1. Which statement best describes ligaments in humans?
   (1) They are made of cartilage and cushion the bones at the joint.
   (2) They are composed of tough, elastic connective tissue and connect the ends of bones at moveable joints.
   (3) They are composed of tough, inelastic connective tissue and connect muscles to bones.
   (4) They are striated in appearance and are controlled by the nervous system.

2. Producing blood cells and providing anchorage sites for muscles are two functions of
   (1) skin (3) cartilage
   (2) bones (4) ligaments

3. What is a function of the structure labeled Y in the diagram below?
   (1) It serves as a site for the synthesis of hormones
   (2) It supports and protects body structures.
   (3) It contracts to aid in locomotion.
   (4) It provides vitamins during periods of physical stress.

4. Elastic fibers that connect the ends of bones at movable joints are known as
   (1) tendons (3) vascular tissue
   (2) nervous tissue (4) ligaments

5. In humans, red bone marrow provides
   (1) structural support for the body
   (2) a source of new blood cells
   (3) an attachment site for muscle tissue
   (4) a site to trap bacteria

6. Which organism is correctly matched with the structures it uses for locomotion?
   (1) grasshopper-muscles, setae
   (2) hydra-muscles, chitinous appendages
   (3) human-muscles, endoskeleton
   (4) earthworm-muscles, exoskeleton

7. Which is not a function of an endoskeleton?
   (1) intracellular transport
   (2) organ protection
   (3) anchorage for muscle action
   (4) leverage for body movement

8. Two functions of bones are to protect body structures and to
   (1) serve as storage sites for glycogen
   (2) synthesize the vitamins needed for clotting
   (3) provide sites for ATP production
   (4) act as levers during body movements

9. Which letter in the diagram below indicates a ligament?
   (1) A (3) C
   (2) B (4) D

10. The inelastic connective tissue that attaches a muscle in the lower leg to a heel bone is known as
    (1) a tendon (3) cartilage
    (2) a ligament (4) epidermis
11. Which two structures are directly involved in locomotion in humans?
   (1) visceral muscle and fibrous tendons
   (2) smooth muscle and ligaments
   (3) skeletal muscle and bones
   (4) cardiac muscle and immovable joints

12. Which statement most accurately describes human skeletal muscle tissue?
   (1) It is involuntary and striated.
   (2) It is involuntary and lacks striations.
   (3) It is voluntary and striated.
   (4) It is voluntary and lacks striations.

13. Which statement best describes cardiac muscle?
   (1) It is striated and voluntary in action.
   (2) It is striated and involuntary in action.
   (3) It is connected to bones and makes up the bulk of the heart.
   (4) It is a structural component of both the digestive tract and the heart.

14. Which phrase best describes the tough connective tissue labeled A in the diagram below?
   (1) a ligament that holds bones together
   (2) an extensor that provides movement to the lower arm
   (3) a tendon that anchors a flexor to a bone
   (4) cartilaginous tissue that connects bones

15. An individual running a marathon may experience periods of oxygen deprivation that can lead to
   (1) anaerobic respiration in muscle cells, forming lactic acid
   (2) aerobic respiration in muscle cells, generating glycogen
   (3) anaerobic respiration in liver cells, producing glucose
   (4) aerobic respiration in liver cells, synthesizing alcohol

16. Which statement does not correctly describe a function of cartilage?
   (1) It anchors muscles to bones.
   (2) It provides flexibility in an embryo.
   (3) It makes up the outer ear.
   (4) It cushions bones at a joint.

17. The connective tissue that cushions the vertebrae and provides flexibility to joints is known as
   (1) tendon (3) cartilage
   (2) muscle (4) bone

18. Which disorder is defined as an inflammation of the joints?
   (1) gout (3) meningitis
   (2) polio (4) arthritis

19. Which malfunction is most closely associated with connective tissue that is involved in human locomotion?
   (1) bronchitis (3) diabetes
   (2) tendinitis (4) meningitis

20. Arthritis and tendinitis differ in that arthritis is an inflammation of the joints and tendinitis is a
   (1) deposition of uric acid in the joints
   (2) tear in the connective tissue that attaches bone to bone
   (3) disorder involving connective tissue
   (4) type of arthritis found only in infants

21. Which two disorders are most closely associated with regions A and B in the diagram below?
   (1) diabetes and goiter
   (2) arthritis and tendinitis
   (3) stroke and meningitis
   (4) angina pectoris and coronary thrombosis