



SREE CHITRA TIRUNAL INSTITUTE FOR MEDICAL SCIENCES & TECHNOLOGY

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ROLL NUMBER

**WRITTEN TEST FOR THE POST OF PHYSIOTHERAPIST - A**

DATE: 28/06/2023

TIME: 1 pm To 2.30 pm

DURATION: 90 MINUTES

Total Marks: 100

**INSTRUCTIONS TO THE CANDIDATES**

1. Write your Roll Number on the top of the Question Booklet and in the OMR sheet.
2. Each question carries **one (1)** mark.
3. There will be no Negative Marking.
4. Each question carries 4 options i.e., **A, B, C & D**. Darken completely, the bubble corresponding to the most appropriate answer using **blue or black ball point pen**.
5. Marking more than **one option** will invalidate the answer. -
6. Candidate should sign in the **question paper** and OMR sheet.
7. No clarifications will be given.
8. Candidate should hand over the **OMR sheet** and **question paper** to the invigilator before leaving the examination hall.

Signature of the Candidate

*Purna Sreedhar*  
28/6/2023

**Physiotherapist – A Examination June 2023**  
**MCQs (1 Mark each)**

- 1) Distance from the point of heel strike, of one extremity to the point of heel strike of the opposite extremity is called as:
  - a) Step width
  - b) Stride width
  - c) Step length
  - d) Stride length
  
- 2) Which one of these is not considered a primary impairment following stroke?
  - a) Aphasia
  - b) Edema
  - c) Impaired muscle tone
  - d) Impaired voluntary control
  
- 3) Bluish-gray discoloration of the skin and mucous membrane are commonly called as
  - a) Erythema
  - b) Ecchymosis
  - c) Cyanosis
  - d) Pallor
  
- 4) The first respiratory defense mechanism is encountered in the
  - a) Mouth
  - b) Nose
  - c) Larynx
  - d) Trachea
  
- 5) Diabetic neuropathy can be most appropriately described as:
  - a) Motor polyneuropathy
  - b) Distal sensory polyneuropathy
  - c) Sensory motor neuropathy
  - d) Distal motor neuropathy
  
- 6) Which muscle is the principal extensor of the thigh in an upright position?
  - a) Hamstrings
  - b) Gluteus minimus
  - c) Gluteus medius
  - d) Gluteus maximus

*Rupa Bredhar*  
28/6/2023

- 7) The structure which gives restraint at knee joint in the maximum directions is:
- LCL (lateral collateral ligament)
  - MCL (medial collateral ligament)
  - ACL (anterior cruciate ligament)
  - PCL (posterior cruciate ligament)
- 8) As an ultrasonic beam travels through tissues the energy contained within it decreases with the distance traversed. This phenomenon is known as:
- Absorption
  - Attenuation
  - Conduction
  - Reflection
- 9) Electrical silence (ie., no electromyogram activity) at rest is:
- Normal
  - Abnormal
  - Denervation
  - Occurs in polymyositis
- 10) Medium frequency currents are those whose frequency ranges from:
- 1-100 Hz
  - 1000 Hz-10000Hz
  - >1 MHz
  - 4000-5000 Hz
- 11) In poliomyelitis destruction occurs in:
- Muscular artery disease
  - Peripheral nerve
  - Anterior horn cells
  - Posterior horn cells
- 12) Which of the following is the most appropriate orthosis for a patient with excessive foot pronation during static standing?
- Scaphoid pad
  - Metatarsal pad
  - Metatarsal bar
  - Rocker bar
- 13) Which one of the following is the most common nerve tissue damage associated with fracture shaft of humerus?
- Axillary nerve injury
  - Radial nerve injury
  - Brachial plexus injury
  - Median nerve injury

*Rupa Sreedhar*  
28/6/2023<sub>2</sub>

- 14) Centre of gravity of adult humans in the anatomical position is slightly
- Anterior to S3 vertebra
  - Posterior to S1 vertebra
  - Anterior to S2 vertebra
  - Posterior to S2 vertebra
- 15) Leg lowering from extended knee position, Quadriceps work
- Concentrically
  - Eccentrically
  - Statically
  - Isokinetically
- 16) Frenkel's exercises are devised to improve coordination by use of sight, sound, and touch in case of ataxia due to
- Cortical lesion
  - Loss of kinesthetic sensation
  - Spastic paralysis
  - Flaccid paralysis
- 17) Exercises that occur in rounds and consist of continuous training
- Open kinematic chain
  - Close kinematics chain
  - Circuit training
  - Isometric
- 18) What should be the progression of exercise protocol following musculoskeletal injury?
- Isometric - eccentric – concentric
  - Isometric-concentric-concentric & eccentric
  - Concentric eccentric-concentric & eccentric
  - Isometric-concentric – eccentric
- 19) In Delorme's progressive resistance exercises, the progression of 10 RM is made once
- Daily
  - Every week
  - Every fortnight
  - Every month
- 20) The piriformis syndrome is caused by piriformis muscle that compresses
- Gluteal nerve
  - Femoral nerve
  - Obturator nerve
  - Sciatic nerve

