ST MARY’S UNIVERSITY

TWICKENHAM, LONDON

BSc Degree Examination students registered for

Level **FOUR**

Title: **Clinical Human Anatomy**

Code: **SRE4011**

Semester: **TWO**

Date: **May 13th 2019**

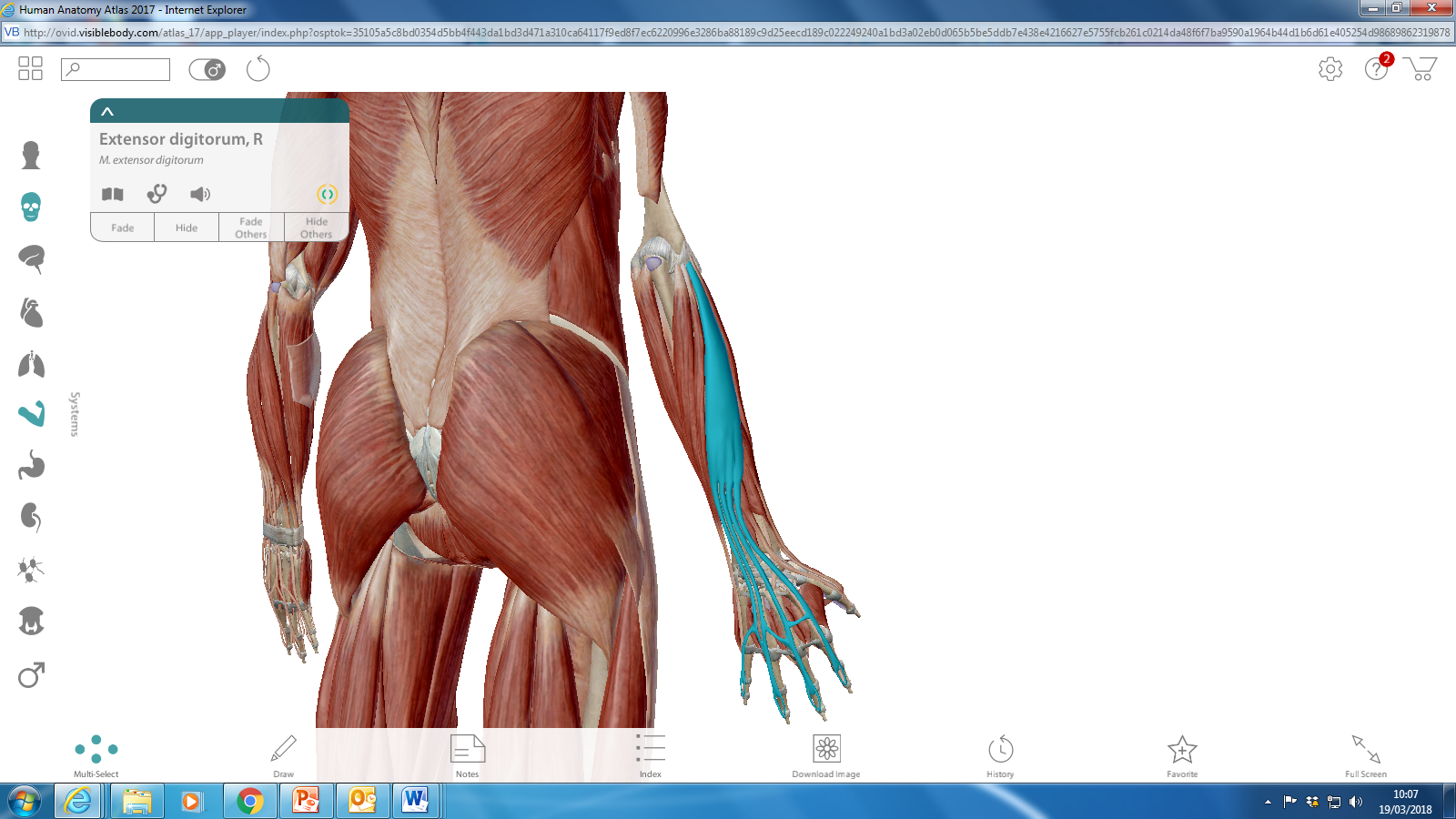
Time: **1:30 – 3:30 PM**

TIME ALLOWED: **TWO** HOURS

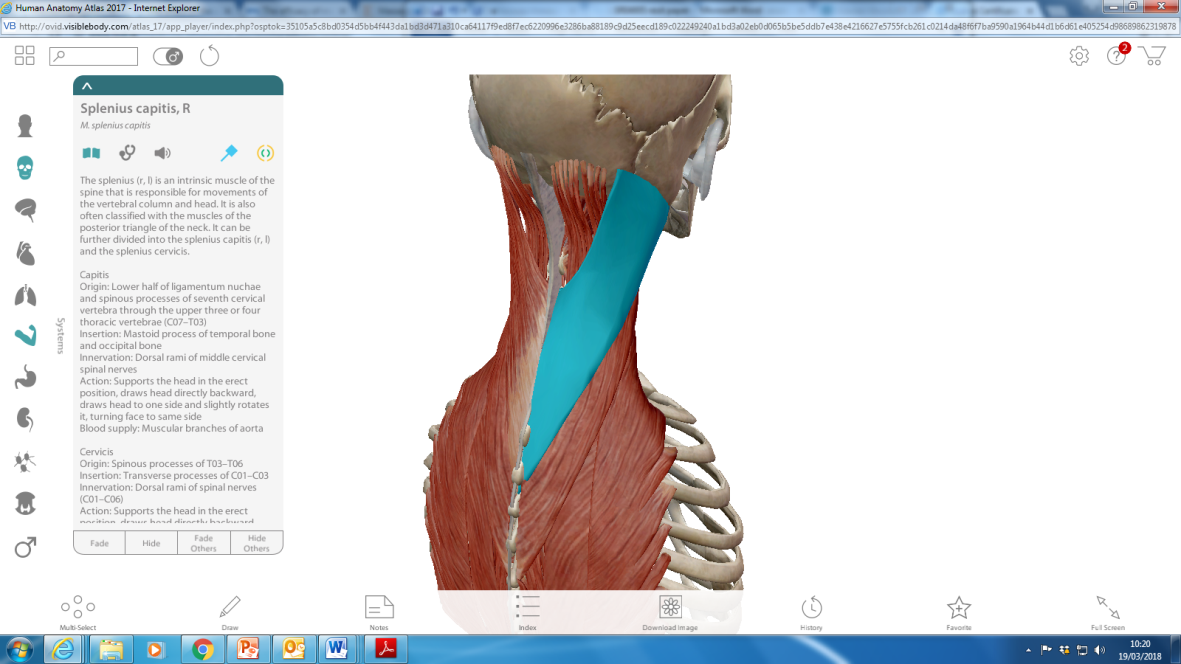
Please answer **ALL** multiple choice questions by answering A/B/C/D on the answer sheet provided. All multiple choice questions are worth one mark.

Please answer **ALL** short answer questions in the answer book provided.

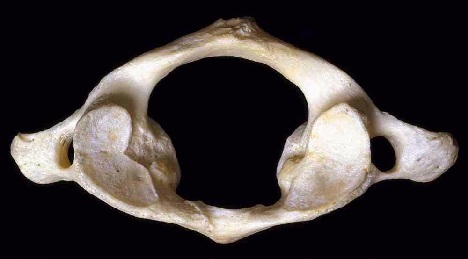
1. Which of the following bony landmarks can be palpated?
   1. AIIS
   2. Acetabulum
   3. Pubic Tubercle
   4. Obturator foramen
2. The three Hamstring muscles are:
   1. Semimembranosus, Semitendinosus, Biceps Brachii
   2. Semimembranosus, Semitendinosus, Biceps Femoris
   3. Semimembranosus, Semitendinosus, Rectus Femoris
   4. Semimembranosus, Semitendinosus, Brachioradialis
3. Which of the following joints does NOT allow pronation to occur?
4. Humeroradial joint
5. Humeroulnar joint
6. Proximal radioulnar joint
7. Distal radioulnar joint
8. Which muscle is highlighted in blue in the picture below?



