT 6TH)**

**Course Title: Manual Therapy Instructor: Ms. Maria Feroze**

**Time: 6 hours 14169 Max Marks: 50**

**Note:**

* **Attempt all questions from this section, all questions carry equal marks.**

**MULTIPLE CHOICE QUESTIONS (MCQs)**

1. If someone physically moves or stretches a part of your body, such as your leg, this is called \_\_\_\_\_\_\_\_

A= PROM

1. AROM
2. AAROM
3. Full ROM
4. All these are goals of passive ROM exercises except:
5. Enhance synovial movement along joints
6. Assist circulation
7. Maintain mechanical elasticity of muscles

D=Increase pain

1. Active ROM exercises prevent thrombus formation. Which of the event/s lead to thrombus formation?
2. Conversion of fibrinogen to insoluble strands of fibrin
3. Initial generation of activated Factor X
4. Amplification of Factor X generation
5. Both B and C

E=All of the above

1. Active ROM exercises are indicated in all of the following except:
2. Muscle weakness

B=Brisk walking

C=Cycling

D=Immobilized segment

E=Both C and D

1. Irfan came to your physiotherapy clinic after being injured in a car accident. O/E, he flexes his right shoulder up to 90 degrees after which he feels pain. You help him in flexing the shoulder above 90 degrees. This type of movement is called \_\_\_\_\_\_\_
2. Passive movement
3. Active movement

C=Active assisted movement

1. Functional movement
2. A patient comes to your clinic with limitation of movement at the shoulder. You find out that he cannot pick anything from above the shelf so you give ROM exercises as a treatment for his limitation. In this case you are working on patient’s \_\_\_\_\_\_\_\_
3. PROM
4. AROM
5. Full ROM

D=Functional ROM

1. 36 years old Saif comes to your clinic with a complaint of pain in his right hip. He tells you that he had a fall 2 days back. He flexes his right hip to 60 degrees after which he feels pain. You plan to give him passive ROM exercises. The most appropriate technique to start PROM exercises is to:
2. Perform the movements with 5 to 10 reps on right hip
3. Perform the movements with 5 to 10 reps on left hip

C =Perform the movements with 10 to 20 reps on right hip

1. Perform the movements with 10 to 20 reps on left hip
2. When arising from a chair, the direction of motion is:

A=AHip extension, knee extension and ankle plantar flexion

1. Hip extension, knee extension and ankle dorsiflexion
2. Hip flexion, knee extension and ankle plantar flexion
3. Hip flexion, knee extension and ankle dorsiflexion
4. To test the muscle strength of posterior fibres of Gluteus Medius, resist hip abduction with
5. Hip extension
6. Hip external rotation
7. Hip internal rotation

D= Both A and B

1. Number of intervertebral disks in the vertebral column are:
2. 26
3. 20

C=23

D=28

1. Primary curves in the vertebral column have:
2. Anterior convexity

BPosterior convexity

1. Posterior concavity
2. None of the above
3. Lumbar lordosis develops as the child:
4. Starts to lie prone
5. Starts to sit
6. Starts to walk

D=DAll of the above

1. To minimize the musculoskeletal pain and promote healing, protection of the part affected by the inflammatory process is necessary during the \_\_\_\_\_\_\_
2. First 12 to 24 hours only

B=First 24 to 48 hours only

C=Any time after 3 days

D =Protection is of no value in musculoskeletal pain

1. A 25 years old female presented with limited right elbow movement. Therapist applied a sudden forceful thrust beyond the patient control. This technique is known as:
2. Mobilization technique
3. PROM

C=Manipulation

1. AROM
2. 38 years old lady with frozen shoulder is treated at a clinic. Therapist applies a posterior glide and simultaneously the patient actively performs physiological movement of her shoulder. This technique is known as:
3. Mobilization technique
4. Manipulation
5. AROM

D=Mobilization With Movement (MWM)

1. You are objectively assessing a 34 years old computer operator for his lumbar spine. While performing active trunk bending, patient was unable to perform full ROM due to pain but there was no pain after extending the trunk. What does it mean regarding the symptoms of patient?
2. Symptoms are severe

B=VSymptoms are irritable

1. Symptoms are not severe
2. Symptoms are non-irritable
3. The ligament which provides stability to the cervical spine preventing the odontoid process from subluxation is:
4. ALL
5. PLL
6. Transverse ligament
7. Alar ligament

