

JEMAS(PG) – 2023 MPT

1. When there is damage or injury to a muscle, the muscle setting exercises are done in the _____ position of that muscle:
 - (A) Shortened.
 - (B) Elongated.
 - (C) Neutral.
 - (D) All of the above.
2. During straight-leg raise (SLR) test adding ankle dorsiflexion with inversion places tension on the _____ nerve:
 - (A) Tibial.
 - (B) Sural.
 - (C) Common peroneal.
 - (D) Sciatic.
3. Bouchard's nodes are found in the _____ Joint:
 - (A) Elbow.
 - (B) MCP.
 - (C) PIP.
 - (D) DIP.
4. Optimal Positions for Shoulder joint Arthrodesis is _____ :
 - (A) 45° internal rotation.
 - (B) 45° external rotation.
 - (C) 30° internal rotation.
 - (D) 30° external rotation.
5. The root value of radial nerve is _____ :
 - (A) C5 to T1.
 - (B) C6 to T1.
 - (C) C7 to T1.
 - (D) C8 to T1.
6. The neutral zone of spinal motion segment is the area situated at the _____ range:
 - (A) Initial range.
 - (B) Mid-range.
 - (C) Terminal range.
 - (D) Full range.
7. Which of the following tissues absorbs the least amount of an ultrasound beam at 1 Mhz?
 - (A) Blood.
 - (B) Muscle.
 - (C) Bone.
 - (D) Skin.
8. In moist heat pack heat is transferred by _____ :
 - (A) Conduction.
 - (B) Convection.
 - (C) Radiation.
 - (D) Evaporation.

9. The amount of Knee Flexion during Mid Stance Phase of normal slow paced walking (gait) is _____:
- (A) 18 to 30°.
 - (B) 12 to 18°.
 - (C) 6 to 12°.
 - (D) 0 to 6°.
10. In a sellar joint each joint surface is _____:
- (A) Concave in one surface and convex in opposite surface.
 - (B) Concave in one direction and convex in another direction.
 - (C) Concave in both joint surfaces.
 - (D) Convex in both joint surfaces.
11. The position of maximum congruency in hip joint is _____:
- (A) Full extension and abduction.
 - (B) Full extension and adduction.
 - (C) Full extension and medial rotation.
 - (D) Full extension and lateral rotation.
12. The mechanism of action of low acupuncture like TENS is _____:
- (A) Gating at the spinal cord.
 - (B) Endorphin release.
 - (C) Ascending inhibition.
 - (D) None of the above.
13. One MET (Metabolic Equivalent) is equivalent to oxygen consumption of _____:
- (A) 2.5 mL/kg/minute.
 - (B) 3.0 mL/kg/minute.
 - (C) 3.5 mL/kg/minute.
 - (D) 4.0 mL/kg/minute.
14. To perform the Hacking manipulations wrist should be extended about _____:
- (A) 10°.
 - (B) 30°.
 - (C) 40°.
 - (D) 50°.
15. Isolytic type of muscle contraction is an example of _____ exercise:
- (A) Muscle setting.
 - (B) Isotonic concentric.
 - (C) Isotonic eccentric.
 - (D) Isometric.
16. The breathing pattern “increasing then decreasing in depth, period of apnoea interspersed with somewhat irregular rhythm” is known as _____ breathing:
- (A) Biot’s.
 - (B) Orthopnic.
 - (C) Apneustic.

- (D) Cheyne-Stokes.
17. Tarsal tunnel syndrome in the foot results from compression of the _____ nerve:
- (A) Anterior tibial.
 - (B) Posterior tibial.
 - (C) Medial plantar.
 - (D) Lateral plantar.
18. The integration level for symmetrical tonic neck reflex (STNR) is _____:
- (A) Cerebellum.
 - (B) Brain Stem.
 - (C) Midbrain.
 - (D) Medulla.
19. In hemiplegia, the lower extremity flexor synergy pattern includes all of the following components except?
- (A) Hip external rotation.
 - (B) Hip abduction.
 - (C) Ankle dorsiflexion.
 - (D) Ankle eversion.
20. Which of the following is not a contraindication for chest physical therapy?
- (A) Dyspnoea.
 - (B) Pulmonary oedema.
 - (C) Fractured Rib.
 - (D) Immediately after chest tube removal.
21. An inability to perform rapid alternating movements are known as _____:
- (A) Dysmetria.
 - (B) Dysdiadochokinesia.
 - (C) Apraxia.
 - (D) Dysphagia.
22. Chaddock's sign can be elicited by stimulating the _____:
- (A) Ball of toes.
 - (B) Sole of foot.
 - (C) Medial border of foot.
 - (D) Lateral border of foot.
23. UMN type lesion of the 7th cranial nerve involves paralysis of the _____:
- (A) All facial muscles on same side.
 - (B) All facial muscles on opposite side.
 - (C) Lower half facial muscles on same side.
 - (D) Lower half facial muscles on opposite side.
24. An inability to recognize part of one's body is denoted by _____:
- (A) Asomatognosias.
 - (B) Anosognosia.
 - (C) Hemispatial Neglect.
 - (D) All of the above.

