Instructions to Candidates

1. This question booklet contains 100 Objective Type Questions (Single Best Response Type).

2. The question paper and answer Sheet are issued to examinees separately at the beginning of the examination session.

3. Choice and sequence for attempting questions will be as per the convenience of the candidate.

4. Candidate should carefully read the instructions printed on the Question Booklet and Answer Sheet and make the correct entries on the Answer Sheet. **The candidate must sign on the Answer Sheet and Question Booklet.**

5. Read each question carefully.

6. Determine the correct answer from out of the four available options given for each question.

7. Fill the appropriate circle completely like this •, for answering a particular question, with Black ink ball point pen in the answer sheet provided to you.

8. Each answer with correct response shall be awarded one (1) mark. There is NO **Negative Marking.** If the examinee has marked two or more answers or has done scratching and overwriting in the Answer sheet in response to any question, or has marked the circles inappropriately, mark/s shall **NOT** be awarded for such answer/s.

9. Use of whitener or any other material to erase/hide the circle once filled is not permitted. Avoid overwriting and/or striking of answers once marked.

10. Rough work should be done only on the blank space provided on the Question Booklet. **Rough work should not be done on the Answer Sheet.**

11. Immediately after the prescribed examination time is over, the Question Booklet and Answer sheet is to be returned to the Invigilator. Confirm that both the Candidate and Invigilator have signed on question booklet and answer sheet.

12. No candidate is allowed to leave the examination hall till the examination session is over.
1. Sustained twisting deformity that may last for several minutes or permanently is called…
   A. Decorticate rigidity  
   B. Decerebrate rigidity  
   C. Spasticity  
   D. Dystonic posturing

2. The practice order in which repeated practice of a task or a group of tasks is performed is called…
   A. Blocked order  
   B. Serial order  
   C. Random order  
   D. Closed order

3. A patient of Multiple Sclerosis who complains of monoparesis, moderate ataxia, moderate disability and is fully ambulatory, is graded as per Kurtzke Disability scale as
   A. 2  
   B. 3  
   C. 4  
   D. 5

4. In a child suffering from Meningomyelocele with level of paralysis below L3, the ambulatory support required is…
   A. Thoracic lumbar spine orthosis with knee Ankle foot orthosis (TLSO with KAFO)  
   B. Thoracic lumbar spine orthosis (TLSO)  
   C. Knee Ankle foot orthosis (KAFO)  
   D. Ankle foot orthosis (AFO)

5. Body schema impairment is also termed as …
   A. Somatognosia  
   B. Agnosia  
   C. Autopagnosia  
   D. Arosognosia

6. Treatment techniques for figure–ground discrimination include all EXCEPT
   A. Patient should examine objects slowly and systematically  
   B. Place red tape velcro strap on shoe or orthosis  
   C. Rub cloth should be rubbed on dorsal surface of hand  
   D. Items should be placed and replaced in exact position in drawer

7. The theory which states that motor control is the result of co-operative action of many interacting systems to accommodate the demands of a specific task, is called…
   A. Reflex theory  
   B. Systems theory  
   C. Hierarchical theory  
   D. Motor programming theory

8. All are physiotherapy strategies to improve mobility EXCEPT.
   A. Active Assisted Movement  
   B. Rhythmic Initiation  
   C. Hold Relax Active Motion  
   D. Slow Reversal Hold

9. Shoes recommended for hemiplegic patient should have all EXCEPT
   A. Leather sole  
   B. Flat shoe with no heel  
   C. Heel covered with non-slip material  
   D. Broad heel and sole of shoe

10. Movement taking place in a changing environment is called…
    A. Open skill  
    B. Closed skill  
    C. Static skill  
    D. Dynamic skill

11. Class III compression garments with 40 – 50 mmHg pressure is used for…
    A. Varicose veins  
    B. Mild lymphoedema  
    C. Moderate lymphoedema  
    D. Severe lymphoedema

12. In the oxyhaemoglobin dissociation curve, right sided shift is in all the following conditions EXCEPT
    A. Reduced pH  
    B. Increased temperature  
    C. Increased diphosphoglycerate (2, 3 DPG)  
    D. Reduced pCO₂
13. In which of the following conditions, will you find an increased Reid’s Index…
   A. COPD  B. Cystic Fibrosis
   C. Silicosis  D. ILD