E=Both C and D

1. Hip abduction can be limited by:
2. Gracilis
3. Pectineus
4. Iliotibial band

D=Both A and C

1. For maintaining ROM and preventing contracture formation \_\_\_\_\_\_\_\_ should be used:

A=Passive movements and passive stretching

1. Active movements and active stretching
2. AROM
3. AAROM
4. All of the following are contra indications for manual therapy EXCEPT:

A=Pain that is relieved by rest

1. Cellulitis
2. Hematoma
3. Osteoporosis

### Standard bone movement are all except:

### Anatomical movements

### B=BUniaxial movements

### Flexion and Extension

### Functional movements

1. Manual Therapy:

A=Manual therapy uses hands-on techniques to improve ROM in restricted joints. It is also used to stimulate the function of muscles, nerves, joints, and ligaments.

* 1. Manual therapy uses physical agents (modalities) to improve ROM in restricted joints. It is also used to stimulate the function of muscles, nerves, joints, and ligaments.
  2. Manual therapy uses hands-on techniques to improve ROM in normal joints. It is also used to stimulate the function of muscles, nerves, joints, and ligaments.
  3. All of the above

1. CPM is used to:
   1. Maintain ROM

B=Increase ROM

C=Strengthening upper limb muscles

D=Strengthening lower limb muscles

1. To passively move the shoulder in external and internal rotation in supine position, the range of shoulder abduction and elbow flexion should be \_\_\_\_\_\_\_\_\_ degrees respectively.

A=90 & 90

* 1. 90 & 60
  2. 90 & 30
  3. 60 & 60

1. A 59 year old male patient is being evaluated for left shoulder pain.  The patient reports that his shoulder pain is closely associated with activity, including stress at work.  The patient reports that at worst, the pain radiates into his neck, and he feels shortness of breath which subsides with rest.  What would the MOST appropriate intervention be?
   1. Begin passive range of motion exercises within the pain free range of motion

B=Postpone treatment and refer the patient to his physician for further evaluation

C=Apply modalities to the shoulder and instruct the patient on activity modification

D=Begin the patient with rotator cuff exercises within the pain reduced range of motion and instruct patient on activity modification

1. Although both PROM and AROM are contraindicated under any circumstance when motion to a part is disruptive to the healing process during acute or initial phase of rehabilitation while complete immobility leads to adhesion, contracture formation, sluggish circulation, and a prolonged recovery time. So what to be to done when a patient has undergone a surgical repair of a tendon or ligament?
   1. Active range of motion

B=Passive range of motion

C=Carefully controlled motion within the limits of pain-free motion

D=Resisted exercises

1. The full range possible at a particular joint is called range of motion. A patient comes to you with limited shoulder movement. What affects the joint range of motion?
   1. The structure of the joints and the bones’ articulations
   2. The integrity and flexibility of non-contractile tissues like ligaments and capsules that pass over the joints
   3. The flexibility and strength of contractile tissues along with integrity of nervous system

D=Proper movement is depending upon all the mentioned structure.

1. A patient comes to you with Right hemiplegia. On examination you noted flickering movement of the upper limb muscle. What type of ROM exercise you would likely start with:
   1. Passive Range Of Motion
   2. Active Range of Motion

C=Active Assisted Range Of Motion

D=Active Resisted Range Of Motion

1. While performing horizontal abduction and adduction in supine at glenohumeral joint, the patient’s position should be

A=Shoulder at the edge of the table. The arm is either flexed or abducted 90°

B=Shoulder at the edge of the table and the arm is in extension position

C=Shoulder is outside the edge of the table as the scapular stabilization is not necessary. The arm is abducted 900

D= Shoulder at the edge of table while arm is in 1200 abduction

1. After your therapeutic intervention for 4 weeks you noted some improvement in that the said patient is now able to move forward, hold a glass of water and then trying to bring to his mouth. This type of exercise is called
2. Passive Range Of Motion

B= Active Assisted Range Of Motion

C=Resisted Range Of Motion

D=Active Range of Motion

1. \_\_\_\_\_\_\_\_ is a basic technique used for the examination of movement and for initiating movement into a program of therapeutic intervention.
2. Stretching
3. Manipulation
4. Joint mobilization

D=Range of motion

1. ROM activities are most easily described in terms of joint range and muscle range. Terms such as flexion, extension, abduction, adduction, and rotation are used for:

