Your answers should be specific to the questions asked.
Draw neat, labeled diagrams wherever necessary.

LONG ESSAYS **2 X 10 = 20 Marks**

1. Define lever and its classification with an example and diagram.
2. Define pain and pain gait theory.

SHORT ESSAYS **10 X 5 = 50 Marks**

3. Define newtons law with an example.
4. Define pulleys and its function.
5. Importance of past medical history in assessment
6. Define Chronaxie and factor affecting.
7. Relationship between BOS, COG, LOG
8. Wax and method of application
9. Accommodation
10. Cryotherapy and its application
11. Posture and types
12. IRR

Multiple Choice Questions **10 X 1 = 10 Marks**

13. Which statement is correct
    a) Aβ fibres are thickly myelinated and normally transmit nociceptive stimuli
    b) Aə fibres are unmyelinated and slower conducting than Aβ transmission
    c) Aə fibers can alter the rate of firing depending on the intensity of stimuli and terminate in laminae I, IV and V
    d) C fibres are non-myelinated and rapid conducting

14. Which statement is most accurate?
    a) Magnesium augments the action of the NMDA receptor
    b) Glycine and glutamate are excitatory neurotransmitters
    c) Transduction involves a flow of negative ions into the cell to cause depolarization
    d) Tetrodotoxin resistant sodium channels are important in nociception

15. Managing chronic pain in more complex in older adults mainly because
    a) They are reluctant to participate in management strategies
    b) The impact is the same as their younger counterparts with the additional problem of social isolation
    c) Many approaches to management are inappropriate for the group
    d) All the above

16. Pain is poorly managed in older adults predominantly because
    a) They have different physiology
    b) They cannot take analgesic medications
    c) It is more difficult to interpret in this group than in their younger counterparts
    d) All the above

18. The purpose of conventional TENS is to
    a) Stimulate large diameter, low threshold afferents (A-beta) and small diameter, high threshold afferents (A-delta)
    b) Stimulate large diameter, low threshold afferents (A-beta) without simultaneously stimulating small diameter, high threshold afferents (A-delta
    c) Generate muscle twitches in order to activate small diameter muscle afferents
    d) Stimulate small diameter, higher threshold afferents (A-delta) without simultaneously stimulating large diameter, low threshold afferents (A-beta)

19. The mechanism of action conventional TENS is predominantly by
    a) Activating structures on the descending pain inhibitory pathways
    b) Resetting central sensitization and re-organising aberrant neuronal pathways
    c) Blocking impulses travelling in peripheral nociceptive afferents
    d) Long-term depression of central nociceptor cell activity

20. The main purpose of passive range of motion exercises is to
    a) Strengthen muscles
    b) Prevent contractures
    c) Increase coordination
    d) Provide Proprioceptive input

21. Which of the following are indicative of posterior column disturbances?
    a) Ataxia, ataxic gait, ramberg sign and athtosis
    b) Ataxia, athetosis, asthenia and Dystonia
    c) Dystonia, dysmetria, dys synergia and dysdiadochokinosia
    d) Ataxia and Romberg sign

22. Co-ordination is space, rhythm and approach is disturbed in the lesion of
    a) Pyramidal tract
    b) Cerebellum
    c) Mid brian
    d) Spinal cord

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