



RASHIDA IQBAL FINANCIAL AID **ORGANIZATION**

PHYSIOLOGY MUSCULOSKELETAL **SYSTEM 2 TERM GUIDELINES**

RIFAO
RAWALPINDI MEDICAL UNIVERSITY

Muscle Physiology

- Comparison of smooth and skeletal muscle contraction
- Latch mechanism
- Stress relaxation of smooth muscle
- Smooth muscle types
- Spike potentials vs. Slow waves
- Cause of spike potentials and slow waves
- Depolarization of multi-unit smooth muscle without action potentials
- Properties of cardiac muscle (to be done from Mushtaq)
- Intrinsic and extrinsic regulation of heart
 - Intrinsic is Frank Starling law
 - Extrinsic is parasympathetic and sympathetic stimulation of heart
- Ventricular action potential
- SA nodal action potential (written better in Sherwood)
- Funny channels
- Impulse transmission in heart
- AV Nodal delay (very important)
- Why Purkinje fibers cause rapid transmission?
- Ectopic pacemakers
- Why SA node is the dominant pacemaker of heart?
- Vagal tone (from Mushtaq)
 - Chronotropy
 - Inotropy
 - Dromotropic
 - Bathmotropic

ECG and Circulation

- If you have notes from the lecture Sir Ilyas gave then do them, they are very comprehensive and to the point, very easy to understand
- Know how to draw an ECG with properly labeled waves and intervals, it is asked very frequently
- Current of injury
- Cardiac arrhythmias
 - Sinus arrhythmia
 - AV block and its types
 - Stokes Adam – Ventricular escape syndrome
 - Premature contractions
 - Ventricular fibrillation
 - Atrial flutter vs. Atrial fibrillation

- Definition of cardiac output and venous return
- Factors affecting cardiac output and venous return
- Hypoeffective vs. hypereffective heart
- Mean circulatory filling pressure, its effect on venous return

Books

Guyton

Selected topics from Mushtaq or Sherwood

REMEMBER RIFAO TEAM IN YOUR PRAYERS

Regards,

Alishba Shezal Ali, Batch 46

Publications Representative RIFAO