25. Consequences of abnormally High Muscle Tone includes all of the following except _____:
- (A) Muscle spasm.
 - (B) Decreased effort by caregiver.
 - (C) Abnormal posture.
 - (D) Pressure ulcer.
26. Specific Heat of human skeletal muscle is _____ J/ g / °C:
- (A) 1.59.
 - (B) 2.30.
 - (C) 3.75.
 - (D) 4.19.
27. Cold-induced vasodilation (CIVD) occurs when the tissue temperature reaches less than _____:
- (A) 10°C.
 - (B) 13°C.
 - (C) 15°C.
 - (D) 20°C.
28. Decreased nerve conduction velocity has been documented in response to application of ice to the skin for a period of _____ minutes or longer:
- (A) 5.
 - (B) 10.
 - (C) 15.
 - (D) 20.
29. The position of maximum incongruence in knee joint is _____ flexion:
- (A) 15°.
 - (B) 25°.
 - (C) 35°.
 - (D) 50°.
30. For treating lumbar disc pathology therapist should apply _____ % of body weight as traction force:
- (A) 7%.
 - (B) 15%.
 - (C) 25%.
 - (D) 50%.
31. Which of the following muscle will be paralyzed in Axillary nerve lesion?
- (A) Deltoid.
 - (B) Biceps.
 - (C) Triceps.
 - (D) Trapezius.

32. Which of the following would show the best conductivity of all tissues to the electrical current?
- (A) Tendons.
 - (B) Muscles.
 - (C) Bones.
 - (D) Skin.
33. Classification of Levers are based on:
- (A) The load and effort located with respect to the fulcrum.
 - (B) Fulcrum and effort are located with respect to the load.
 - (C) Where the load and fulcrum are located with respect to the effort.
 - (D) None.
34. When toe extensors and Anterior Tibial muscle are paralyzed and the triceps surae muscle is normal, the following orthosis is prescribed:
- (A) Dorsiflexion assist AFO.
 - (B) Below knee orthosis with anterior and posterior stop.
 - (C) Planter flexion assist AFO.
 - (D) Static Ankle Foot Orthosis.
35. The 'Three-Column concept' divides the vertebra into which of these columns:
- (A) Medial, Middle and lateral columns.
 - (B) Anterior, Middle and Posterior columns.
 - (C) Posterior, lateral and anterior.
 - (D) None of the above.
36. To prepare a patient with an incomplete T12 paraplegic for ambulation with crutches, the upper quadrant muscle that would be most important to strengthen include the:
- (A) Upper trapezius, Rhomboids and levator scapulae.
 - (B) Middle trapezius, Latissimus dorsi and Triceps.
 - (C) Lower trapezius, Latissimus dorsi and Triceps.
 - (D) Deltoid, coracobrachialis and brachialis.
37. Tenodesis grasp seen in:
- (A) C5-C6 SCI.
 - (B) C6-C7 SCI.
 - (C) C7-C8 SCI.
 - (D) Klumpke Paralysis.
38. Which of the following instructions would be most appropriate to give a patient who is learning pursed-lip breathing?
- (A) Exhale through pursed lips while contracting abdominal muscles.
 - (B) Exhale by blowing air out forcefully between pursed lips.
 - (C) Exhale by relaxing air out through pursed lips.
 - (D) Exhale in quick short puffs through pursed lips.
39. Lower branch of brachial plexus injury leads to:
- (A) Erb's Palsy.
 - (B) Klumpke's Palsy.
 - (C) Wrist Drop.
 - (D) Shoulder Dislocation.

