

Subject: Human Anatomy II

Instructor: Dr. Arooba.

Class: Dental Technology, 2nd semester

Section: B

MidTerm Assignment, Spring 2020.

Total marks: 30.

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Select the best option.

1. A muscle known for tailor master:

- A. Iliacus
- B. Psoas major
- C. Sartorius**
- D. Pectineus

2. Which of the quadricep femoris muscles performs extension as well as flexion?

- A. Vastus lateralis
- B. Vastus medialis
- C. Vastus intermedias
- D. Rectus femoris**

3. Which of the following muscles crosses two joints?

- A. Vastus lateralis
- B. Vastus medialis

C. Vastus intermedius

D. Rectus femoris

4. It is the largest and longest bone of the body:

A. Hip bone

B. Femur

C. Vertebra

D. Tibia

5. It is the union of three bones:

A. Sternum

B. Femur

C. Hip bone

D. Tibia

6. The true foot drop occurs because of:

A. Sciatic nerve

B. Common peroneal nerve

C. Tibial nerve

D. Posterior cutaneous nerve

7. Peripheral hearts are located in:

A. Thorax

B. Abdomen

C. Thigh

D. Leg

8. Which of the following structure does not take part in the formation of the knee joint?

- A. Condyle of tibia
- B. Head of fibula**
- C. Medial femoral condyle
- D. Lateral femoral condyle

9. It is inserted to the quadrate tubercle:

- A. Quadriceps femoris**
- B. Quadratus plantae
- C. Quadratus femoris
- D. Rectus femoris

10. How many tarsal bones are there?

- A. 12
- B. 14**
- C. 16
- D. 18

Give brief answers to the following questions. Add diagrams/ picture where needed.

Each question carries 5 marks.

Question 1:

a) Why hip joint is more stable than shoulder joint?

Answer:

Because the socket of the hip joint is deeper and the ligament and muscle are much bigger and stronger as result we can't get the same rang of movement from our hips as from our shoulder but it return the hip is more stable and much less likely

dislocate the shoulder and the hip joint has a high degree of stability at the expense of some ligament. In contrast the glenohumeral joint has greater freedom of movement

b) Why flexor compartment of lower limb is directed posteriorly?

Answer:

In the lower part of leg the muscle belly combine with the soleus to calcaneal tendon with insert on the calcaneus because there are four muscle in the deep compartment of the posterior leg. One muscle, the popliteus acts only on the knee joint. The remaining three muscle (tibialis posterior, flexor hallucis longus and flexor digitorum longus) act on ankle joint

c) Why varicose veins are more common in prolonged standing working persons?

Answer:

The prolonged standing can cause veins to overwork and blood may pool in the leg veins increasing pressure in those veins causing the valve to become weak inefficient leading to varicose veins.

Question 2 :

What do you know about the ligaments of hip joint?

Answer:

The most notable ligament in the hip joint are iliofemoral ligaments which connects the pelvis to the femur at the front of the hip extension pubofemoral ligaments which attaches the most forward part of the pelvis known as the pub as femur.

Question 3:

Write a note on the movements and stability of talocrural joint ?

Answer:

The ankle joint or (talocrural joint) is a synovial joint located in the lower limb. It is formed by the bone of leg (tibia and fibula) and the foot (talus)

Movement:

The ankle joint is a hinge type joint permitting dorsiflexion and plantarflexion of foot the main movement that occur at the ankle joint. Eversion and inversion are produced at the other joints of foot, such as subtalar joint.

- Plantarflexion- produced by the muscle in the posterior compartment of the leg (gastrocnemius, soleus, plantaris and posterior tibialis)
- Dorsiflexion-produced by the muscles in the anterior compartment of leg (tibialis anterior, extensor hallucis longus and extensor digitorum longus)

Surfaces of ankle joint:

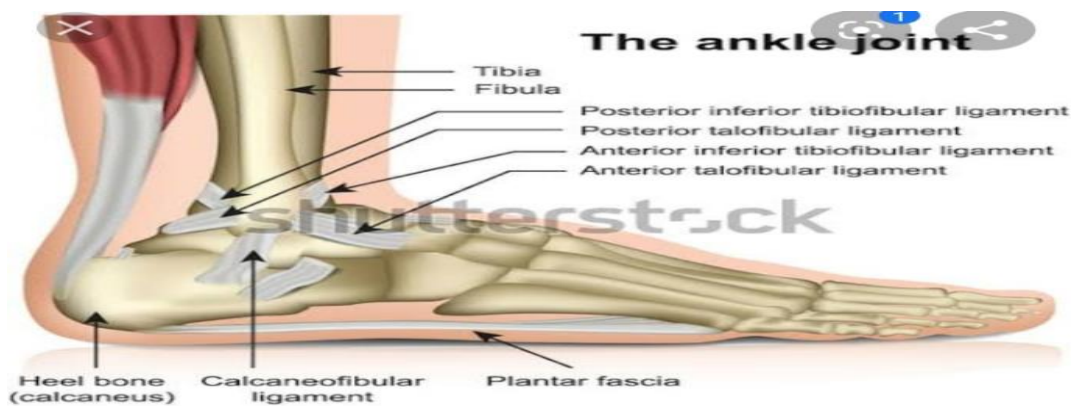
The ankle joint is formed by three bones, the tibia and fibula of the leg, and the talus of the foot: the tibia and fibula are bound together by strong tibiofibular ligaments. Together they form a bracket shaped socket covered in hyaline cartilage. This socket is known as a mortise

The body of the talus fits snugly in to the mortise formed by the bones of the legs. The articulating part of the talus is wedge shaped it is broad anteriorly, and narrow posteriorly:

- Dorsiflexion- the anterior part of the talus is held in mortise and the joint is more stable .

- Plantarflexion- the posterior part of the talus is held in the mortise, and the joint is less stable.

Stability: the bony architecture of the talocrural joint is the most stable in dorsiflexion. Thus, a sprained ankle is more likely to occur when the ankle is plantar- flexed, as ligamentous support is more important in this position. another ligament that can be injured in a severe ankle sprain is the calcaneofibular ligament .



Question 4:

Write a note on the transverse arch of the foot.?

Answer:

It is located in the coronal plane of the foot. It is formed by the cuboid and the three cuneiform bones. It has muscular support from the fibularis longus and tibialis posterior.

