

Questions on muscles

Q1: A muscles source of energy is:

- [A] Glucose
- [B] Oxygen
- [C] Lactic acid
- [D] Fibre

Q2: A muscle provides movement by:

- [A] Pronating
- [B] Pivoting
- [C] Pulling
- [D] Pushing

Q3: What holds a muscle to a bone?

- [A] Tendon
- [B] Ligament
- [C] Cartilage
- [D] Collagen

Q4: Which is NOT a type of muscle?

- [A] Voluntary
- [B] Involuntary
- [C] Cardiac
- [D] Coronary

Q5: Muscles operate in _____ pairs:

- [A] antagonistic
- [B] voluntary
- [C] coupled
- [D] aggravating

Q6: The origin of the *Vastus* muscles is the

- [A] Scapula
- [B] Patella
- [C] Femur
- [D] Humerus

Q7: Over stimulus of the muscle so that fibres are contracted more than is necessary for the muscle to function is known as:

- [A] Fatigue
- [B] Tension
- [C] Tone
- [D] Action

Q8: Bending a joint (decreasing the angle across a joint) is:

- [A] Abduction
- [B] Adduction
- [C] Flexion
- [D] Extension

Q9: Which of the following is NOT a muscle function?

- [A] Motion
- [B] Heat production
- [C] Calcium store
- [D] Maintenance of posture

Q10: Smooth muscles are generally:

- [A] Attached to the skeleton
- [B] Attached to or surround internal organs
- [C] Found in professional athletes
- [D] Unhealthy

Q11: What is the scientific name for the study of muscles?

- [A] Motion
- [B] Myology
- [C] Sphincters control
- [D] Ligament

Q12: What type of muscle forms most of the heart?

- [A] Cardiac
- [B] Smooth
- [C] Involuntary
- [D] Skeletal

Q13: What type of muscle is attached to bones and moves part of the skeleton?

- [A] Striated
- [B] Smooth
- [C] Voluntary
- [D] Skeletal

Q14: What word means 'muscle can be extended without damaging the tissue'?

- [A] Elasticity
- [B] Extensibility
- [C] Excitability
- [D] Neurons

Q15: A ligament is:

- [A] a sheet or broad band of fibrous connective tissue beneath the skin
- [B] a strong band of collagen fibres that joins muscle to bone
- [C] a band of tissue consisting mainly of collagen
- [D] a property of both muscle and nerve

Q16: What are the thick and thin myofilaments called?

- [A] Myofibrils
- [B] Myosin
- [C] Actin
- [D] Mitochondria

Q17: What are the two things muscle contractions require?

- [A] Asynchronous and Motor units
- [B] Protein and Energy
- [C] Oxygen and Protein
- [D] Calcium ions and Energy

Q18: Lactic acid accumulates in:

- [A] Veins and bones
- [B] Bones and muscle tissue
- [C] Blood and muscle tissue
- [D] Veins and blood

Q19: What muscle has its origin in the anterior, inferior part of the iliac spine and its insertion on the upper border of the patella?

- [A] *Rectus femoris*
- [B] *Vastus lateralis*
- [C] *Biceps femoris*
- [D] *Semimebranosus*

Q20: What muscle adducts, flexes, medially rotates and flexes the thigh, and its insertion is in the upper half of the linea aspera of the femur?

- [A] *Adductor longus*
- [B] *Adductor magnus*
- [C] *Gracilis*
- [D] *Adductor brevis*

Q21: Which muscle crosses diagonally from the lateral, anterior aspect of the thigh?

- [A] *Tensor fasciae latae*
- [B] *Sartorius*
- [C] *Rectus femoris*
- [D] *Vastus intermedius*

Q22: When driving a car and changing gear, the action of the foot that moves upwards towards the biting point of the clutch can best be described as:

- [A] Flexion
- [B] Plantarflexion
- [C] Dorsiflexion
- [D] Extension

Q23: The group of muscles located on the posterior aspect of the thigh is:

- [A] *Rectus femoris*
- [B] Hamstrings
- [C] *Biceps femoris*
- [D] Quadriceps

Q24: Which statement is NOT true regarding muscle attachments and body movements?