*Rupa Sreedhar*  
28/6/2023

- 21) Pump handle movement is a feature of
- Lower ribs
  - Upper ribs
  - All ribs
  - Diaphragm
- 22) Conventional TENS is:
- High-intensity, low-frequency stimulation
  - Low-intensity, low-frequency stimulation
  - High-intensity, high-frequency stimulation
  - High-frequency, low-intensity stimulation
- 23) Which one of the following is **NOT** due to the pelvic floor musculature?
- It helps in the generation of intra-abdominal pressure
  - It assists in unloading the spine
  - It has an excitatory effect on bladder activity
  - It maintains the anorectal angle
- 24) Ataxia of the trunk is seen in lesions of:
- Cerebellar vermis
  - Neo cerebellum
  - Archi cerebellum
  - Paleo cerebellum
- 25) Spirometry does not determine the:
- Tidal volume
  - Inspiratory reserve volume
  - Vital capacity
  - Residual volume
- 26) 10 RM load refers to:
- A weight that can be lifted less than 10 times as it is too heavy
  - A maximum weight that can be lifted for minimum 10 minutes
  - A minimum weight that can be lifted for maximum 10 seconds
  - A weight that can be lifted only 10 times and is too heavy to be lifted more than 10 times
- 27) Cause of Bell's palsy is
- Idiopathic
  - Vascular
  - Trauma
  - Exposure to heat

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28/6/2023

- 28) Loss of axonal continuity as well as myelin sheath with intact connective tissue coverings represents which type of nerve injury?
- Neuropraxia
  - Axonotmesis
  - Neurotmesis
  - Neurolysis
- 29) Which of these is not a recommended preventive measure for osteoporosis?
- Diet rich in calcium and vitamin D
  - Weight-bearing exercises
  - Resistance exercises
  - Diet rich in fats
- 30) Passive Stretching is the \_\_\_\_\_.
- Slow and sustained passive movement
  - Sudden forced passive movement
  - Relaxed jerky movement
  - Manipulation
- 31) All of the following are in the normal gait cycle except:
- Swing phase
  - Mid swing
  - Initial contact
  - Heel flat
- 32) An example of a synovial joint is:
- Intervertebral disc
  - Sternomanubrial joint
  - Sacroiliac joint
  - Distal tibulofibular joint
- 33) The lesion in Klumpke's paralysis is at:
- Cervical plexus
  - Lower brachial plexus
  - Upper brachial plexus
  - Sacral plexus
- 34) Which one of the following is a contraindication for cryotherapy?
- Peripheral artery disease
  - Acute injury
  - Acute inflammation
  - Acute ankle sprain

*Rupa Sreedhar*  

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28/6/2023

- 35) Hemibalismus is due to a lesion in the:
- Subthalamic nucleus
  - Red nucleus
  - Putamen
  - Globus Pallidus
- 36) FEV1/FVC ratio may increase in
- COPD
  - Bronchial Asthma
  - Restrictive airway disease
  - Bronchiectasis
- 37) Green stick fracture is seen in
- Adult
  - Children
  - At any age
  - Elderly
- 38) Brain death is
- Irreversible loss of capacity to think
  - Loss of capacity to breathe
  - Brainstem death
  - Death of cortex
- 39) Severe brain injury according to Glasgow coma scale is
- 3 to 8
  - 9 to 10
  - 11 to 13
  - 14 to 15
- 40) Increased polyphasic action potential is a feature of
- Denervation
  - Neuropathy
  - Myasthenia gravis
  - Myopathy
- 41) Motor perception disorder is
- Aphasia
  - Apraxia
  - Alexia
  - Anomia
- 42) Paralysis of palate, pharynx and larynx can occur due to lesion of
- 7th cranial nerve
  - 3<sup>rd</sup> cranial nerve
  - 10th cranial nerve
  - 12th cranial nerve