A=Joint range

B=Muscle range

C=Functional excursion

D=None of the above

1. A 25 years old young cricketer seeks your advice regarding upper limb strengthening exercises. First you want to assess his muscle range. He performs flexion of elbow with supination while simultaneously performing maximum flexion at shoulder. This is \_\_\_\_\_\_\_\_\_\_

A=Maximum shortening of biceps

1. Maximum shortening of triceps
2. Maximum shortening of brachialis
3. Maximus shortening of brachioradialis
4. 40 years old patient is admitted in cardiac ward after bypass surgery. You are asked for therapeutic intervention. What therapeutic intervention will you choose as initial rehabilitation program?
5. AROM of upper and lower limb
6. PROM of upper and lower limb
7. Resisted exercises

D=Both A and B

1. A patient has no symptoms in AROM and with overpressure, the patient’s joint may be:
   1. Unstable

B=Needs to be tested further

* 1. Normal
  2. None of the above

1. In cervical spine, disc herniation occurs mostly at the level of:
   1. C3-C4
   2. C4-C5

C#CCC5-C6

D=C6-C7

1. What movement occurs at the forearm while holding a phone to the ear?
   1. Supination
   2. Pronation
   3. Flexion
   4. Extension

E=Both A and C

1. A patient comes to you with neck pain; you clinically assess the patient and find mild tightness in neck ROM. Now you want to improve his ROM, you laterally flex/bend and rotate the neck towards the right side along with neck flexion and shoulder depression. Which muscle are you stretching?
2. Levator scapulae of the right side

B=Levator scapulae of the left side

1. Trapezius of the right side
2. Trapezius of the left side
3. Sternocleidomastoid stretch involves:
4. Chin tuck in contralateral side flexion ipsilateral rotation
5. Chin tuck in side flexion towards the opposite side rotation towards the testing side
6. Chin tuck out side flexion towards the opposite side rotation towards the testing side

D=Both A and B

1. If a person has restricted ROM in the direction of contralateral side flexion along with neck flexion and shoulder depression, which muscle do you suspect as being tight?

A=Upper trapezius

B=Middle trapezius

C=Lower trapezius

D=Upper trapezius is weak

1. You are assessing a patient in clinic, when the patient lies down supine; you find out that the coracoid process is pulled inferiorly and anteriorly. This might be the contracture of which of the following muscles?
2. Pectoralis Major And Minor
3. Pectoralis Major Clavicular Fibers
4. Pectoralis Major Sternocostal Fibers

D=Pectoralis Minor alone

1. Erector spinae is the major muscle of back (lumbar). This muscle is tight when there is:
2. Increase in lumbar lordosis
3. Decrease in lumbar lordosis
4. Lack of flattening of lumbar lordosis

D= Both A and C

1. Fill accordingly:
2. Ipsilateral rotation= \_\_anterior\_\_\_\_\_\_\_ fibers of scalenes
3. Neutral rotation= \_\_\_\_\_medial\_\_\_\_ fibers of scalenes
4. contralateral rotation= \_\_\_\_posterior\_\_\_\_\_ fibers of scalenes
5. All are the muscles of neck except:
6. Upper Trapezius
7. Scalenes
8. Deep Occipitals
9. Levator Scapulae

E=None of the above.

1. Upper trapezius can be weak. This statement is:

A=True

B= False

1. A patient is doing Straight Leg Raise (SLR) and you notice that he flexes his knee while doing SLR. This is an indication of tightness of which muscle?

A=Hamstring

B=Iliopsoas

C=Rectus Femoris

DBoth A and C

1. Piriformis stretch involves all of the following except:
2. Lateral rotation of hip
3. Adduction of hip

C=Active flexion of hip to 90 degrees

D#All of the above are true

1. Scalene muscle has 3 fibers. This statement is:

A=True

B=False

1. To test the tightness of Tibialis Posterior muscle, the clinician must do the following movements:
2. Dorsiflexion and inversion of foot
3. Plantar flexion and eversion of foot

C=Dorsiflexion and eversion of foot

D=None of the above

1. All of the following are the benefits of CPM except:
   1. Prevents development of adhesions
   2. Prevents the degrading effects of immobilization
   3. Decreases postoperative pain

D=Provides a quicker return of ROM

E=None of the above