40. A physical therapist is caring for a patient in the step down unit. The patient has signs of increased intracranial pressure. Which of the following is not a sign of increased intracranial pressure?
- (A) Bradycardia.
 - (B) Change in LOC.
 - (C) Vomiting.
 - (D) Increased pupil size bilaterally.
41. Which of the following condition would be considered as contraindication for aquatic therapy?
- (A) Chronic Pain.
 - (B) Cerebral Palsy.
 - (C) Urinary Tract Infection.
 - (D) Multiple Sclerosis.
42. A physical therapist working on an ICU unit, notices a patient is experiencing calf pain, and warmth over the posterior calf. All of these may indicate which of the following medical conditions?
- (A) Patient may have a DVT.
 - (B) Patient may be exhibiting signs of dermatitis.
 - (C) Patient may be in the late phases of CHF.
 - (D) Patient may be experiencing anxiety after surgery.
43. A physical therapist is working in an outpatient orthopaedic clinic. During the patient's history the patient reports, "I tore 3 of my 4 Rotator cuff muscles in the past." Which of the following muscles cannot be considered as possibly being torn?
- (A) Teres minor.
 - (B) Teres major.
 - (C) Supraspinatus.
 - (D) Infraspinatus.
44. A patient presents to the inpatient rehabilitation unit who has suffered a vertebro-basilar CVA and has difficulty adducting and depressing his eyes. Which cranial nerve is the MOST likely cause of this impairment?
- (A) CN I.
 - (B) CN II.
 - (C) CN III.
 - (D) CN IV.
45. In ICU a patient demonstrates, No eye opening, no verbal response and no motor response. Using GCS how would you score this patient?
- (A) 0.
 - (B) 1
 - (C) 3
 - (D) 6
46. As you stand on your tip toes your foot is acting as what type of lever?
- (A) Class –I.
 - (B) Class –II.
 - (C) Class –III.
 - (D) All of the above.

47. A 20 year old male soccer player presents with a Grade II right lateral ankle sprain upon evaluation. What are the characteristics of a Grade II ankle sprain?
- (A) Partial tear of the lateral ligament complex with mild joint instability, moderate intra-capsular swelling and tenderness, and some loss of ROM and joint function.
 - (B) Complete rupture of the anterior talofibular ligament, calcaneofibular ligament, and capsule with mechanical joint instability; severe intra/extra-capsular swelling, ecchymosis, tenderness and inability to weight-bear.
 - (C) Stretch of the lateral ligament complex with no macroscopic tear or joint instability, little swelling or tenderness.
 - (D) Partial tear of the syndesmosis, creating generalized swelling and tenderness throughout the ankle joint complex; inability to bear weight, severe ecchymosis, and mortise widening.
48. A fundamental principle of early intervention is that:
- (A) It should begin as early in life as possible.
 - (B) It should target poor children.
 - (C) It should begin after infancy, around 18 months to 2years.
 - (D) It should begin working with pregnant women prior to the birth of the child.
49. Which of the following is the most important instructional strategy to use when adapting physical activities for children with asthma?
- (A) Schedule frequent rest and water breaks during the children's activities.
 - (B) Permit the children to perform at lower intensity levels during aerobic activities and when exercising in cold, dry weather.
 - (C) Allow the children to be excused from all physical education activities involving running.
 - (D) Encourage the children to breathe through their mouths during aerobic activities and when exercising outdoors
50. Which of the following is not a feature of Coxa vara?
- (A) Increased external rotation of affected hip.
 - (B) Prominent greater trochanter of affected hip.
 - (C) Positive Trendelenburg sign.
 - (D) Lengthening of the affected limb.
51. Which of the following is an example of specific learning disability?
- (A) Mental Retardation.
 - (B) Dyslexia.
 - (C) ADHD.
 - (D) Autistic spectrum disorder.
52. Flat foot is most commonly seen in:
- (A) Toddlers.
 - (B) Os calcis fracture.
 - (C) Congenital vertical talus.
 - (D) Spastic Peroneal muscles.
53. “Gunstock” deformity occurs as a complication of which fracture:
- (A) Capitulum fracture.
 - (B) Fracture neck of radius.
 - (C) Supra condylar fracture.
 - (D) Fracture lateral epicondyle of Humerus.