14. ‘Pink Puffers’ refers to
   A. Asthma  B. Bronchiectasis
   C. Chronic bronchitis  D. Emphysema

15. Mr. Sinha was given a valve taken from an animal cadaver. Thus, the graft he is using is…
   A. Xenograft  B. Allograft
   C. Homograft  D. Heterograft

16. All are the physiological effects of prone position EXCEPT
   A. Increased urine output  B. Decreased sympathetic activity
   C. Increased arterial oxygen tension  D. Increased dynamic lung compliance

17. Identify the condition if,
   pH = 7.25  
   PCO₂ = 36 lt.mm.Hg  
   PO₂ = 80  
   HCO₃⁻ = 32 mmol / Lt.  
   A. Respiratory Acidosis  B. Metabolic acidosis
   C. Respiratory alkalosis  D. Metabolic alkalosis

18. Normal pulmonary artery systemic pressure is…
   A. Upto 20 mmHg  B. 20 – 40 mmHg
   C. 40 – 60 mmHg  D. 60 – 80 mmHg

19. When a patient assumes sitting position from supine position, the onset of dyspnoea is called …
   A. Orthopnoea  B. Platypnoea
   C. Trepopnoea  D. Dyspnoea

20. The concept of autogenic drainage or self – drainage was first introduced by…
   A. Thompson  B. Webber
   C. Pryor  D. Chevaillier

21. All of the following is True with regards to geriatric population EXCEPT
   A. Immobilization should only be resorted to only when absolutely necessary
   B. Immobilization should continue for as brief a period as possible
   C. Weight - bearing casts should be used if the injury permits
   D. Once immobilization is no longer necessary, gradual physiotherapy should not be started

22. The combined & co-ordinated use of medical, social, educational and vocational measure for training & retraining the individual to the highest possible level of functional ability is referred as…
   A. Rehabilitation  B. Restoration
   C. Remediation  D. Resuscitation

23. Abdominal colic, constipation, loss of appetite, red cell stippling, anaemia, wrist drop, foot drop are symptoms of…
   A. Inorganic lead exposure  B. Organic lead exposure
   C. Cotton fiber dust exposure  D. Asbestos exposure

24. The best suited exercise for an obese individual who has pain in the knees is…
   A. Running  B. Jogging
   C. Cycling  D. Walking
25. All are complications common to pregnancy EXCEPT
   A. Constipation  B. Diastasis recti
   C. Decreased blood volume  D. Anemia

26. Branch of the posterior cord of brachial plexus is…
   A. Ulnar nerve  B. Thoracodorsal nerve
   C. Musculocutaneous nerve  D. Long thoracic nerve

27. During inspiration the bucket handle movement is most evident in the …
   A. Second to sixth ribs  B. Sixth to tenth ribs
   C. Seventh to tenth ribs  D. Eighth to twelfth ribs

28. Muscles which cause protrusion at temporomandibular joint are…
   A. Lateral pterygoids and mylohyoid  B. Temporalis and geniohyoid
   C. Temporalis and masseter  D. Lateral and medial pterygoids

29. The tract which carries Fibers from the facial, glossopharyngeal and vagus nerves, relays in the …
   A. Nucleus ambiguus  B. Nucleus solitarius
   C. Nucleus cuneatus  D. Pontine nuclei

30. Duration of spinal shock in humans is…
   A. 2 – 3 hours  B. 2 – 3 days
   C. 2 – 3 weeks  D. 2 – 3 months

31. Fibres carrying pain sensation terminate in all of the following areas EXCEPT
   A. Brain stem  B. Hypothalamus
   C. Limbic cortex  D. Cerebellum

32. Skeletal muscle strength can be best increased by…
   A. Isotonic exercise  B. Aerobic isotonic exercise
   C. Isometric exercise  D. Electrical stimulation

33. The type of nerve fiber most susceptible to local anesthetics is…
   A. C type  B. B type
   C. Aα type  D. Aγ type

34. The compound acting as high energy carrier in muscle is…
   A. Creatine  B. Carnitine
   C. Creatinine  D. Carnosine

35. The pathway involved in elimination of two waste products is…
   A. Kreb’s cycle  B. Kreb’s Henseleit cycle
   C. Polyol pathway  D. Salvage pathway