- [A] Abduction is movement away from the body
- [B] When a foot is plantarflexed the foot is flat on the ground
- [C] Flexion is a movement that decreases the angle of the joint and brings the two bones closer together
- [D] The point of attachment of a muscle to the immovable bone is called the origin

Q25: The muscle that is mainly responsible for a particular movement is known as the:

- [A] Fixator
- [B] Antagonist
- [C] Synergist
- [D] Prime mover

Q26: The hamstrings are:

- [A] *Gastrocnemius and Soleus*
- [B] *Gracilis, Sartorius and Adductor magnus*
- [C] *the Biceps femoris, Semimembranosus and Semitendinosus*
- [D] *Vastus lateralis, Vastus medialis, Rectus femoris and Vastus intermedialis*

Q27: The major muscle that will require strengthening for athletic sprinting and jumping is:

- [A] *Gluteus medius*
- [B] *Gluteus maximus*
- [C] *Gluteus Minimus*
- [D] *Erector spinae*

Q28: What is the most appropriate definition of the origin of a muscle?

- [A] The attachment of the muscle to a bone
- [B] The proximal attachment of the muscle to a bone
- [C] The attachment of the muscle to a bone that is relatively moveable
- [D] The attachment of the muscle to a bone that is relatively fixed

Q29: The _____ does not cause movement at the knee joint.

- [A] *Sartorius*
- [B] *Gastrocnemius*
- [C] Quadriceps group
- [D] Hamstring group

Q30: The muscle that causes dorsiflexion of the foot is the:

- [A] *Tibialis posterior*
- [B] *Peroneus longus*
- [C] *Tibialis anterior*
- [D] *Sartorius*

Q31: The action(s) of the *Gluteus medius* and *Gluteus minimus* are:

- [A] To abduct and rotate the thigh medially
- [B] To laterally rotate the thigh
- [C] To extend the thigh
- [D] To adduct and laterally rotate the thigh

Q32: Which postural deformity is likely to weaken the hamstrings, *Gluteus* muscles, *rectus abdominus*, internal and external obliques?

- [A] Kyphosis
- [B] Scoliosis
- [C] Lordosis
- [D] None of the above

Q33: When massaging the posterior aspect of the lower trunk, which superficial muscles will be worked directly over?

- [A] Internal and external obliques
- [B] *Gluteus maximus* and *Gluteus minimus*
- [C] *Abdominus transversalis*
- [D] *Rectus abdominus*

Q34: The _____ is a tough, fibrous band that extends from the sternum to the pubis.

- [A] *Tensor fasciae latae*
- [B] *Linea alba*
- [C] Great trochanter
- [D] *Erector spinae*

Q35: Which statement is FALSE with regards to the *Extensor hallucis longus* and *Flexor hallucis longus* muscles?

- [A] The *Hallucis longus* muscles have point of origin at the fibula
- [B] Flexes and extends the big toe
- [C] Plantarflexes the foot
- [D] Point of insertion is the phalanx of the big toe

Q36: What muscles will be most affected by a pulled achilles tendon?

- [A] *Extensor hallucis longus* and *Flexor hallucis longus*
- [B] *Soleus* and *Gastrocnemius*
- [C] *Extensor digitorum longus* and *Flexor digitorum longus*
- [D] *Peroneus longus* and *Tibialis posterior*

Q37: What is the deepest muscle of the abdominal girdle?

- [A] *Rectus abdominus*
- [B] External oblique
- [C] Internal oblique
- [D] *Transvers abdominus*

Q38: What is the superficial muscle that is commonly known as the calf muscle?

- [A] *Soleus*
- [B] *Gastrocnemius*
- [C] *Peroneus longus*
- [D] *Gracilis*

Q39: Which muscle is responsible for the 'six pack' effect?

- [A] *Erector spinae*
- [B] *Gluteus maximus*
- [C] *Rectus abdominus*
- [D] *Transversus abdominus*

Q40: The function of the external and internal obliques is:

- [A] Bending the torso backwards
- [B] Sideways movement of the trunk
- [C] Twisting the trunk to the opposite side
- [D] Bending the torso forwards

