

Sree Chitra Tirunal Institute for Medical Sciences & Technology,

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Written test – Physiotherapist-A

8th AUG, 2012

Roll Number:

1. Venous return to the heart is decreased by:
 - a) the Valsalvamaoeuvre
 - b) exercise
 - c) femoral arteriovenous fistula
 - d) rapid infusion of blood

2. Skeletal muscle blood flow:
 - a) increases with noradrenaline
 - b) receives 50% of the cardiac output at rest
 - c) may cease during isometric contraction
 - d) decreases with rhythmic contraction

3. Total plasma calcium:
 - a) increases with phosphate
 - b) decreases with a rise in albumin,
 - c) changes its degree of ionisation with pH changes
 - d) is decreased in osteoporosis

4. Acetylcholine is a neurotransmitter at all except:
 - a) sweat glands
 - b) the adrenal medulla
 - c) the parotid gland
 - d) sympathetic ganglia

5. The velocity of conduction of a nerve action potential:
 - a) is inversely related to the cross-sectional area of the axon
 - b) is faster in a myelinated fibre than in an unmyelinated one
 - c) is increased by cooling the nerve
 - d) is highest in pre-ganglionic autonomic fibres

6. Aldosterone:
 - a) production increases with a fall in plasma osmolality
 - b) production decreases with a fall in blood volume
 - c) production decreases with a rise in plasma renin level
 - d) increases urinary potassium excretion

7. A denervated muscle responds only to
 - a) Faradic current
 - b) Galvanic Current
 - c) Surged Faradic current
 - d) Gaussian current

8. A typical mammalian motor neurone:
- innervates only one skeletal muscle cell
 - is non-myelinated
 - has its cell body in the ventral (anterior) horn of the spinal cord
 - would be stimulated by application of glycine to its cell body
9. All are true regarding the vagus nerve except:
- has little direct effect on the strength of ventricular contraction
 - contains afferent and efferent fibres
 - contains parasympathetic post-ganglionic fibres
 - contains fibres which regulate gastric acid secretion
10. All of the following are PNF techniques except
- Oxford
 - Brunnstrom
 - Bobath
 - Temple Fay
11. All are true regarding the blood-brain barrier except:
- results in certain molecules in the blood taking longer to equilibrate with tissue fluid in the brain than with tissue fluid elsewhere
 - permits CO₂ to pass freely
 - is more permeable to water-soluble substances than fat-soluble substances
 - is more permeable in neonates than in adults
12. Regarding reflex action, all are true except:
- may be carried out by skeletal, smooth or cardiac muscle or by glands
 - is not influenced by higher centres in the brain
 - may involve simultaneous contraction of some skeletal muscles and relaxation of others
 - can be monosynaptic or polysynaptic
13. Athletes differ from normal individuals in having:
- a higher resting cardiac output
 - a higher resting heart rate
 - a decreased muscle mass
 - a higher maximum oxygen consumption
14. Stimulation of the parasympathetic nervous system:
- increases the heart rate
 - decreases the rate of gastric emptying
 - dilates the pupil
 - causes contraction of the detrusor muscle in the bladder
15. Cerebrospinal fluid:
- is actively secreted by the choroid plexus
 - is the major nutrition source of the brain
 - has the same pH as arterial blood
 - contains virtually no glucose

16. Changing position from standing to supine:
- a) decreases stroke volume
 - b) decreases baroreceptor activity
 - c) decreases the pulmonary blood volume
 - d) decreases leg vein pressure
17. On ascending to an altitude of 6000m, changes include all except:
- a) an increase in minute volume
 - b) an initial increase in plasma pH
 - c) an increase in cerebral blood flow
 - d) a fall in arterial PO₂
18. Breathing 100% oxygen at atmospheric pressure for a prolonged period causes:
- a) retrosternal pain
 - b) dizziness
 - c) auditory disturbances
 - d) convulsions
19. Ptosis results from all except:
- a) parasympathetic block
 - b) sympathetic block
 - c) facial nerve block
 - d) oculomotor nerve block
20. Commonest type of dislocation of hip is
- a) Anterior
 - b) Posterior
 - c) Central
 - d) Dislocation with fracture of the shaft
21. Pes cavus is caused by:
- a) Weakness of the intrinsic muscles of foot
 - b) Excessive tone of intrinsic muscles
 - c) Collapse of the arch
 - d) Fracture of calcaneum
22. A modality that uses two alternating currents of different frequencies
- a) TENS
 - b) LASER
 - c) IFT
 - d) SWD
23. Claw hand is seen in:
- a) Carpal tunnel syndrome
 - b) Ulnar Nerve injury
 - c) Syringomyelia
 - d) Cervical rib

