Introduction to Anatomy and Physiology

BIOL 2404: Lab Practical 2

**Chapter 7: Muscles**

Head and Neck:

|  |  |  |
| --- | --- | --- |
| Frontalis | Buccinator | Sternocleidomastoid |
| Occipitalis | Masseter | Scalenes |
| Orbicularis Oculi | Temporalis |  |
| Orbicularis Oris | Zygomaticus |  |

Torso and Arm:

|  |  |  |
| --- | --- | --- |
| Trapezius | Biceps brachii | Rectus Abdominis |
| Serratus Anterior | Brachialis | Linea Alba\* |
| Pectoralis Major | Brachioradialis | Diaphram |
| Latissimus Dorsi | Triceps brachii |  |

Lower limb

|  |  |  |
| --- | --- | --- |
| Gluteus maximus | Hamstring Group:  | Quadriceps Group:  |
| Adductor group: |  Biceps femoris |  Rectus femoris |
|  Adductor longus |  Semitendinosus |  Vastus lateralis |
|  Adductor magnus |  Semimembranosus |  Vastus medialis |
|  Gracilis |  |  Vastus intermedius |
| Sartorius | Gastrocnemius | Calcaneal (Achilles) Tendon |
| **Muscle Action** |
| orbicularis oris | Closes mouth |
| orbicularis oculi | Closes eye |
| masseter | Elevates mandible |
| trapezius | Rotates scapula |
| deltoid | Abducts, extend and flexes arm |
| biceps brachii | Flexes forearm |
| triceps brachii | Extends forearm |
| Rectus abdominis | Compresses abdominal region |
| gluteus maximus | Extends thigh |
| adductor group | Adducts leg |
| hamstring group | Flexes Leg |
| quadriceps group | Extends leg |

**Joints:**

Temporomandibular joint (TMJ) Tibiofemoral joint (knee joint)

Glenohumeral Joint (shoulder joint) patellar ligament

Pubic symphysis quadriceps tendon

Sacroiliac Joint

**Chapter 8: Nervous**

|  |  |  |
| --- | --- | --- |
| **Neuron:** | **Brain:** | **Spinal Cord:** |
| Dendrite | Meninges |  Central canal |
| Cell body | Cerebrum |  Dorsal root |
| Axon |  Cerebral hemispheres |  Dorsal root ganglion |
|  Schwann Cell |  Convolutions |  Ventral root |
|  Nodes of Ranvier |  Longitudinal fissure |  |
|  |  Central sulcus | Spinal Nerves: |
|  |  Corpus callosum |  Cervical nerves |
|  | Lobes of cerebrum |  Thoracic nerves |
|  |  Frontal |  Lumbar nerves |
|  |  Parietal lobe |  Sacral Nerves |
|  |  Temporal Lobe |   |
|  |  Occipital lobe |  Ulnar nerve |
|  |  Insula |  Radial Nerve |
|  | Diencephalon |  Median nerve |
|  |  Thalamus |  Femoral nerve |
|  |  Hypothalamus |  |
|  |  Pituitary gland |  |
|  | Pons |  |
|  | Medulla Oblongata |  |
|  | CerebellumCranial Nerves |  |
|  |  Olfactory nerve |  |
|  |  Optic nerve |  |