*Deepa Sreedhar*  
28/6/2023

- 43) Commonest intra-cranial tumor
- Gliomas
  - Meningiomas
  - Angiomas
  - Neuromas
- 44) Burst fracture is seen in
- Talus fracture
  - Vertebral fracture
  - Femoral head fracture
  - Scaphoid
- 45) Stretching of the transferred tendon can be performed after \_\_\_\_.
- 3 weeks
  - 6 weeks
  - 12 weeks
  - after 6 weeks provided the power is grade 3+
- 46) Faradic current is
- An alternating current
  - A direct current
  - Interrupted current
  - Modified current
- 47) Following skin graft the part must be left undisturbed and passive movement can be started after \_\_\_\_\_
- 3 - 4 days
  - 7 - 10days
  - 21 days
  - 6 weeks
- 48) Degenerative bone disease is called as
- Osteoarthritis
  - Rheumatoid Arthritis
  - Gouty arthritis
  - Synovitis
- 49) Knee flexion in prone lying is an example of
- 1st order lever
  - 2nd order lever
  - 3rd order lever
  - 4th order lever
- 50) 2nd order lever is the lever of
- Stability

*Pooja Bredhar*  
28/6/2023



- b. Instability
- c. Speed
- d. Efficiency

51) Standing on toes is an example of \_\_\_\_\_ order lever

- a. 1st
- b. 2nd
- c. 3rd
- d. 4<sup>th</sup>

52) Internal respiration is:

- a) The exchange of oxygen and carbon dioxide between blood and tissue cells
- b) The exchange of oxygen and carbon dioxide between blood and atmosphere
- c) The exchange of hydrogen and carbon dioxide between blood and tissue cells
- d) The exchange of oxygen, carbon dioxide and nitrogen between blood and tissue cells

53. Thomas heel is given in case of

- a. Equines foot
- b. Cavus foot
- c. Flat foot
- d. CTEV

54) The Blue Print of a Research work is called \_\_\_\_\_

- a) Research Design
- b) Research Problem
- c) Research Method
- d) Research Tool

55) What is angiogenesis?

- a) Differentiation process
- b) Growth factors
- c) Contact inhibition
- d) Blood vessel formation

56) A 78-year-old female who has osteoporosis and reports mid-thoracic back pain. During assessment, what characteristic posture should the physiotherapist expect the patient to have?

- a) Increased cervical lordosis, increased thoracic kyphosis
- b) Decreased lumbar lordosis, decreased cervical lordosis
- c) Increased thoracic kyphosis, decreased cervical lordosis
- d) Decreased lumbar lordosis, increased cervical lordosis

*Reena Sreedhar*<sup>8</sup>  
28/6/2023

- 57) Biceps Brachii acts as a
- Flexor of knee
  - Extensor of elbow
  - Flexor of elbow
  - Extensor of knee
- 58) Minute Volume is equal to
- $FiO_2 \times PEEP$
  - $FiO_2/PEEP$
  - Tidal Volume  $\times$  Respiratory rate
  - Tidal Volume/Respiratory rate
- 59) \_\_\_\_\_ splint is prescribed for claw hand deformity
- Cock-up
  - Knuckle bender
  - Pan cake
  - Short opponens
- 60) Colles' fracture occurs at
- Distal 1/3rd of radius
  - Proximal 1/3rd of radius
  - Olecranon process of ulna
  - Distal 1/3rd of ulna
- 61) In case of unilateral Phrenic nerve palsy, with deep inspiration the paralyzed half of the diaphragm is?
- Pulled up in the thorax
  - Pulled up in the abdomen
  - Pushed down in thorax
  - Pushed down in abdomen
- 62) A physical therapist is evaluating a 66 year old female who has a history of severe head trauma following a motor vehicle accident. The patient has difficulty with rapid alternating movements while performing neurologic testing. The BEST term to describe this specific impairment is:
- Ataxia
  - Dysmetria
  - Dysarthria
  - Dysdiadochokinesia
- 63) What is fibromyalgia?
- Small tumors in muscle tissue
  - A collection of painful symptoms
  - Extra growth of fibrous tissue
  - Tendon inflammation
- 64) Patient with tumor in the frontal lobe will **NOT** present with following signs and symptoms