54. Known factors for “ Idiopathic scoliosis”:
- (A) Congenital.
 - (B) Unknown.
 - (C) Postural.
 - (D) Polio.
55. Clinical test of hip dysplasia in New Born is:
- (A) Trendelenburg sign.
 - (B) Faber’s test.
 - (C) Ortolani’s sign.
 - (D) Telescopic test.
56. Sprengel’s deformity of scapula is:
- (A) Undescended / elevated scapula.
 - (B) Undescended neck of scapula.
 - (C) Exostosis Scapula.
 - (D) None of the above.
57. Cattell’s classification is useful for:
- (A) CDH.
 - (B) CTEV.
 - (C) Fracture neck of femur.
 - (D) Perthe’s disease.
58. A neonate has an asymmetric Moro’s reflex, Social smile is normal. On examination weak or absent abduction of shoulder and supination of forearm. The lesion lies at:
- (A) C 3 -6.
 - (B) C 3 -4.
 - (C) C 7 -8.
 - (D) T 1- 4.
59. The fixed flexion deformity of Hip can be tested by:
- (A) Thomas test.
 - (B) Barlow’s test.
 - (C) Trendelenburg’s test.
 - (D) Lachman’s test.
60. The deformities seen in Rheumatoid hand are all except:
- (A) Swan neck deformity.
 - (B) Boutonniere’s deformity.
 - (C) Radial deviation.
 - (D) Adduction, External rotation, Flexion.
61. Lesion in Pyramidal tract causes:
- (A) Rigidity.
 - (B) Athetosis.
 - (C) Flaccidity.
 - (D) Spasticity.

62. Scarpa's triangle is:
- (A) Posterior triangle of the neck.
 - (B) Anterior triangle of the neck.
 - (C) Femoral triangle.
 - (D) None of the above.
63. The normal angle of the acetabulum in adult:
- (A) 5- 7 degree.
 - (B) 33- 38 degree.
 - (C) 40- 45 degree.
 - (D) 50- 55 degree.
64. The Commonest cause for neuralgic pain in foot is:
- (A) Compression of communication between medial and lateral plantar nerves.
 - (B) Exaggeration of longitudinal arches.
 - (C) Injury of deltoid ligaments.
 - (D) Shortening of Plantar aponeurosis.
65. In cerebral palsy the intelligence quotient is:
- (A) Very Low.
 - (B) Always borderline.
 - (C) May or May not be normal.
 - (D) High.
66. A Patient has been referred to your clinic after being evaluated at an spine centre. The Patient has been diagnosed as having rheumatoid arthritis rather than Osteoarthritis. Which of the following would you expect to observe in a rheumatoid arthritis patient?
- (A) Chronic Inflammation.
 - (B) Involvement of the shoulder joints.
 - (C) Involvement of the weight bearing joints.
 - (D) Involvement of the proximal interphalangeal joints.
67. The in-charge nurse on a cardiac unit tells you a patient is exhibiting signs of right-sided heart failure. Which of the following would indicate right-sided heart failure?
- (A) Nausea.
 - (B) Anorexia.
 - (C) Rapid weight gain.
 - (D) Shortness of breath.
68. Which of the following arterial blood gas values indicates a patient may be experiencing a condition of metabolic acidosis?
- (A) PaO₂ (91%).
 - (B) Bicarbonate 159.
 - (C) CO₂ 48 mm Hg.
 - (D) pH 7.33.
69. What age does the Rooting reflex become integrated?
- (A) 3 months.
 - (B) 6 months.
 - (C) 8 months.
 - (D) 10 months.

70. Name of Rotator cuff muscles are:
(A) Deltoid, supraspinatus, trapezius & Triceps.
(B) Supraspinatus, Infraspinatus, Teres minor & pectoralis major.
(C) Supraspinatus, Infraspinatus, Teres minor & Subscapularis.
(D) None of these.
71. Wrist drop is due to:
(A) Ulnar nerve lesion.
(B) Median nerve lesion.
(C) Sciatic nerve lesion.
(D) Radial nerve lesion.
72. Abduction of hip is occurred by action of:
(A) Gluteus maximus & Sartorius.
(B) Gluteus medius & minimus.
(C) Adductor magnus & longus.
(D) Bicep brachii & Brachioradialis.
73. Muscles of mastication are:
(A) Temporalis, buccinators, masseter & orbicularis oris.
(B) Medial & lateral pterygoid, orbicularis oris & zygomatic major.
(C) Masseter, medial & lateral pterygoid & temporalis.
(D) None of these.
74. Smallest bone of Human skeleton:
(A) Stapes.
(B) Hamate.
(C) Pisiform.
(D) Capitate.
75. How many Bones in axial skeleton (adult)?
(A) 70.
(B) 80.
(C) 126.
(D) 90.
76. Popliteus muscle in the leg is used for.....while walking:
(A) Locking of knee.
(B) Unlocking of knee.
(C) Ankle dorsiflexion.
(D) None of these.
77. Intrinsic muscles of hand are supplied by:
(A) Median nerve.
(B) Radial nerve.
(C) Musculocutaneous nerve.
(D) Femoral nerve.

