

Histology

- Give a short account on the steps of intra membranous ossification.
- Give a short account on the steps of endochondral ossification .
- Describe the zone of ossification.
- From where the mesenchymal buds arise and which area it invades.
- Give a short account on bone remodeling.
- How can osteoclasts increase the width of bones?

☒ By increase the bone marrow cavities

- In which method flat bones, long bones are ossified.
- In which zone the chondrocyte accumulate glycogen and lipids.
- **(NB) In Neurons** : 1- (rER – Ribosomes) Synthesis of proteins
2- (Golgi Packing Them as synaptic vesicles)
3- (NeuroFibrils Stained by Silver stain)
4- (There are lysosomes and mitochondria)
5- (There are Inclusions like (Lipids and Lipochromes)
6- (There is no Centrosome)
7- (Nucleus Rounded – Large – central – With EUchromatin)
- Give a Short account On Excitable Tissues and conductivity
- What is the perikaryon And what are its contents
- What is the place that Nissle's granules Disappear from
- Which organelle forms synaptic vesicles
- What's the Difference Between Centrifuge And Centripetal

☒ What is the type of Nerve cell according to Morphological classification

1. Spinal ganglion
2. Spiral ganglion
3. Sympathetic ganglion
4. Cerebral ganglion
5. Cerebellal ganglion

- Explain The two types Of Nerve Fibers in CNS and PNS
- What Are The Two Types of Sheathes Around The Axon Of Nerve cell

Answer: Myelin and Neurilemmal sheath

- Give A short account on Inter nodal segment
- What Is the difference between myelin Formation in CNS And PNS
- What is the appearance of myelin sheath with (H&E) And OSMIC acid
- What are The functions of myelin sheath
- What is the description and function of schwan cell
- ✓ NB(Schwann cell is considered one of modified supportive neuroglial cells)
- ✓ Schwann cells absent in CNS
- ✓ In UNmyelinated cells in PNS there are schwan myelin sheathes but In un myelinated cells in CNS they absent
- ✓ Adipocyte is seen close to nerve trunk
- Compare between (EPIneurium and ENDOneurim and perineurium)
- What is the only structure is seen by osmic stain in nerve fiber

☒ Answer(Myelin sheath

Biochemistry

- Mention 3 minerals in the matrix of bone and their percentage.
- Give a short account on the daily requirements of calcium and phosphorus.
- Describe the absorption of calcium and phosphorus.
- Mention the factors that inhibit and activated absorption of calcium.
- What is the range of CA/P ratio?
- ✓ From 1.2 to 2.1
- What is the active form of calcium?
- ✓ Ionized form (53%)
- What is the diffusible and non diffusible form?
- What are the functions of calcium?
- What is the abnormal level of calcium?

N.B. (osteomalacia decrease in minerals in bone.)

(osteoporosis decrease in minerals and EC matrix.)

- Mention the plasma level of phosphorous And calcium.
 - Give a short account on metabolism of phosphorous.
 - Which disease can be a land mark of kidney failure
 - ✓ Hyper phosphatemia
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Physiology

- Define The RMP
 - Mention The Normal values of RMP
 - Give a Short Account on the selective permeability
 - Describe The NA-K Pump And What Are its Importance
 - Define the Action potential
 - HOW Can w record the action potential
 - What is the firing level
 - What is Hyper polarization
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Anatomy

- Give a short account on the anterior and posterior folds of axilla.
- Enumerate the compartments of arm.
- Give a short account on the changes occur at the level of insertion of coracobrachialis?
- Enumerate 2 structure attached to the coracoids process of scapula.
- Mention 3 muscles have nerve supply from muscle cutaneous nerve.
- Mention the structure that separates the brachial artery from the median cubital vein.
- Mention the branches of brachial artery.
- Enumerate the boundries and contents of cubital fossa.
- Mention the muscle that Absent In 13% from people

- Mention 4 Muscles Have Origin from Medial Supra EpiCondyl
- Mention 4 Muscles Have The Nerve supply From Median Nerve
- Mention 3 Muscles Have The Nerve supply From Anterior Interouusus Nerve
- Mention The Muscle From The deep Flexors Has Double nerve supply
- Mention 2 Muscles That involve In Pronation
- Give A short account on The anterior and posterior Axillary FOLDS
- Compare between Radial and Ulnar Arteries
- Give a short Account On The Branches of radial Nerve
- Mention 2 Muscles share in the stabilization of shoulder Joint
- Answer (Biceps brachaii and Triceps)
- Mention 3 muscles have nerve supply from Radial nerve
- Mention 4 muscles have nerve supply from posterior interouusus Nerve
- Mention An extensor Muscle Has DouBle nerve supply
- **It`s very Important to revise Action And Nerve supply of all muscles**
- Give Ashort account on Axillary and median Nerves

Medicine
(ASM)