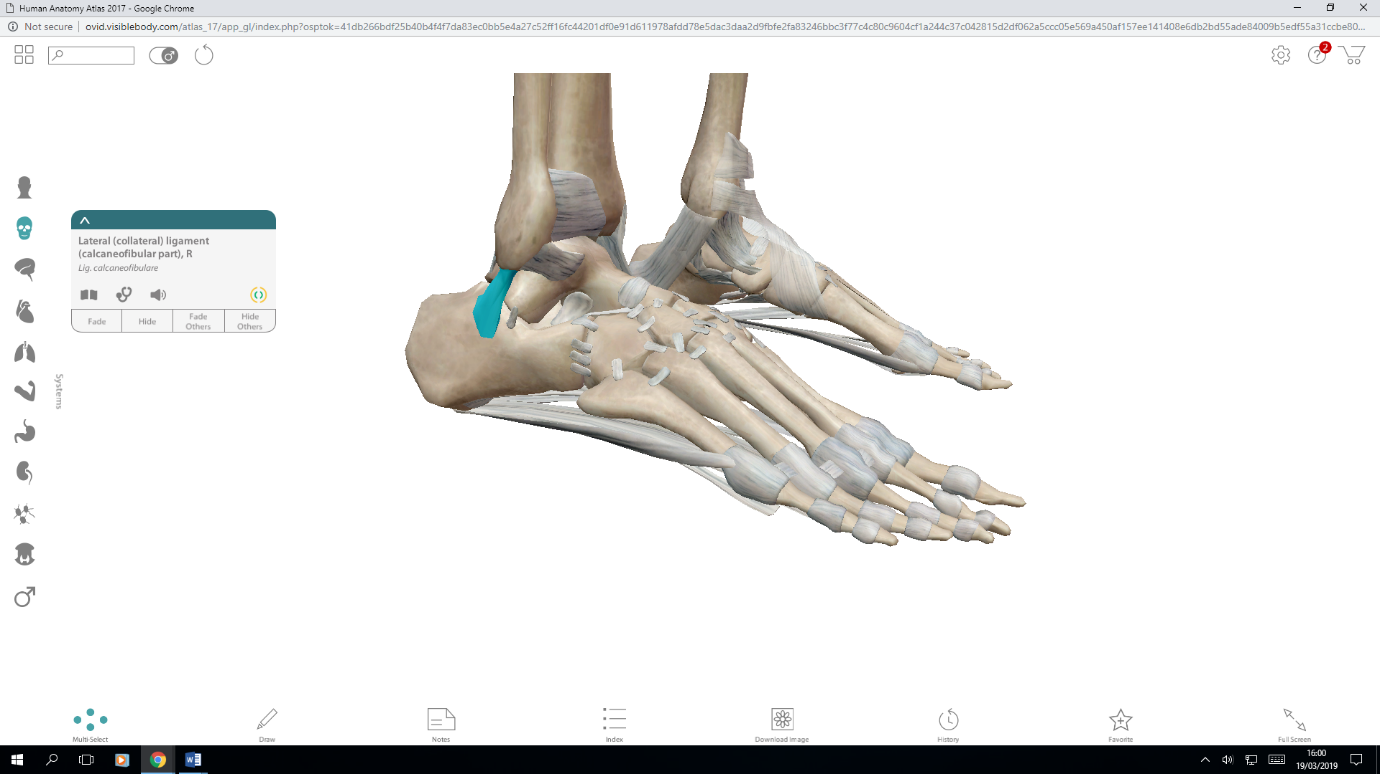
1. Extensor carpi ulnaris
2. Palmaris longus
3. Extensor digitorum
4. Flexor digitorum
5. The Inner layer of an intervertebral disc is called the Nucleus Pulposus. What does it consist of?
6. Elastin & lipids
7. H20, glycoproteins & elastin
8. Collagen & Elastin
9. H20, collagen & proteoglycans
10. Which of the following is NOT a function of the sacrotuberous ligament?
11. Binds sacrum to the ilium
12. Limits nutation of the sacrum
13. Prevents posterior flaring or diastasis of the joint
14. Is lengthened when the hip is maximally extended
15. What are the functions of the acetabular labrum?
    1. Deepen the acetabulum, and lubricate the joint
    2. Limit abduction of the hip, and lubricate the joint
    3. Deepen the acetabulum, and distribution of forces
    4. Secretes synovial fluid, and site for muscle attachment
16. Which is the main weight-bearing bone in the lower leg?
    1. Fibula
    2. Navicular
    3. Tibia
    4. Patella
17. The muscle highlighted in blue is Splenius capitis. What movements does this muscle create?



