

**G.C. FOSTER COLLEGE OF PHYSICAL EDUCATION AND SPORT  
ASSOCIATE DEGREE IN SPORTS MASSAGE AND FITNESS**

**MAY 2022 EXAMINATION**

**PAIN AND MANUAL THERAPY**

**YEAR 2**

**DURATION: 2 HOURS**

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**INSTRUCTIONS: This paper consists of three (3) sections 'A', 'B' and 'C'**

1. Answer **ALL** questions from Section A and B
2. Answer **TWO** question from Section C

**DO NOT TURN OVER UNTIL YOU ARE TOLD TO DO SO**

**SECTION A (15 MARKS)**  
**ANSWER ALL QUESTIONS FROM THIS SECTION**

**Instructions: Indicate whether the statement is true or false by writing T or F beside the statement**

1. Pain is a complex experience consisting of a physiological and a psychological response to a pleasant stimulus.
2. Manual therapy is a procedure that consists of passive movement of joints only.
3. Referred pain means that a trigger point in one muscle can create pain in another area.
4. Pain involves a complex interaction between specialized nerves, your spinal cord and your brain.
5. 1 cun is the width of the interphalangeal joint of the thumb
6. With acupressure, when treating abnormal conditions, pain should be unbearable.
7. Fascia is a very dense woven, covering and interpenetrating muscles only.
8. Acupressure applies the same principles as acupuncture to promote relaxation and wellness
9. In Traditional Chinese Medicine, the meridians begin at your fingertips, connect to your brain, and then connect to an organ
10. The changes trauma causes in the fascial system influences comfort and function of our body.
11. Deep tissue work such as acupressure is indicated for varicose vein
12. Myofascial release is the only method of treating fascial restrictions.
13. Acute pain is a severe or sudden pain that resolves within a certain amount of time.
14. A trigger point is a mechanism of the muscle locked in a lengthened position.
15. Scar tissue is the body's most complex grade of tissue.

**SECTION B (20 MARKS)**  
**ANSWER ALL QUESTIONS FROM THIS SECTION**

**Instructions: Circle the most appropriate answer**

16. Pain messages travel along a peripheral nerve to
  - a. the spinal cord
  - b. the muscles
  - c. the skin
  - d. the fascia
  
17. A person's response to pain is heavily influenced by
  - a. individual traits,
  - b. psychological factors
  - c. social factors
  - d. all of the above
  
18. In acupressure, it is believed that through invisible channels flows
  - a. vital blood
  - b. vital energy
  - c. vital chemistry
  - d. vital nerves
  
19. Trauma and inflammatory responses create myofascial restrictions that can produce tensile pressures of approximately
  - a. 5000 pounds per square inch on pain sensitive structures
  - b. 10,000 pounds per square inch on pain sensitive structures
  - c. 2,000 pounds per square inch on pain sensitive structures
  - d. 1,000 pounds per square inch on pain sensitive structures
  
20. When performing a myofascial stretch, tissue begins to release only after about
  - a. 60 to 70 seconds
  - b. 30 to 50 seconds
  - c. 10 to 20 seconds
  - d. 90 to 120 seconds
  
21. Inflammation has
  - a. three distinct phases
  - b. two distinct phases
  - c. four distinct phases
  - d. five distinct phases

22. With acute pain, its purpose is to
- alert you to injury and start the healing process
  - alert you to inflammation
  - alert you that something harmful is about to happen
  - alert you to injury and protect you from further harm
23. Patients who suffer from painful joints or a lack of joint mobility
- are great candidates for mechanical therapy
  - are not good candidates for manual therapy
  - are great candidates for manual therapy
  - are great candidates for psychotherapy
24. When using acupuncture, channels should be treated until
- one can feel the tension decrease in the surrounding tissues
  - one can feel the tension increase in the tissues on the opposite side
  - one can feel the tension increase in the surrounding tissues
  - one can feel the tension decrease in the tissues on the opposite side
25. When performing myofascial release, the therapist addresses the tissue barrier of resistance by feeling for
- tightness
  - restrictions
  - adhesions
  - all of the above
26. To achieve the desired results when applying soft tissue techniques
- the least force should be applied
  - the greatest force should be applied
  - no force should be applied
  - the therapist's comfortable force should be applied
27. Factors that can influence how sensitive you are to pain and how you respond to it include
- Genetics
  - Gender
  - A only
  - A and B

28. Peripheral nerve fibers have special endings that can sense different types of harmful stimuli called
- Periceptors
  - Photoceptors
  - Nociceptors
  - Neuroceptors
29. The most common factor that precipitates soft tissue pain and functional impairment is
- trauma
  - lack of sleep
  - over eating
  - A and B
30. In the normal healthy state, the fascia is
- taut
  - relaxed
  - spongy
  - restricted
31. With myofascial release, the angle into the tissue should be
- 90 degrees
  - 75 degrees
  - 45 degrees
  - 35 degrees
32. Peripheral nerves act as a communication relay between
- your organs and your extremities
  - your brain and your spinal cord
  - your extremities and your brain
  - your extremities and your heart
33. When pain messages reach your brain, they pass through
- the emotional regions
  - the thinking regions
  - the physical sensation region
  - all of the above
34. A major assumption in Traditional Chinese Medicine is that health is achieved by maintaining the body in a
- nutritious state
  - balanced state
  - energized state
  - relaxed state

35. Soft tissue mobilization is a component of manual therapy that includes evaluation and treatment of all the following except,
- Articular dysfunctions
  - Neurovascular dysfunctions
  - Neuromuscular dysfunctions
  - Psychological dysfunctions

### SECTION C (30 Marks)

#### ANSWER TWO QUESTIONS FROM THIS SECTION

- While working with the sports medicine team you were asked by the physiotherapist to assist by performing a myofascial release technique on an athlete
  - What is the aim of myofascial release? (3 marks)
  - Outline the **general** steps involved in applying/administering myofascial release. (6 marks)
  - Write detailed notes on the deep fascia of the body (6 marks)
- Outline the role massage plays in the gate control theory of chronic pain (8 marks)
  - Outline the route involved in the pain pathway. (4 mark)
  - List three (3) factors that can influence how sensitive you are to pain and how you respond to it. (3 marks)
- You are performing a rehabilitative sports massage on an athlete who is recovering from a hamstring strain
  1. State on which meridian you would focus your acupressure treatment. (1 mark)  
2. What is used to perform acupressure (1 mark)
  - Outline the **General** approach to the acupressure treatment (8 marks)
  - List five (5) benefits of acupressure (5 marks)

END OF EXAMINATION