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Instructor: Dr. Arooba.

Assignment for viva.

Question: Write a complete note on hip joint.

Ans The hip joint is a ball and socket synovial joint formed by an articulation between the pelvic acetabulum and the head of the femur It forms a connection from the lower limb to the pelvic girdle and thus is designed for stability and weight bearing rather than a large range of movement

Function OF Hip joint

1) The hip joint is a complex ball and socket joint

2) Hip joint supports the weight of the body and is responsible for movement of the upper leg

The main nerves of the hip that supply the muscles in the hip include the femoral obturator and sciatic nerves

The hip bone is formed by three parts the ilium ischium and pubis At birth these three components are separated by hyaline cartilage

Important and movement Of Hip joint

The hip joint is one of the most important joints in the human body It allows us to walk run and jump

This ball and socket construction allows for three distinct types of flexibility

Hip flexion and extension moving the leg back and forth

Hip abduction and adduction moving the leg out to the side abduction and inward toward the other leg adduction and

Rotation pointing toes inward internal rotation or outward external rotation and then moving the straightened leg in the direction of the toes

Hip Joint Muscles

Hip muscles

The hip joint is surrounded by several muscles including

Gluteal muscles located on the back of the hip buttocks

The adductor muscle on the inner thigh

The iliopsoas muscle which extends from the lower back to upper femur

Quadriceps a group of four muscles that comprise the front of the thigh and

Hamstrings a group of muscles that comprise the back of the thigh and extend to just below the knee Together, these muscles support the hip joint, so exercises to relieve hip osteoarthritis symptoms will focus on these muscles as well as muscles of the core

When the hip joint becomes inflamed and painful the pain may be felt in the groin but may also be referred into the back buttocks and down the front or back of the leg

Articulation of Hip joint

The hip joint is the articulation of the pelvis with the femur which connects the axial skeleton with the lower extremity The adult os coxae or hip bone is formed by the fusion of the ilium the ischium and the pubis which occurs by the end of the teenage

The movements that can be carried out at the hip joint are listed below, along with the principle muscles responsible for each action:

Flexion – iliopsoas rectus femoris sartorius pectineus.

Extension – gluteus maximus semimembranosus semitendinosus and biceps femoris the hamstrings