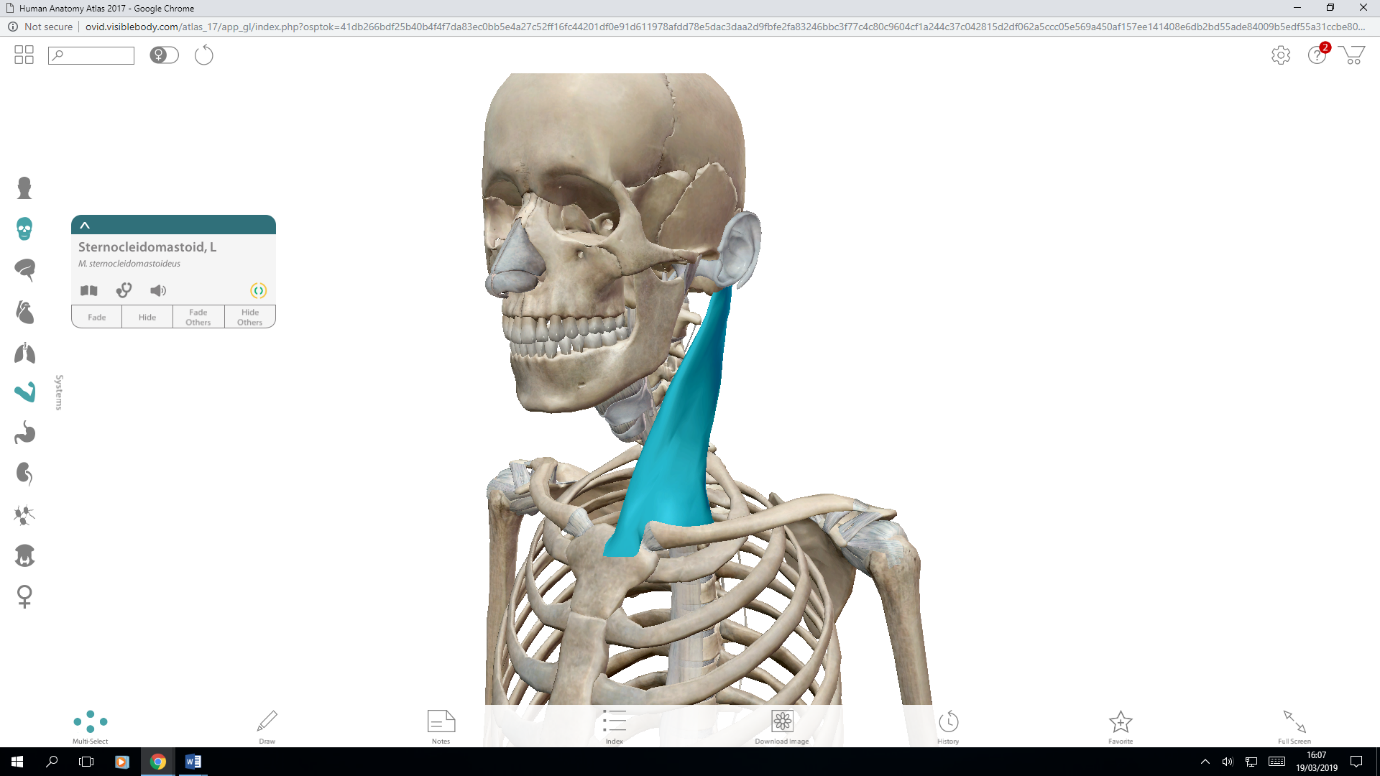
1. Extension, contralateral rotation, ipsilateral lateral flexion
2. Extension, ipsilateral rotation, flexion
3. Flexion, contralateral rotation, lateral flexion
4. Extension, ipsilateral lateral flexion, ipsilateral rotation
5. The brachial plexus consists of:
6. A lateral, posterior and medial cord
7. A superior, middle and inferior trunk
8. 3 anterior and 3 posterior divisions
9. All of the above
10. Rhomboids major arises from…
11. Spinous processes of C7 – T1
12. Transverse processes of C7 – T1
13. Spinous processes of T2 – T5
14. Transverse processes of T2 – T5
15. Which three muscles insert into the Pes anserinus on the Tibia?
16. Gracilis; Semitendinosus; Sartorius
17. Gracilis; Semimembranosis; Rectus Femoris
18. Semitendinosus; Semimembranosis; Sartorius
19. Sartorius; Biceps Femoris; Adductor Magnus
20. What are the attachments of the Iliofemoral ligament?
21. ASIS to greater trochanter
22. Iliopubic eminence, superior pubic ramus to base of intertrochanteric line
23. AIIS and iliac part of acetabular rim to intertrochanteric line
24. ASIS to lesser trochanter
25. Which of the following statements are false:
26. The sternoclavicular joint is a synovial saddle joint
27. The knee joint is a synovial hinge joint
28. The apophyseal joints are synovial plane joints
29. The hip and shoulder are both synovial ball and socket joints
30. Name this vertebra:



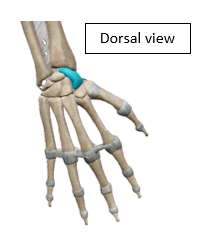
1. C1
2. C2
3. C7
4. T4
5. Which of the following attaches to the Corocoid process?
6. Long head of Biceps Brachii tendon
7. Pectoralis Minor
8. Pectoralis Major
9. Brachialis
10. The Median nerve comes from the ventral nerve roots of:
11. C5 & C6
12. C5, C6 & C7
13. C5, C6, C7 & C8
14. C5, C6, C7, C8 & T1
15. Which of the following bony landmarks are NOT palpable?
16. Anterior border of tibia
17. Medial condyle of tibia
18. Tibial tuberosity
19. Interosseous boarder of tibia
20. Which of the Adductor muscles assists in extension of the hip?
21. Adductor Brevis
22. Adductor Longus
23. Adductor Magnus
24. Pectineus
25. The joint orientation of the superior facets in the Thoracic spine face in which direction?
26. Posteriorly & laterally
27. Posteriorly & medially
28. Superiorly & medially
29. Inferiorly & anteriorly
30. What is the joint classification for the distal radioulnar joint?
31. Pivot joint
32. Hinge joint
33. Ball and socket
34. Saddle joint
35. The Axillary nerve innervates which muscle group?
36. The Pectorals
37. The Deltoids
38. The Adductors
39. The rotator cuff
40. The Iliocostalis muscles makes up one of the three erector spinae group. Where is its main attachment point?
41. The spinous processes
42. The transverse process
43. The ribs
44. The occipital bone
45. Which ligament is highlighted in blue?



1. Anterior talofibular ligament
2. Talocalcaneal ligament
3. Posterior talofibular ligament
4. Tibiofibular ligament
5. What is the function of the subscapular bursa?
6. Separate the tendon of the subscapularis from the anterior margin of the glenohumeral joint.
7. Separate the tendon of the infraspinatus from the posterior margin of the glenohumeral joint.
8. Prevent friction between the humerus and the corocoacromial arch.
9. Stabilise the glenohumeral joint.
10. Where would you palpate the head of the Fibula?
11. Lateral aspect of the lower leg in line with the tibial tuberosity
12. Medial aspect of the lower leg inferior to the knee joint line
13. Lateral aspect of the lower leg in line with the medial malleolus
14. Medial aspect of the lower leg in line with the tibia tuberosity
15. Which statement is NOT correct about the atlantoaxial joint?
16. The facet on the anterior arch of the atlas articulates with the dens of the axis
17. The atlantoaxial joint is a ball and socket joint
18. The atlantoaxial joint consists of 3 articulations
19. The atlantoaxial joint is a rotary joint
20. Name the muscle highlighted in blue:



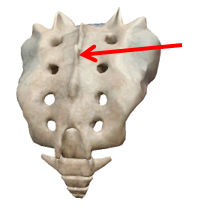
1. Scaleneus anterior
2. Splenius Cervicis
3. Sternocleidomastoid
4. Longus Colli
5. Which of the following muscles does NOT assist with shoulder flexion?
6. Anterior deltoid
7. Biceps brachii
8. Coracobrachialis
9. Pectoralis minor
10. Which of these muscles flexes the wrist?
11. Palmaris Longus
12. Flexor pollicis brevis
13. Flexor digiti minimi
14. Pronator quadratus
15. What nerve innervates Adductor brevis and Adductor longus?
16. Femoral nerve
17. Sciatic nerve
18. Gluteal nerve
19. Obturator nerve
20. How many interphalangeal joints are there in the foot?
21. Nine
22. Ten
23. Five
24. Seven
25. Name the bone highlighted in blue:



1. Lunate
2. Scaphoid
3. Hamate
4. Pisiform
5. What are the boundaries of the femoral triangle?
6. Inguinal ligament, Sartorius, Pectineus
7. Inguinal ligament, Adductor Longus, Rectus Femoris
8. Inguinal ligament, Adductor Brevis, Tensor Fascia Lata
9. Inguinal ligament, Adductor Longus, Sartorius
10. Which muscle sits most superficial?
11. Piriformis
12. Gluteus Medius
13. Gluteus Minimus
14. Gluteus Maximus
15. Where does the Scalenus Anterior muscle insert?
16. Medial end of the Clavicle
17. Lateral end of the Clavicle
18. 1st rib
19. Acromion process
20. What are the two attachment points for ligamentum teres found in the hip?
21. Fovea capitus on the head of the femur and the pubic tubercle
22. Lesser trochanter of the femur and the acetabular labrum
23. Fovea capitus on the head of the femur and the transverse acetabular ligament
24. Lesser trochanter of the femur and the acetabular labrum.
25. What is the name given to the superior indentation of the manubrium?
26. Acromial notch
27. Jugular notch
28. Xiphoid notch
29. Sternal notch
30. Which ribs are classed as true ribs?

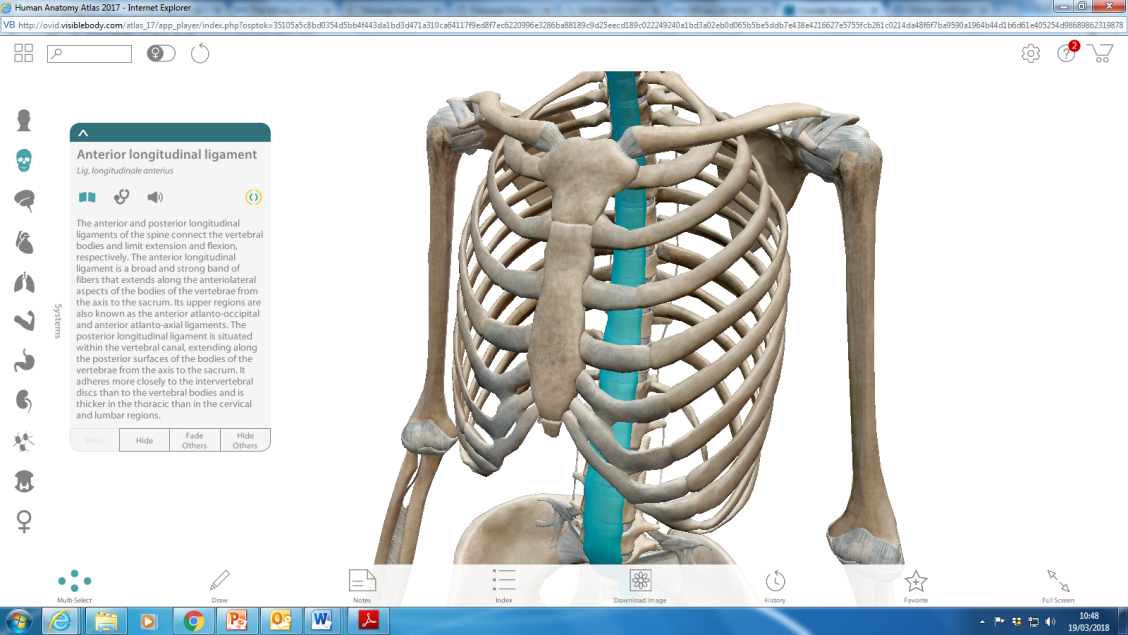
* 1. 1-7
  2. 2-8
  3. 1-10
  4. All of them

