

UNIT-III : HUMAN ANATOMY AND PHYSIOLOGY-III

IIIA.MUSCULO-SKELETAL SYSTEM**(1 x 2) + (1 x 4) = 6 Marks****ROOT POINTS**

- Muscles** are meant for **movement**.
- The movements are (i) internal (peristalsis) (ii) movements of various parts like head, eyes, hands (iii) Locomotory movements (one place to another like walking, running)
- Skeleton gives '**support and form**' to the body.
- Each Skeletal muscle is madeup of **muscle bundles (Fascicles)**.
- The muscles are attached to skeleton by **tendons**.
- Muscles classification based on location:* **Skeletal, Visceral, Cardiac**
- Bones and muscles together form **powerful locomotory organs**.
- Joints** between bones facilitate **free movement** of different parts of the body.
- T tubule and the two terminal cisternae at its sides form the **triad system**. [IPE]
- Actin** is a thin contractile protein where as **Myosin** is thick contractile protein. [IPE]
- The ear ossicles are** (i) Malleus (ii) Incus (iii) Stapes [IPE]
- Synovial Joint** is free moving joint. It prevents **dislocation of joint**. [IPE]
- Synovial Joint acts a **lubricant for free movement of joint**. [IPE]
- Synovial joints:** Ball & socket, Hinge joint, Pivot joint, gliding joint, condyloid joint, saddle joint.

FRUITY Qs OF IPE**(1 x 2) + (1 x 4) = 6 Marks**

- What is triad system?
- Write the difference between actin and myosin.
- Name two cranial sutures and their locations.
- Name the ear ossicles and their evolutionary origin in human beings.
- Write short notes on the ribs of human being.
- Draw a neat labeled diagram of pelvic girdle.
- Describe the structure of synovial joint with the help of a neat labelled diagram.