*Rupa Sreedhar*  
\_\_\_\_\_  
28/6/2023

- a) Incontinence of urine and faeces
  - b) Hemiplegia
  - c) Wernicke's dysphasia
  - d) Emotional lability
- 65) Hyperextension at Interphalangeal Joint (IP) joint of finger is checked by
- a. Volar plate
  - b. Extensor hood
  - c. Tension of the skin
  - d. Collateral ligament
- 66) Reverse colle's fracture is otherwise known as
- a. Barton's fracture
  - b. Smith fracture
  - c. Galeazzi fracture
  - d. Pott's fracture
- 67) The space between \_\_\_\_\_ & \_\_\_\_\_ is referred to as Noman's land (PIP – proximal interphalangeal DIP - distal interphalangeal MCP -metacarpophalangeal)
- a. PIP joint & DIP joint
  - b. MCP joint & PIP joint
  - c. MCP joint & DIP joint
  - d. Wrist joint to MCP joint
- 68) Patient with bone tumor has used crutches with a partial weight-bearing toe touch gait for the past 3 months. When progressed to full weight-bearing, the patient is unable to demonstrate a heel-toe gait sequence with the involved extremity. Which of the following disorders is the MOST likely origin of the gait abnormality?
- a) Plantar fasciitis
  - b) Bunion toe
  - c) Heel cord tightness
  - d) Hammer toe
- 69).Shoulder dislocation is caused by vigorous
- a. Flexion with internal rotation
  - b. Flexion with external rotation
  - c. Abduction with External rotation
  - d. Abduction with internal rotation
- 70) Colposcopy is a medical diagnostic procedure used for examination of
- a) Ovary
  - b) Colon
  - c) Uterus
  - d) Cervix/Vagina

*Punya Kreedhar*  
28/6/2023

- 71) A physical therapist suspects that a patient is developing Bell's Palsy. The physical therapist wants to test the function of cranial nerve VII. Which of the following would be the most appropriate testing procedures?
- Test the taste sensation over the back of the tongue and activation of the facial muscles.
  - Test the taste sensation over the front of the tongue and activation of the facial muscles.
  - Test the sensation of the facial muscles and sensation of the back of the tongue.
  - Test the sensation of the facial muscles and sensation of the front of the tongue.
- 72) A patient has been diagnosed with diabetes mellitus. Which of the following is not a clinical symptom of diabetes mellitus?
- Polyphagia
  - Polyuria
  - Polydipsia
  - Hirsutism
- 73) Mallet finger is due to
- Contracture of FDP
  - Rupture of collateral slip of extensor expansion
  - rupture of central slip of extensor expansion
  - Rupture of the volar plate
- 74) Swan neck deformity is due to
- Contracture of extensor digitorum communis
  - Intrinsic tightness
  - Contracture of FDP
  - Rupture/laxity of volar plate
- 75) A patient who has suffered a cutting injury to the entire left half of the spinal cord at the T8 level is being examined by a physical therapist. Which of the following impairments would be MOST apparent on the ipsilateral lower extremity?
- Loss of pain and temperature sensation
  - Loss of movement and light touch sensation
  - Loss of peripheral smooth muscle control
  - Loss of coordination and accuracy
- 76) Interferential therapy is not used for
- Muscle stimulation
  - Pain relief
  - Muscle re-education
  - Wound healing

11  
Rupa Sreedhar  
28/6/2022

- 77) Avascular necrosis of scaphoid fracture occurs at
- Proximal half
  - Distal half
  - Whole bones
  - Distal one third
- 78) ----- current is used for the stimulation of innervated muscles
- Russian
  - Interferential type
  - Surged faradic
  - Interrupted galvanic
- 79) A physical therapist is evaluating a 50-year-old patient with a generally swollen right leg. The patient does not report any trauma to the leg and describes the swelling as increasing gradually over the last 12 months. The swelling is non-pitting, primarily below the knee. The leg is not red or hot, and the patient indicates that his leg just feels "heavy." What is the MOST likely origin of the swelling?
- Systemic infection
  - Chronic inflammation
  - Congestive heart failure
  - Lymphedema
- 80) While examining a patient's lumbar x-ray films, a physical therapist notices that the L5 vertebra is displaced anteriorly on sacrum by approximately 50% of the vertebral body. What is this condition called?
- Spondylosis
  - Osteoporosis
  - Spondylolisthesis
  - Scoliosis
- 81) The best bone graft is
- Allograft
  - Autograft
  - Xeno Graft
  - Metal implant
- 82) The mode of heat transfer by hot pack is
- Conduction
  - Radiation
  - Convection
  - Convection

*Pupa Bredhar* <sup>12</sup>  
28/6/2023

- 83) Following is the correct for Chopart's amputation:
- Inter-tarsal
  - Tarsometatarsal
  - Carpometacarpal
  - Ankle joint
- 84) A 12-year-old male athlete is being evaluated by a physical therapist. The patient reports pain with running and has a sharp pain over the patellar tendon, particularly on the tibial tubercle. Which of the following disorders is MOST likely present?
- Legg-Calvé-Perthes' disease
  - Chondromalacia patellae
  - Osgood-Schlatter disease
  - Pes anserine bursitis
- 85) Which of the following is **NOT** true about breathing exercises?
- Diaphragmatic breathing is used to increase ventilation
  - Improve gas exchange
  - Increase work of breathing
  - Improve mobility of chest
- 86) Which one of the following is the most important factor to gain bone density?
- Resistance training
  - Weight bearing aerobic conditioning
  - Weight bearing resistance training
  - Non weight bearing aerobic training
- 87) Bony ankyloses result from:
- Pyogenic arthritis
  - Traumatic arthritis
  - Osteoarthritis
  - Rheumatic arthritis
- 88) The head of Femur receives blood supply from:
- Medial and Lateral Femoral artery
  - Medial and Lateral circumflex artery
  - Medial and Lateral iliac artery
  - Medial and lateral gluteal artery

