A & P I
PRACTICE TEST 3

1. The _______________ is the widest portion of a muscle between the origin and insertion.

2. The connective tissue sheath around an entire muscle known as:
   A. Epimysium    C. Endomysium
   B. Perimysium   D. Fascia

3. Which one of the following makes up the thick filaments?
   A. Tropomyosin  C. Troponin
   B. Actin        D. Myosin

4. Calcium Ions released from lateral sacs bond to:
   A. G Actin      C. Troponin
   B. Tropomyosin  D. Myosin

5. Which of the following is an attachment term for a muscle end that is generally more distal and relatively moveable?
   A. Origin       C. Contractile
   B. Insertion    D. Fixation
   E. None of the above

6. Which of the following are true during a muscle contraction?
   A. I-Bands decrease in size
   B. Z-Lines come closer together
   C. A-Bands decrease in size
   D. H-Zone stays the same
   E. A & B only
   F. All of the above are true

7. _______________ is the enzyme that destroys Acetyl Choline during relaxation.

8. Which of the following is true of the Masseter?
   A. Originates from the Zygomatic Arch
   B. Inserts on the Ramus and Angle of the Mandible
   C. Raises the Mandible
   D. All of the above are true
9. The connective tissue sheath around fascicles is known as:
   A. Epimysium  
   B. Endomysium  
   C. Perimysium  
   D. Fascia

10. List the following in order with (1) as the smallest and (5) as the largest.
    ___ A. Muscle Fiber (cell)
    ___ B. Myofibril
    ___ C. Fascicle
    ___ D. Myofilaments
    ___ E. Muscle

11. When a muscle fiber is at rest where are the calcium ions harbored?

12. Which of the following factors affect the strength of a contraction?
    A. Amount of ATP available
    B. Amount of Lactic Acid present
    C. Initial length at time of contraction
    D. Previous stimulation
    E. All of the above

13. Define:
    A. Prime Mover (Agonist):
    B. Synergist:
    C. Antagonist:

14. The I-Band is made up entirely of:
    A. Thick filaments
    B. Thin filaments
    C. Fibers
    D. Myofibrils

15. The molecule released by the end of the Motor Neuron at the Myoneural Junction is known as:
    A. ATP
    B. Calcium Ions
    C. Acetylcholine
    D. Glucose
16. In which muscle type would you find intercalated discs?

17. The_________ muscle draws the eyebrows together.
   A. Epicianious Frontales
   B. Epicianious Occipitalis
   C. Corrugator
   D. Buccinator

18. T Tubules are part of the;
   A. Sarcolemma
   B. Lateral Sacs
   C. Sarcoplasmic Reticulum
   D. Sarcomere

19. Which of the following blocks the binding sites for Myosin on thin filaments?
   A. B-Actin
   B. F-Actin
   C. G-Actin
   D. Tropomyosin
   E. None of the above

20. A_________________________ muscle is one that displays less than normal tonus.

21. Which one of the following is least related to the other?
   A. Origin
   B. Belly
   C. Proximal
   D. Less moveable end

22. List the three types of muscle tissue.
   A. ________________________________
   B. ________________________________
   C. ________________________________

23. Which muscle raises the Hyoid and lowers the jaw?
   A. Sternohyoid
   B. Mylohyoid
   C. Sternothyroid
   D. Digastric

24. Which of the following is true of the Sarcomere?
   A. Area on Myofibril where there are thick filaments
   B. Is a region between two(2) Z-Lines
   C. Area on Myofibril where there are thin filaments
   D. Are composed of Actin and Myosin
   E. None of the above
25. Answer true or false. If the answer is false, cross out the underlined word or phrase that makes the statement false and write in the correct word or phrase that makes the statement true.

A. ___________ Muscles are only able to contract (pull)
B. ___________ An individual muscle is an organ
C. ___________ The origin of a muscle is generally Distal and less moveable.
D. ___________ Myofilaments are striated and they make up Myofibrils
E. ___________ When a muscle is in a state of contraction, the H-Zone becomes quite large

26. The type of muscle contraction in which tension develops but no appreciable shortening occurs is:
   A. Isomeric  C. Isosomatic
   B. Isotonic  D. Hypotonic

27. Which of the following muscles originates from the xyphoid process, the lower six (6) ribs, and lumbar vertebrae? Its action is to pull the central tendon, increasing the size of the thoracic cavity.
   A. External Intercostal
   B. Internal Intercostal
   C. Rectus Abdominus
   D. Diaphragm

28. ___________ is the neurotransmitter released into the synaptic cleft.

29. Which of the following is the name for the connective tissue around each individual muscle fiber?
   A. Sarcolemma  C. Epimysium
   B. Perimysium  D. None of the above

30. Which of the following is the term used where a synaptic knob actually meets the sarcolemma of a muscle?
   A. Motor Unit
   B. Neuro Muscular Junction
   C. Motor Neuron
   D. Synaptic Junction
   E. None of the above
31. Which of the following is(are) true of Myoglobin?
A. All muscles have the same amount of Myoglobin
B. Stores extra oxygen in muscles
C. Gives Muscle reddish color
D. B & C
E. All of the above

32. The muscle whose contraction opposes a particular movement is known as a/an:
A. Fixator
B. Antagonist
C. Prime Mover
D. Synergist

33. Which one of the following events listed occurs thirdly in the contraction of a muscle cell?
A. Release of Calcium Ion
B. Myosin head swivels
C. Acetylcholine released
D. Tropomyosin moves from its blocking position

34. Which one of the following is not a characteristic of skeletal muscle?
A. Not Striated
B. Voluntary
C. Controlled by the Somatic Nervous system
D. All of the above are characteristic of skeletal muscles

35. Which one of the following muscles is involved with chewing?
A. Buccinator
B. Masseter
C. Corrugator
D. Obicularis Occuli

36. Which one of the following muscles is not part of the hamstrings?
A. Rectus Femoris
B. Semitendinosus
C. Semimembranosus
D. Biceps Femoris
37. Which one of the following muscles does **not** have its insertion on the Linea Alba?

- A. Rectus Abdominis
- B. External Oblique
- C. Internal Oblique
- D. Interspinales

38. Which one of the following muscles is **most** responsible for quiet inspiration?

- A. External Intercostals
- B. Internal Intercostals
- C. Diaphragm
- D. Transversus Thoracis

39. Which one of the following muscles has its insertion on the lateral third of the Clavicle, the Acromion Process, and the Spine of the Scapula?

- A. Rhomboideus Major
- B. Pectoralis Major
- C. Trapezius
- D. Serratus Anterior

40. The muscle involved in raising the eyebrow is:

- A. Occipitalis
- B. Orbicularis Oculi
- C. Corrugator
- D. Frontalis
1. Belly

2. A

3. D

4. C

5. B

6. E

7. Acetyl cholinesterase

8. D

9. C

10. 3 - A
    2 - B
    4 - C
    1 - D
    5 - E

11. In the lateral sacs

12. E

13. A) Muscle most responsible for a particular movement
    B) Muscle that assists the prime mover indirectly
    C) On the opposite side of joint from prime mover, offers resistance to prime mover and synergist

14. B

15. C

16. Cardiac

17. C

18. A
19. D

20. Flaccid

21. B

22. A) Smooth B) Skeletal C) Cardiac

23. D

24. B

25. A) T B) T C) F - proximal, less moveable D) F - are striated, sarcomere E) F - small

26. A

27. D

28. Acetylcholine (Ach)

29. D (endomysium - p. 245)

30. B

31. D

32. B

33. D

34. A

35. B

36. A

37. Omit

38. C

39. C

40. D