78. Claw hand is usually caused by damage to:
- (A) Ulnar nerve.
 - (B) Radial nerve.
 - (C) Median nerve.
 - (D) Sural nerve.
79. Function of Patella in the movement of knee:
- (A) Anatomic pulley for quadriceps.
 - (B) Anatomic pulley for Hamstring.
 - (C) Anatomic pulley for calf muscle.
 - (D) None of these.
80. The movement Ratio of scapula and humerus in scapulohumeral Rhythm:
- (A) 1:2.
 - (B) 2:1.
 - (C) 1:1.
 - (D) 2:3.
81. Intrinsic plus hand represent as:
- (A) Excessive flexion of MCP and Extension of IP joint.
 - (B) Excessive flexion of IP and Extension of MCP joint.
 - (C) Excessive flexion of MCP and IP joint.
 - (D) Excessive extension of MCP and IP joint.
82. In Gait, The Ratio of Stance Phase and swing phase is:
- (A) 60:40.
 - (B) 40:60.
 - (C) 30:70.
 - (D) 70:30:00.
83. Trendelenburg test is done to detect:
- (A) Weakness of hip abductor muscles.
 - (B) Weakness of hip adductor muscles.
 - (C) Weakness of hip flexor muscles.
 - (D) Weakness of hip rotator muscles.
84. Pain gate theory was postulated by:
- (A) Cyriax and Johnson.
 - (B) Bryan Mulligan and Cyriax.
 - (C) Melzack and wall.
 - (D) Maitland & Melzack.
85. Interrupted Galvanic current is choice for stimulation of:
- (A) Denervated muscle.
 - (B) Innervated muscles.
 - (C) Denervated muscle& innervated muscles.
 - (D) None of These.

86. If mark space ratio of UST is 1:1 then Duty cycle:
(A) 20%.
(B) 30%.
(C) 40%.
(D) 50%.
87. Frequency of Faradic Type current:
(A) 50-100 Hz.
(B) 30-50 Hz.
(C) Below 20 Hz.
(D) 100-200 Hz.
88. Iontophoresis means:
(A) Ion Transfer.
(B) Molecule Transfer.
(C) Sound Transfer.
(D) None of These.
89. Quadripolar method of electrode placement is usually used in:
(A) SWD.
(B) UST.
(C) MWD.
(D) IFT.
90. Grade -I scillatory technique of Maitland Mobilization is used to:
(A) Reduce spasticity.
(B) Increase ROM.
(C) Reduce joint pain.
(D) None of these.
91. Forceful expiratory techniques are:
(A) Coughing.
(B) Huffing.
(C) Huffing & coughing.
(D) None of these.
92. The characteristics of Blount's disease is:
(A) Genu varum.
(B) Genu valgum.
(C) Coxa valga.
(D) Coxa vara.
93. ----- joint s involved in Syme's amputation:
(A) Midtarsal.
(B) Ankle.
(C) Tarsometatarsal.
(D) None of these.
94. Name of 7th Cranial nerve:
(A) Vagus.
(B) Olfactory.
(C) Optic.
(D) Facial.

95. McBurney's incision is used to access:
- (A) Appendectomy.
 - (B) Splenectomy.
 - (C) Gall Bladder operation.
 - (D) Pneumonectomy.
96. Which trimester in pregnancy is relatively uneventful?
- (A) 1st Trimester.
 - (B) 3rd Trimester.
 - (C) 4th Trimester.
 - (D) 2nd Trimester.
97. Median sternotomy is widely used for:
- (A) Cholecystectomy.
 - (B) Caesarean section.
 - (C) Appendectomy.
 - (D) Cardiac surgery.
98. A Boutonniere deformity present as:
- (A) PIP-flexed & DIP- hyperextended.
 - (B) MCP flexed & PIP hyperextended.
 - (C) MCP Hyperextended & DIP Flexed.
 - (D) None of these.
99. Spasticity is due to lesion on:
- (A) Upper motor neuron lesion.
 - (B) Lower motor neuron lesion.
 - (C) Both Upper & lower motor neuron lesion.
 - (D) None of these.
100. A positive Cozen's test indicates:
- (A) Golfer's elbow.
 - (B) Student's elbow.
 - (C) Tennis elbow.
 - (D) None of these.