TABLE SENSOR LOCATION VS MUSCLES OBSERVED In Region 1

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Muscles Observed | Origin | Insertion | Action | Jarque Bou |
| Flexor Carpi Ulnaris (FCU) | Medial epicondyle of humerus, olecranon and posterior border of ulna | Pisiform, Hamate, base of Metacarpal V | Wrist flexion, wrist adduction | 1 |
| Abductor Pollicis Longus (APL) | Lateral dorsal surface of ulna and radius | Pedicle of 1st Metacarpal | Thumb extension (abduction) |  |
| Extensor Carpi Ulnaris (ECU) | Humeral head: Lateral epicondyle of the Humerus. Ulnar head: Olecranon, Posterior surface of ulna, antebrachial fascia. | 5th Metacarpal | Wrist Extension Wrist Adduction |  |
| Extensor Pollicis Longus (EPL) | Middle third of posterior surface of ulna, interosseous membrane | thumb, distal phalanx | extension of thumb |  |
| Extensor Digiti Minimi (EDM) | Anterior portion of lateral epicondyle of humerus | Dorsal digital expansion of digit V located at the base of the proximal phalanx | extends the wrist, extends digit V at all joints |  |
| Extensor Digitorum (EDC) | Lateral Epicondyle of humerus by common tendon | extensor expansion of middle and distal phalanx of digits 2-4 | extension of hand, extension of wrist, extension of fingers |  |

TABLE SENSOR LOCATION VS MUSCLES OBSERVED In Region 2

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Origin | Insertion | Action | Jarque Bou |
| Flexor Carpi Radialis (FCR) | medial epicondyle of humerus | base of second and third metacarpal bones | flexion and abduction at wrist | 1 |
| Palmaris Longus (PL) | medial epicondyle of humerus | palmar aponeurosis and flexor retinaculum | wrist flexor  (OPPOSITION) | 2 |
| Flexor Digitorum Superficialis (FDS) | medial epicondyle of the humerus, Ulnar coronoid process, below radial tuberosity | Anterior margins on the base of middle phalanges of digits II -V | Flexor of fingers, primarily at proximal interphalangeal joints |  |
| Flexor Digitorum Profundus (FDP) | Upper three quarters of the anterior and medial surfaces of the body of the ulna, interosseous membrane and deep fascia of the forearm | base of the digital phalanges of the fingers | flex hands and both interphalangeal joints |  |
| Pronator Teres (PT) | humeral head: medial supracondylar ridge of humerus, ulnar head: coronoid process of ulna | Middle of the lateral surface of body of the radius | pronation of forearm, flexes elbow |  |

TABLE SENSOR LOCATION VS MUSCLES OBSERVED In Region 3

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Origin | Insertion | Action | Jarque Bou |
| Flexor Digitorum Profundus (FDP) | Upper three quarters of the anterior and medial surfaces of the body of the ulna, interosseous membrane and deep fascia of the forearm | base of the digital phalanges of the fingers | flex hands and both interphalangeal joints | 1 |
| Flexor Digitorum Superficialis (FDS) | medial epicondyle of the humerus, Ulnar coronoid process, Below radial tuberosity | Anterior margins on the base of middle phalanges of digits II -V | Flexor of fingers, primarily at proximal interphalangeal joints | 2 |
| Flexor Pollicis Longus (FPL) | Middle half of the anterior surface of the radius and the adjacent interosseus membrane | The base of the distal phalanx of the thumb | Flexion of the thumb | 3 |
| Extensor Carpi Ulnaris (ECU) | Humeral head: Lateral epicondyle of the Humerus. Ulnar head: Olecranon, Posterior surface of ulna, antebrachial fascia. | 5th Metacarpal | Wrist Extension Wrist Adduction |  |
| Extensor Pollicis Longus (EPL) | Middle third of posterior surface of ulna, interosseous membrane | thumb, distal phalanx | extension of thumb |  |
| Extensor Digiti Minimi (EDM) | Anterior portion of lateral epicondyle of humerus | Dorsal digital expansion of digit V located at the base of the proximal phalanx | extends the wrist, extends digit V at all joints |  |
| Continued on next page |  |  |  |  |

TABLE SENSOR LOCATION VS MUSCLES OBSERVED In Region 3 CONTINUED

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Origin | Insertion | Action | Jarque Bou |
| Flexor Carpi Ulnaris (FCU) | Medial epicondyle of humerus, olecranon and posterior border of ulna | Pisiform, Hamate, base of Metacarpal V | Wrist flexion, wrist adduction |  |
| Flexor Carpi Radialis (FCR) | medial epicondyle of humerus | base of second and third metacarpal bones | flexion and abduction at wrist |  |

