

KPK Class 10 Biology Short Questions – Chapter 13

Support and Movement

1. Why are bones considered as dynamic structures? □

- Bones aren't just dead things! They're constantly changing and growing.
- They get stronger when you work out 🏋️, and they can repair themselves after injuries.
- This is why we say they're "dynamic" – they're always moving and changing.

2. What is the contribution of Vesalius in understanding the human skeleton? □ 📖

- Vesalius was a smart guy who studied bones a long time ago.
- He drew really detailed pictures of skeletons and wrote books about them.
- This helped people understand how bones fit together and work.
- He's like the first "bone expert"! □

3. Describe the function of three major types of joints and give an example of each. □

- **Immovable joints:** These joints don't move at all, like the bones in your skull. 🔒
- **Slightly movable joints:** These joints can move a little bit, like the bones in your spine. 🌀
- **Freely movable joints:** These joints can move in many different directions, like your shoulder and elbow joints. □ ♀

4. How are different types of arthritis caused? □

- Arthritis is when joints get inflamed and hurt.
- There are different types of arthritis, but they all have something to do with the cartilage in your joints.
- Cartilage is a soft, squishy substance that helps bones move smoothly.
- When cartilage gets damaged or worn out, it can cause arthritis. ☹️

5. Differentiate between a skeletal muscle's origin and insertion. 🏋️

- The origin of a muscle is the end that stays still when the muscle contracts.
- The insertion is the end that moves.
- For example, when you bend your elbow, your biceps muscle contracts.
- The origin of the biceps is near your shoulder, and the insertion is near your elbow.

6. State the functions of flexors and extensors. 🗨️

- Flexors are muscles that help you bend your joints.
- Extensors are muscles that help you straighten your joints.
- For example, when you bend your knee, your hamstrings (flexors) contract.
- When you straighten your knee, your quadriceps (extensors) contract.

Here are answers to your questions about ligaments, tendons, and the functions of bones:

7. What are ligaments and tendons? What function do they perform? ☐

- **Ligaments** are like strong rubber bands that hold bones together at joints.
- **Tendons** are like strong cables that connect muscles to bones.
- Together, they help our bodies move and stay stable. ☐♀

8. State five functions of bones. ☐

- **Support:** Bones hold up our bodies and give us shape. ☐♀
- **Protection:** Bones protect our organs, like our brain and heart. ♡
- **Movement:** Bones work with muscles to help us move. 🏃♀
- **Storage:** Bones store minerals, like calcium and phosphorus. 🏠
- **Blood cell production:** Bones make blood cells in the bone marrow. ☐