1. What muscle assists Pectoralis Major and Latissimus Dorsi in internal rotation of the glenohumeral joint?
   1. Infraspinatus
   2. Pectoralis Minor
   3. Subscapularis
   4. Brachioradialis
2. What are the articulating surfaces of the Talocrural joint?
   1. The superior calcaneus with the inferior surface of the talus
   2. The inferior surface of the tibia, articular facet on the distal fibula and the trochlea surface of the talus.
   3. Between the distal tibia and fibula
   4. The tibia condyles and the posterior surface of the patella
3. What is the nerve innervation for the Gastrocnemius?
   1. Sciatic nerve
   2. Deep peroneal nerve
   3. Tibial nerve
   4. Femoral nerve
4. Name the landmark which the arrow is pointing at.



* 1. Median crest
  2. Sacral hiatus
  3. Sacral foramina
  4. Transverse ridges

1. In the lumbar spine, what is the unique bony landmark, which is an attachment for the Multifidus muscle?
   1. Mammillary process
   2. Spinous process
   3. Transverse process
   4. Lamina
2. What is the name given for the soft tissue structure found between the distal ulnar and the carpals?
   1. Labrum
   2. Retinaculum
   3. Triangular fibrocartilage complex
   4. Meniscus
3. What muscle has an insertion into the tuberosity of the navicular and is responsible for plantarflexion and inversion of the foot?
   1. Tibialis anterior
   2. Tibialis posterior
   3. Plantaris
   4. Soleus
4. What is the soft tissue structure located on the posterior aspect of the trunk, inferior to the ribs and superior to the innominate bone.
   1. Flexor retinaculum
   2. External Oblique aponeurosis
   3. Interosseus membrane
   4. Thoracolumbar fascia
5. Which ligament is highlighted in blue?



1. Ligamentum flavum
2. Intertransverse ligament
3. Posterior longitudinal ligament
4. Anterior longitudinal ligament
5. When comparing the labrum of the hip joint with glenoid labrum of the shoulder joint, which of the following statements is true?
6. Both are made of hyaline cartilage
7. The hip labrum is triangular in cross-section, whereas the glenoid labrum is rectangular in cross-section.
8. Both are deficient (absent) inferiorly.
9. Both increase stability at the respective joints.
10. Pisiform is usually firmly attached to which other bone?
11. Lunate
12. Triquetral
13. Trapezoid
14. Radius

**Section Two**

Please answer ALL of the questions below in the answer book provided.

1. Discuss the structure & function of the Meniscus at the knee. (6 marks)
2. Describe the structures that increase stability at the GHJ. (5 marks)
3. List and describe the location of the extra capsular ligaments at the knee (8marks)
4. What structures pass through the popliteal fossa at the knee? (3 marks)
5. Describe the nerve pathway of the Radial nerve. (4 marks)
6. List the Hamstring muscles along with their origin and insertion points. (7marks)
7. What structures limit extension at the Thoracic spine? (3 marks)
8. Which muscles internally rotate the hip? (3 marks)
9. Name the ligaments found that the elbow (4 marks)
10. List the functions of the interosseous membrane in the lower leg. (3 marks)
11. What is the origin, insertion, action and nerve supply of the Quadratus Lumborum muscle? (4 marks)

**END OF EXAMINATION**

**SRE4011 Clinical Human Anatomy**

**Answer Sheet to Multiple Choice Questions**

**Reg. Number……………………………………..**

**Insert your letter to your answer next to the question number**

|  |  |
| --- | --- |
| **Question Number** | **Answer (a, b, c or d)** |
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**Please attached this to your exam script with the treasury tag provided**