36. In a single movable pulley, if the effect of friction is omitted & the weight to be lifted is 6 kg & the tension required in each of 2 supported ropes is 3 kg. Then the mechanical advantage is…
   A. 1  B. 2
   C. 3  D. 4

37. This type of muscle work is most economical in respect of physiological cost…
   A. Isometeic  B. Isokinetic
   C. Concentric  D. Eccentric

38. This order of lever is called lever of power…
   A. 1st order  B. 2nd order
   C. 3rd order  D. C & A

39. 10 RM is approximately …… % of 1 RM.
   A. 25%  B. 50%
   C. 75%  D. 100%
40. In sitting, the muscles which prevent the tendency to slump the most are…
   A. Abdominals B. Back Extensors
   C. Hip Flexors D. Hip Extensors

41. Which radiation is produced by the movement of electrons within the atom…
   A. Ultraviolet B. Infrared
   C. Electromagnetic D. Electric

42. Identify the following diagram…
   A. Resistance in parallel B. Resistance in series
   C. Rheostat in series D. Rheostat parallel

43. Acceleration of chemical action is stated by …… law.
   A. Joules Law B. Ohm’s Law
   C. Vant Hoff’s Law D. Lenz’s Law

44. Interferential Therapy utilizes …
   A. Low frequency current B. High frequency current
   C. Mixed frequency current D. Medium frequency current

45. In the case of water, 1 gm of ice at 0°C requires ……… joules of energy to convert it to 1 gm of water at 0°C …
   A. 300 J B. 350 J
   C. 30 J D. 336 J

46. Which enzyme is inhibited by entacapone ?
   A. MAO – A B. COMT
   C. DOPA decarboxylase D. MAO – B

47. Which of the following drug causes gum hypertrophy?
   A. Phenobarbitone B. Phenytoin
   C. Carbamazepine D. Sodium valproate

48. Curschmann Spirals in sputum are pathognomonic of…
   A. Emphysema B. Chronic Bronchitis
   C. Bronchial Asthma D. Bronchiectasis

49. Most common site of occlusive arterial thrombi is…
   A. Iliac B. Coronary
   C. Cerebral D. Femoral

50. All of the following are auto-immune diseases EXCEPT.
   A. Rheumatoid arthritis B. Pernicious anemia
   C. Toxic shock syndrome D. Sjogren’s syndrome

51. The causative agent of gas gangrene is…
   A. Clostridium tetani B. Clostridium perfringens
   C. Corynebacterium diphtheriae D. Bacillus anthracis

52. The main method used by the structuralists to discover these elementary units of mind was…
   A. Introversion B. Internalization
   C. Interposition D. Introspection

53. Impairment of memory without global disturbance of function, consciousness and attention is…
   A. Dementia B. Delirium
   C. Amnesia D. Mental Retardation
54. E4 dose in UVR is given for the treatment of…
A. Rickets        B. Acne
C. Psoriasis      D. Infected wound

55. The process of movement of ions across biological membrane, by means of an electric current, for therapeutic purpose is called…
A. Phonophoresis  B. Eletrophoresis
C. Magnetophoresis D. Iontophoresis

56. Possible therapeutic mechanism for pulsed shortwave diathermy is all EXCEPT.
A. Electromagnetic energy leads to general increase in intra cellular & intercellular activities
B. Increase in body temperature
C. Series of high energy pulses exceeds some threshold is produce cellular effect
D. Reduces risk of burns

57. Strong surged faradic current is useful to …
A. Reduce edema  B. Increase edema
C. Sensitize edema D. Desensitize edema

58. LASER therapy is contraindicated in…
A. Trigger points  B. Neoplastic pain
C. Myofascial pain D. Wound healing

59. The following is an absolute contraindication to therapeutic ultrasound …
A. Vascular conditions  B. Recent soft tissue injury
C. Scar tissue      D. Chronic edema

60. High frequency currents are routinely used for …
A. Iontophoresis  B. Stimulating nerves
C. Producing heating effect  D. Contracting denervated muscles