TABLE SENSOR LOCATION VS MUSCLES OBSERVED In Region 4

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Origin | Insertion | Action | Jarque Bou |
| Extensor Pollicis Brevis (EPB) | Lateral dorsal surface of body of radius Interosseous Membrane | Base of proximal phalanx of thumb | Thumb extension Wrist abduction | 1 |
| Abductor Pollicis Longus (APL) | Lateral dorsal surface of ulna and radius  Interosseous Membrane | Pedical of 1st Metacarpal | Thumb extension (abduction) | 2 |
| Extensor Pollicis Longus (EPL) | Middle third of posterior surface of ulna, interosseous membrane | thumb, distal phalanx | extension of thumb | 3 |
| Extensor Carpi Radialis Longus (ECRL) | lateral supracondylar ridge humerus | 2nd metacarpal | extensor at the wrist joint, abducts the hand at the wrist |  |
| Extensor Carpi Radialis Brevis (ECRB) | humerus at the anterior of lateral epicondyle | Posterior base of 3rd metacarpal | extensor and abductor of the hand at the wrist joint |  |
| Brachioradialis (BR) | lateral supracondylar ridge of the humerus | distal radial styloid process | flexion of the elbow, supination and pronation of the radioulnar joint to 90deg |  |

TABLE SENSOR LOCATION VS MUSCLES OBSERVED In Region 5

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Origin | Insertion | Action | Jarque Bou |
| Extensor Digitorum (EDC) | Lateral Epicondyle of humerus by common tendon | extensor expansion of middle and distal phalanx of digits 2-4 | extension of hand, extension of wrist, extension of fingers | 1 |
| Extensor Pollicis Brevis (EPB) | Lateral dorsal surface of body of radius Interosseous Membrane | Base of proximal phalanx of thumb | Thumb extension Wrist abduction |  |
| Extensor Pollicis Longus (EPL) | Middle third of posterior surface of ulna, interosseous membrane | thumb, distal phalanx | extension of thumb |  |
| Extensor Indicis (EI) | Posterior distal third of ulna and interosseous membrane | Posterior digital expansion of second digit 1st phalanx | extends index finger |  |
| Extensor Carpi Radialis Brevis (ECRB) | humerus at the anterior of lateral epicondyle | Posterior base of 3rd metacarpal | extensor and abductor of the hand at the wrist joint |  |

TABLE SENSOR LOCATION VS MUSCLES OBSERVED In Region 6

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Origin | Insertion | Action | Jarque Bou |
| Extensor Carpi Ulnaris (ECU) | Humeral head: Lateral epicondyle of the Humerus. Ulnar head: Olecranon, Posterior surface of ulna, antebrachial fascia. | 5th Metacarplal | Wrist Extension Wrist Adduction | 1 |
| Abductor Pollicis Longus (APL) | Lateral dorsal surface of ulna and radius  Interosseous Membrane | Pedical of 1st Metacarpal | Thumb extension (abduction) |  |
| Extensor Pollicis Longus (EPL) | Middle third of posterior surface of ulna, interosseous membrane | thumb, distal phalanx | extension of thumb |  |
| Extensor Digiti Minimi (EDM) | Anterior portion of lateral epicondyle of humerus | Dorsal digital expansion of digit V located at the base of the proximal phalanx | extends the wrist, extends digit V at all joints |  |
| Extensor Digitorum (EDC) | Lateral Epicondyle of humerus by common tendon | extensor expansion of middle and distal phalanx of digits 2-4 | extension of hand, extension of wrist, extension of fingers |  |

TABLE SENSOR LOCATION VS MUSCLES OBSERVED In Region 7

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Origin | Insertion | Action | Jarque Bou |
| Brachioradialis (BR) | lateral supracondylar ridge of the humerus | distal radial styloid process | flexion of the elbow, supination and pronation of the radioulnar joint to 90deg | 1 |
| Pronator Teres (PT) | humeral head: medial supracondylar ridge of humerus, ulnar head: coronoid process of ulna | Middle of the lateral surface of body of the radius | pronation of forearm, flexes elbow | 2 |
| Extensor Carpi Radialis Brevis (ECRB) | humerus at the anterior of lateral epicondyle | Posterior base of 3rd metacarpal | extensor and abductor of the hand at the wrist joint | 3 |
| Extensor Carpi Radialis Longus (ECRL) | lateral supracondylar ridge humerus | 2nd metacarpal | extensor at the wrist joint, abducts the hand at the wrist | 4 |
| Flexor Pollicis Longus (FPL) | Middle half of the anterior surface of the radius and the adjacent interosseus membrane | The base of the distal phalanx of the thumb | Flexion of the thumb |  |
| Flexor Carpi Radialis (FCR) | medial epicondyle of humerus | base of second and third metacarpal bones | flexion and abduction at wrist |  |