**Study guide for Ch 6 Skeletal Tissue**

Cartilages

Structure

Hyaline-Microscopic-Locations

Elastic – Microscopic-Location

Fibro cartilage- Microscopic-Location

Classification of the Bones

Axial and Appendicular

According to shape-Long, Short, Flat, and irregular-Examples

Clavicle is a flat bone. Patella is a sesamoid bone.

Functions of the bones: Protection, support, Movement

Important: formation of blood cells (Hematopoiesis), storage of fat, and secretion of hormones.

Osteocalcin.

Bone structure- Short bone

long bone. Figures. Parts of long bone and its significance.

Bone markings-Projections and Depressions Study the table in the book.

Bone Textures-Compact and Spongy bones. Location where they are found

Microscopic anatomy. Fig. (Important)

* + **Osteoblasts**
  + **Osteocytes**
  + **Osteoclasts**
* **Osteon** or **Haversian system**
* **Perforating (Volkmann's) canals**
* **Lamellae**

**Chemical composition of the bone**

Bone development.-

Intramembranous ossification See fig

Endochondral Ossification See the fig.

Postnatal bone growth

Remodeling and Repair-

Understand the simultaneous activity of both Osteoblasts and Osteoclasts.

Hormonal regulation of bone growth

Growth hormone

Thyroid hormone

Sex hormones

Bone remodeling- bone homeostasis

Use of calcium in blood

* + Nerve impulse transmission
  + Muscle contraction
  + Blood coagulation
  + Secretion by glands and nerve cells
  + Cell division

Hormonal control of blood calcium

Parathyroid hormone

Calcitonin

Bone Repair.

Different types of fractures

Treatment

Bone diseases and its management.

Osteoporosis