61. If one’s elbow is placed on the table with the forearm in a vertical position & the hand is allowed to drop forward into wrist flexion, fingers tend to extend “This phenomenon is due to……
A. Active insufficiency of finger flexors  B. Passive insufficiency of finger flexors
C. Active insufficiency of flexor extensions

62. In a weight bearing position, combination of calcaneal inversion, talar abduction, talar dorsiflexion and tibiofibular lateral rotation is called …
A. Ankle dorsiflexion  B. Ankle plantarflexion
C. Subtalar supination  D. Subtalar pronation

63. This muscle plays an important role in initiating unlocking of the knee…
A. Gracilis  B. Sartorius
C. Pes anserinus  D. Popliteus

64. In erect upright posture, the line of gravity passes … to the axis of hip joint.
A. Anterior  B. Posterior
C. Through  D. Lateral

65. This muscle acts as a steerer & offsets anterior dislocation forces in case of shoulder arm complex …
A. Supraspinatus  B. Infraspinatus
C. Teres minor  D. Subscapularis

66. Slow reversals technique is based on…
A. Autogenic inhibition  B. Reciprocal inhibition
C. Successive induction  D. Recurrent inhibition
67. Laura Mitchell’s technique of Relaxation is based on this physiological principle…
   A. Autogenic Inhibition        B. Reciprocal Inhibition
   C. Recurrent Inhibition       D. Reflex Inhibition

68. The characteristics of wound healing by primary intention are following EXCEPT.
   A. Wound edges are opposed    B. Normal healing
   C. Minimal scar              D. Poor scar

69. The following breast lump is also called ‘breast mouse’
   A. Cystosarcoma phylloids    B. Lobular carcinoma of breast
   C. Fibroadenoma              D. Fibroadenosis

70. The ideal treatment for Pleomorphic Adenoma is…
   A. Superficial Parotidectomy   B. Excision of the adenoma
   C. Total Parotidectomy        D. Enucleation

71. Which of the following test is used for diagnosis of Anterior cruciate ligament rupture in the knee…
   A. Mc Murray’s Test     B. Anterior drawer’s Test
   C. Patellar tap        D. Thomas Test

72. The ideal length of stump for standard trans-tibial BK amputation is approximately
   A. 1 cm            B. 5 cm
   C. 12.5 cm        D. 30 cm

73. Distal end radius fracture gives rise to the following deformity…
   A. Dinner fork    B. Gun stock
   C. Swan neck     D. Kyphus

74. Arthritis mutilans is seen in…
   A. SLE            B. Rheumatoid Arthritis
   C. Ankylosing Spondylitis   D. Psoriatic Arthritis

75. Weil’s disease is severe …
   A. Leptospirosis          B. Malaria
   C. Dengue                 D. Swine flue

76. Atrial fibrillation is a feature of…
   A. Acromegaly           B. Cushing’s syndrome
   C. Hypothyroidism       D. Hyperthyroidism

77. P R prolongation on ECG is a type of ……….. heart block.
   A. 1\textsuperscript{st} (1\textsuperscript{st} degree)    B. 2\textsuperscript{nd} (2\textsuperscript{nd} degree)
   C. 3\textsuperscript{rd} (3\textsuperscript{rd} degree)   D. 4\textsuperscript{th} (4\textsuperscript{th} degree)

78. Clubbing is not a feature of…
   A. Bronchiectasis       B. Bronchogenic Carcinoma
   C. Bronchial Asthma     D. Lung Abscess

79. ‘Paralysis Agitans’ is the other name of …
   A. Alzheimer’s disease   B. Idiopathic Parkinson’s disease
   C. Creutzfeldt – Jakob disease   D. Motor neuron disease

80. All are supports of uterus EXCEPT
   A. Round ligament       B. Uterosacral ligament
   C. Cardinal ligament   D. Levator ani

81. Menopause is defined as time of final menstrual period followed by ……….. months of amenorrhoea.
   A. 6 Months            B. 9 Months
   C. 12 Months           D. 18 Months
82. Active management of third stage of labor starts at delivery of…
   A. Anterior shoulder  B. Posterior shoulder
   C. Entire baby  D. Placenta