*Rupa Sreedhar*  
28/6/2023

- 89) Positive adson's test indicates thoracic outlet syndrome due to
- Splenius capitis muscle
  - Cervical rib
  - Sternocleidomastoid muscle
  - Trapezius muscle
- 90) A 26 year old female presents with a diagnosis of recurrent patella dislocation. Which direction does the patella most often dislocate?
- Superior
  - Medial
  - Inferior
  - Lateral
- 91) After administration, many drugs are stored at specific locations in the body. What is the primary site for drug storage in the body?
- Adipose tissue
  - Spleen
  - Bone
  - Muscle
- 92) Hyperbaric oxygen is indicated in:
- Aerobic infections
  - Fungal infections
  - Anaerobic infections
  - Viral infections
- 93) Commonest benign tumour of the bone:
- Osteoma
  - Osteochondroma
  - Chondroma
  - Osteoid Osteoma
- 94) Fish head appearance of the vertebral bodies is seen in:
- Paget's disease
  - Rickets
  - Osteomalacia
  - Osteoporosis
- 95) Commonest fracture in childhood is:
- Femur
  - Clavicle
  - Radius
  - Distal tibia

96) The ability of Cardiac muscles to regenerate is:

- a) Partial
- b) None
- c) Complete
- d) Variable

97) The resting membrane potential of skeletal muscle fiber is:

- a) -90 mv
- b) -0.9 mv
- c) -0.09 mv
- d) -0.009 mv

98) The mode of heat transfer by whirl pool bath is\_\_\_\_\_.

- a. Convection
- b. Radiation
- c. Conduction
- d. Convection

99) HLA B 27 is negative in

- a. Ankylosing spondylitis
- b. Reiter's syndrome
- c. Psoriatic arthritis
- d. SLE

100) Which Scale is used for check the level of Consciousness:

- a. MMSE (Mini Mental Status Examination) Scale
- b. GCS (Glasgow Coma Scale)
- c. Visual Analog Scale
- d. Gross Motor Function Classification Scale

Pupa Reddy  
28/6/2023



**SCTIMST Examination**  
**MCQs (1 Mark each) Answer Key**

- Q1. C
- Q2. B
- Q3. C
- Q4. B
- Q5. C
- Q6. D
- Q7. B
- Q8. B
- Q9. A
- Q10. B
- Q11. C
- Q12. A
- Q13. B
- Q14. C
- Q15. B
- Q16. B
- Q17. C
- Q18. A
- Q19. B
- Q20. D
- Q21. B
- Q22. D
- Q23. C
- Q24. A
- Q25. D
- Q26. D
- Q27. A
- Q28. B
- Q29. D
- Q30. A
- Q31. D
- Q32. C
- Q33. B
- Q34. A
- Q35. A
- Q36. C
- Q37. B
- Q38. C
- Q39. A
- Q40. D, B
- Q41. B

*Rupa Sreedhar*  

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*28/6/2023*

- Q42. C
- Q43. A
- Q44. B
- Q45. D
- Q46. A
- Q47. B
- Q48. A
- Q49. C
- Q50. D
- Q51. B
- Q52. A
- Q53. C
- Q54. A
- Q55. D
- Q56. A
- Q57. C
- Q58. C
- Q59. B
- Q60. A
- Q61. A
- Q62. D
- Q63. B
- Q64. C
- Q65. A
- Q66. B
- Q67. B
- Q68. C
- Q69. C
- Q70. D
- Q71. B
- Q72. D
- Q73. B
- Q74. D
- Q75. B
- Q76. D
- Q77. A
- Q78. C
- Q79. D
- Q80. C
- Q81. B
- Q82. A
- Q83. A
- Q84. C
- Q85. C

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28/6/2023

- Q86. C
- Q87. A
- Q88. B
- Q89. B
- Q90. D
- Q91. A
- Q92. C
- Q93. B
- Q94. D
- Q95. B
- Q96. B
- Q97. A
- Q98. A
- Q99. D
- Q100. B

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