|  |  |  |
| --- | --- | --- |
| muscle | nerve supply | action |
| 1-Gluteus maximus | \*Inferior gluteal nerve. | Extends & laterally rotates thigh;  through iliotibial tract, it extends  knee joint |
| 2-Gluteus medius | \*Superior  gluteal nerve. | Abducts thigh. Tilts pelvis when  walking  Abduct thigh; anterior fibers  medially rotate thigh |
| 3- Gluteus medius | \*Superior  gluteal nerve. | Abducts thigh. Tilts pelvis when  walking  Abduct thigh; anterior fibers  medially rotate thigh |
| 4- Tensor fasciae latae | \*Superior  gluteal nerve. | \*Keep knee in the extened position |

Muscles of lower limb

1-gluteal region:-

2- small Lateral rotator of thigh:-

|  |  |  |
| --- | --- | --- |
| 1- Piriformis | \* 1st & 2nd sacral  Nerves(anterior rami). | \* Lateral  rotator  of  the thigh  at  hip joint |
| 2- Superior gemellus | \*nerv to obturator internus. |
| 3- Inferior gemellus | \* nerv to quadratus femoris.  (L4&5 and S1). |
| 4- Obturator internus. | \*nerv to obturator internus.  (L 5, S1&S2) |
| 5- quadratus femoris. | \* nerv to quadratus femoris.  (L4&5 and S1). |
| 6- Obturator externus. | \*postrior division of obturator nerve. |

3- Anterior Compartment of Thigh :-

|  |  |  |
| --- | --- | --- |
| 1- Sartorius | \* Femoral  Nerve. | \* Flexes, abducts, laterally rotates  thigh; flexes & medially rotates leg. |
| 2- Pectineus | \* Femoral  Nerve. | \*Flexes and adducts thigh. |
| 3-Iliacus | \* Femoral  Nerve. | \* Flexes thigh on trunk;  \* medially rotates thigh |
| 4- Psoas major | \*branches of Lumbar plexus. | \* Flexes and medial rotates thigh. |
| 5- Quadriceps femoris  \* rectus femoris  \* vastus medialis  \* vastus lateralis  \* vastus intermedius | \* Femoral  nerve. | \*powerfulExtensors of leg.  \* rectus femoris Flexes thigh |
| 6-articularis genu muscle. | \* Femoral  Nerve. | \*pulls synovial membrane of knee upward joint during extension |

4-Medial Compartment of Thigh:-

|  |  |  |
| --- | --- | --- |
| 1-Gracilis. | \*Obturator nerve. | \*Adducts thigh and flexes leg. |
| 2-Adductor longus. | \* Obturator nerve. | \* Adducts, flexes and medial rotates thigh. |
| 3- Adductor brevis. | \* Obturator nerve. | \* Adducts, flexes and medial rotates thigh. |
| 4-Adductor magnus. | \*adductor part→  Obturator nerve.  \* ischial part →  Sciatic nerve-(tibial  nerv) | \*adductor part→  Adducts and medial rotates thigh.  \* ischial part →  Extend thigh. |

5-Posterior Compartment of Thigh:-

|  |  |  |
| --- | --- | --- |
| 1-Biceps femoris. | \*Long head: tibial verve.  \*short head:  Common peroneal. | \*Flexes and laterally rotates leg.  \*long  head extends thigh. |
| 2-Semitendinosus. | \*Tibial Nerve. | \* Flexes and medially rotates leg.  \* Extends thigh . |
| 3-Semimembranosus |

6-Anterior Compartment of the Leg:-

|  |  |  |
| --- | --- | --- |
| 1-Tibialis anterior. | \*Deep  peroneal  nerve  (anterior tibial verve) | \*Dorsiflexes (extends) foot.  \* inverts foot. |
| 2-Extensor hallucis  Longus. | \*Extends big toe at metatarsophlengeal and interphlangeal joints.  \* Dorsiflexes foot. |
| 3- Extensor digitorum Longus. | \* Extends lateral 4 toes at toe at metatarsophlengeal and interphlangeal joints.  \* Dorsiflexes foot. |
| 4-Peroneus tertius. | \* Dorsiflexes foot.  \*Everts foot. |
| 5- Extensor digitorum brevis. | \* Extends medial 4  Toes. |

7-Muscles of Lateral Compartment of Leg:-

|  |  |  |
| --- | --- | --- |
| 1-Peroneus longus | \*Superficial  peroneal  nerve(musculocutaneous). | \*Plantar flexes foot; everts foot.  \*maintain transverse arches of foot. |
| 2-Peroneus brevis. | \*Plantar flexes foot and everts foot. |

8-Muscles of Posterior Compartment of the Leg:-

|  |  |  |
| --- | --- | --- |
| 1-Gastrocnemius | \*Tibial nerve. | \* Plantar flexes foot and flexes leg. |
| 2- Plantaris. | \* Tibial nerve. | \* Plantar flexes foot and flexes leg. |
| 3- Soleus. | \*superficial surface→ Tibial nerve.  \*deep surface→  Posterior Tibial nerve. | \*planter flexes foot only. |
| 4- Popliteus. | \* Tibial nerve. | \* Flexes leg  unlocks full \*Extension of knee by  laterally rotating femur on tibia. |
| 5- Flexor digitorum  Longus. | \* Posterior Tibial nerve. | \* Flexes distal phalanges of lateral 4  Toes.  \*plantar flexes and inverts foot. \*supports  medial longitudinal  arches of foot. |
| 6- Flexor hallucis longus. | \* Posterior Tibial nerve. | \*Flexes distal phalanx of big toe.  \*plantar flexes and inverts foot. \*supports medial  longitudinal arch. |
| 7-Tibialis posterior. | \* Posterior Tibial nerve. | \*plantar flexes and inverts foot. \*supports medial  longitudinal arch |

By/ abd elrahman hilmy.

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