83. During mobilization, grade III gliding techniques should incorporate …
   A. Grade I distraction  B. Grade II distraction
   C. Grade I compression  D. Grade II compression

84. The sacro-Iliac rocking test is also called as stress test of…
   A. Sacrotuberous ligament  B. Sacrococcygeal ligament
   C. Iliofemoral ligament  D. Ischiofemoral ligament

85. In ordinary untrained subject during the following type of exercise, the mean value for maximal oxygen uptake is highest …
   A. Running uphill  B. Upright cycling
   C. Swimming  D. Supine cycling

86. Post synaptic neuronal hypersensitivity is also called as…
   A. Innervation supersensitivity  B. Innervation sensitivity
   C. Denervation supersensitivity  D. Denervation sensitivity

87. Radiological findings of homogenous opacity in right lower zone, with obliteration of right costophrenic angle and shift of the mediastinum to the left is suggestive of …
   A. Left lower lobe collapse  B. Right lower lobe collapse
   C. Right sided pneumothorax  D. Right sided pleural effusion

88. According to Rood’s approach, the sensory input for light pattern of muscle work is…
   A. Semicircular canals  B. Utricle and saccule
   C. Muscle spindle  D. Golgi Tendon

89. Motor function evaluation that uses a 3 point scale to score the domains of pain, range of motion, sensation, volitional movement and balance is…
   A. Fugl Meyer Test  B. TEMPA scale
   C. Jebson Test of Hand function  D. Motor Assessment Scale

90. Treatment strategy is which reflexive movement is NOT used as a precursor for volitional movement is…
   A. Rood’s therapy  B. Brunnstrom Approach
   C. Proprioceptive Neuromuscular facilitation  D. Neuro developmental therapy

91. Which clinical finding is not indicative of a ruptured Achilles tendon…
   A. Negative Thompson test  B. Lack of toe off during gait
   C. Absent achilles reflex  D. Limping gait

92. The most common mechanism for an anterior talofibular ligament sprain is…
   A. Inversion & dorsiflexion  B. Inversion & plantar flexion
   C. Inversion  D. Pronation, eversion & dorsiflexion

93. The movement of the patella is influenced and controlled by all of the following EXCEPT
   A. Medical meniscus  B. Medical patellofemoral ligament
   C. Height of patella  D. Vastus medialis obliquis

94. The following statement concerning the anterior cruciate ligament is NOT TRUE
   A. It is maximally taut b/w 0- 20 & 70 – 90 degree of knee flexion
   B. It resists posterior displacement of tibia
   C. It inserts on the medial femoral intercondylar notch  D. It inserts on the lateral femoral intercondylar notch
95. Which anatomical alignment is associated with pronation in standing …
A. Hind foot pronation & fore foot supination  
B. Hind foot supination & fore foot pronation  
C. Hind foot varus & fore foot varus  
D. Toe out

96. In which direction should a mobilizing force be applied at the gleno humeral joint…
A. In the same direction as the limitation  
B. In the opposite direction as the limitation  
C. In all directions regardless of the limitation  
D. As per the physiotherapist preference

97. A patient with a left A K amputation is gait training. You note that the patient vaults with left swing phase & occasionally circumducts the involved leg. What is the most likely cause of these gait deviations?
A. The prosthesis is too short  
B. The prosthesis is too long  
C. Weak plantar flexors in the right  
D. There is decreased toe-out on the left

98. A degenerative process beginning with irritation and fragmentation of the hyaline cartilage on the patella is termed …
A. Osgood – Schlatter disease  
B. Retropatellar syndrome  
C. Chondromalacia patellae  
D. Plica syndrome

99. Which of the following statement concerning myositis ossificans is NOT TRUE?
A. it occurs when part of a haematoma is replaced with bone  
B. it can be recognized on plain radiograph  
C. it usually results from a single injury & not repetitive trauma  
D. it is believed to be caused by periosteal cells invading the haematoma following injury

100. Which pattern of limitation is typically considered to be a capsular pattern with regards to hip joint : Gross limitation in…
A. Medial rotation - flexion – abduction – lateral rotation  
B. Medial rotation – extension – abduction – lateral rotation  
C. Lateral rotation – flexion – abduction – medial rotation  
D. Lateral rotation – extension – abduction – medial rotation

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