24. Non-dynamic splint is:
- Banjo
 - Cock-up
 - Opponens
 - Brand
25. March fracture affects:
- Neck of 2nd metatarsal
 - Body of 2nd metatarsal
 - Neck of 1st metatarsal
 - Fracture of lower end of tibia
26. Pointing Index sign is seen in:
- Ulnar Nerve Palsy
 - Radial Nerve Palsy
 - Median Nerve Palsy
 - Axillary Nerve Palsy
27. Tardy Ulnar nerve palsy is seen in:
- Cubitus Valgus
 - Fixation of nerve in the groove by osteoarthritis
 - Excision of elbow joint
 - Fracture of internal condyle
28. Mallet finger is:
- Avulsion fracture of extensor tendon of distal phalanx
 - Fracture of distal phalanx
 - Fracture of middle phalanx
 - Fracture of proximal phalanx
29. Nerve most commonly involved in fracture of Surgical neck of humerus:
- Radial
 - Axillary
 - Ulnar
 - Median
30. Phalen's Test is positive in:
- Ulnar bursitis
 - Tennis elbow
 - Carpal tunnel syndrome
 - De Quervain's disease
31. Which nerve repair has worst prognosis:
- Ulnar
 - Radial
 - Median
 - Lateral popliteal
32. N-K Table is used for
- Quadriceps strengthening


5.8.12

- b) Mobilization of the knee
 - c) Balance Rehabilitation
 - d) Gait Training
33. Housemaid's knee is inflammation of:
- a) subpatellar bursa
 - b) suprapatellar bursa
 - c) infra[atellar bursa
 - d) prepatellar bursa
34. The earliest feature of Pott's paraplegia is:
- a) flexor spasm
 - b) increased tendon jerk
 - c) ankle clonus
 - d) sensory loss
35. Recurrent clubfoot is due to failure of development of:
- a) tendocalcaneus
 - b) peroneal muscles
 - c) plantar fascia
 - d) tibialis anterior
36. The most important sign in Volkman's ischemic contracture is:
- a) Pain
 - b) Pallor
 - c) Numbness
 - d) Obliteration of radial pulse
37. Most important pathology in clubfoot is:
- a) Congenital talonavicular dislocation
 - b) Tightening of tendoachilles
 - c) Calcaneal fracture
 - d) Lateral derangement
38. Treatment of CTEV should begin:
- a) Soon after birth
 - b) After discharge from hospital
 - c) After one (1) month
 - d) At two (2) years
39. Commonest site of disc prolapse is:
- a) C5 – C6
 - b) T8 – T9
 - c) L4 – L5
 - d) L5 – S1
40. Commonest cause of paraplegia is:
- a) Tuberculosis
 - b) Trauma

- c) Secondaries
 - d) Transverse Myelitis
41. Commonest site of tuberculosis (TB) spine is:
- a) C8 – T2
 - b) T2 – T6
 - c) T12 – L1
 - d) L1 – L4
42. Joint least affected by neuropathy:
- a) Shoulder
 - b) Hip
 - c) Wrist
 - d) Elbow
43. The cause of gunstock deformity is:
- a) Supracondylar fracture
 - b) Fracture both bones forearm
 - c) Fracture surgical head of humerus
 - d) Fracture fibula
44. The cause of rheumatoid arthritis is:
- a) Familial
 - b) Immunological
 - c) Infective
 - d) Traumatic
45. Increased bone density occurs in:
- a) Cushing Syndrome
 - b) Hypoparathyroidism
 - c) Fluorosis
 - d) Hyperparathyroidism
46. Bamboo spine is seen in:
- a) Tuberculosis
 - b) Rheumatoid arthritis
 - c) Ochronosis
 - d) Ankylosingspondylosis
47. The lesion is Klumke's paralysis is at:
- a) Cervical plexus
 - b) Lower brachial
 - c) Upper brachial
 - d) Sacral plexus
48. Commonest cause of wrist drop is:
- a) Intramuscular injection
 - b) Fracture humerus
 - c) Dislocation of elbow
 - d) Dislocation of shoulder


5-8-12

49. Beheaded Scottish Terrier sign is seen in:
- Disc Prolapse
 - Sacralisation of L5
 - Spondylosis
 - Spondylolisthesis
50. Club foot in a new born is treated by:
- Surgery
 - Manipulation by the mother
 - Dennis Browne Splint
 - Strapping
51. Most common cause of pressure sore in the foot in India is:
- Diabetes
 - Syringomyelia
 - Leprosy
 - Thorn prick
52. In Burton's disease, there is:
- Scurvy and Rickets
 - Scurvy and Syphilis
 - Syphilis and Rickets
 - Scurvy and Pellagra
53. Herbedennoeds are seen in::
- Osteoarthritis
 - Rheumatoid arthritis
 - Rheumatic arthritis
 - Psoriatic arthritis
54. Myositis ossificans is commonly seen at the:
- Knee joint
 - Elbow joint
 - Shoulder joint
 - Hip joint
55. Commonest type of shoulder dislocation:
- Subcoracoid
 - Subglenoid
 - Posterior
 - Subclavicular
56. Cryotherapy is contraindicated in
- Spasticity
 - Sprains & Strains
 - Cryoglobulinemia
 - Myofascial Pain Syndrome
57. Which of the following is a UMN lesion?
- Poliomyelitis

- b) Guillain-Barre Syndrome
 - c) Hemiplegia
 - d) Muscular Dystrophy
58. Which of the following is not a Walking Aid?
- a) Wheelchair
 - b) Walker
 - c) Crutch
 - d) Cane
59. Facial Nerve is the ----- cranial nerve
- a) 2nd
 - b) 4th
 - c) 7th
 - d) 12th
60. Ashworth Scale is used for quantifying which of the following?
- a) Rigidity
 - b) Spasticity
 - c) Tremor
 - d) Ataxia

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Signature of the candidate

Devi
7.3.12