

1. The total number of bones in the adult human skeleton is:

- a) 180
- b) 206
- c) 230
- d) 300

2. Which of the following is NOT a function of bones?

- a) Storage of fat
- b) Hormone production
- c) Synthesis of blood elements
- d) Protection of vital organs

3. The bone cells responsible for the resorption (breakdown) of bone tissue are:

- a) Osteoblasts
- b) Osteocytes
- c) Osteoclasts
- d) Macrophages

4. Tetracycline is contraindicated in pregnant women and children because it can:

- a) Stimulate excessive bone growth
- b) Weaken the bone matrix
- c) Cause permanent discoloration of teeth
- d) Inhibit calcium absorption

5. The part of a long bone that is primarily composed of compact bone and contains the medullary cavity is the:

- a) Epiphysis
- b) Diaphysis
- c) Metaphysis
- d) Periosteum

6. The "keystone" bone of the cranium, because it articulates with all other cranial bones, is the:

- a) Frontal bone
- b) Occipital bone
- c) Sphenoid bone
- d) Ethmoid bone

8. The vertebral column of an adult is composed of how many bones?

- a) 24
- b) 26
- c) 28
- d) 33

9. The bones that form the pectoral (shoulder) girdle are the:

- a) Scapula and humerus
- b) Clavicle and sternum
- c) Clavicle and scapula
- d) Humerus and ulna

10. The longest and strongest bone in the human body is the:

- a) Humerus
- b) Tibia
- c) Fibula
- d) Femur

11. Which of the following is a feature of the proximal end of the femur?

- a) Medial malleolus
- b) Olecranon process
- c) Greater and lesser trochanters
- d) Capitulum and trochlea

12. A key characteristic of a synovial joint is:

- a) Bones held together by fibrous tissue
- b) The presence of a synovial cavity
- c) Little to no movement
- d) Bones connected by cartilage

13. The shoulder joint is an example of which type of synovial joint?

- a) Hinge joint
- b) Pivot joint
- c) Ball-and-socket joint
- d) Saddle joint

1. True/False: The axial skeleton includes the bones of the upper and lower limbs.
2. True/False: Osteocytes are located within spaces in the bone matrix called lacunae.
3. True/False: The periosteum is a thin tissue layer that lines the medullary cavity.
4. True/False: Spongy (cancellous) bone contains numerous small, interconnected cavities.
5. True/False: The foramen magnum is located in the frontal bone.
6. True/False: The hyoid bone is unique because it does not articulate with any other bone in the body.
7. True/False: Ribs pairs 1-7 are classified as "true ribs" because they attach directly to the sternum via their own costal cartilages.
8. True/False: The clavicle provides the only bony attachment between the upper limb and the axial skeleton.
9. True/False: The tibia is the main weight-bearing bone of the leg, while the fibula is non-weight bearing.
10. True/False: Bursae are sac-like structures that contain synovial fluid and help cushion movements between tendons, ligaments, and bones.

MULTIPLE CHOICE ANSWERS:

1. b) 206
2. b) Hormone production
3. c) Osteoclasts
4. c) Cause permanent discoloration of teeth
5. b) Diaphysis
6. c) Sphenoid bone
7. c) Mandible
8. b) 26
9. c) Clavicle and scapula
10. d) Femur
11. c) Greater and lesser trochanters
12. b) The presence of a synovial cavity
13. c) Ball-and-socket joint
14. c) Stability and holding the humeral head in place

TRUE/FALSE ANSWERS:

1. False (The appendicular skeleton includes the limbs)
2. True
3. False (The endosteum lines the medullary cavity)
4. True
5. False (It is located in the occipital bone)
6. True
7. True
8. True
9. True
10. True