

SKU-Human Physiology-I

SKU-Human Physiology is the biological study of the functions of living organisms and their Parts. Here Human Physiology is covered in two parts. This part describes some of the biological systems with the help of various Images, Creative Animations and User interface Simulations. Learning theoretical topics with help of these interactive methods provide Ease and Quality in Learning. Every Unit ends up with Interesting FAQ's and Quizzes.

Scientech Knowledge Universe www.sku.bz

Disciplines of Bio Medical Engineering

Biomechanics

Study of static and fluid mechanics associated with physiological systems

$T = F \times D$

T - Torque
F - Force
D - Distance

Reduced speed 1:4

- Highly active muscles
- Medium active muscles
- less active muscles

Movement of Skeletal Muscles during running in different ratio

Topics covered in SKU-Human Physiology-I:

Cytology

Topics Covered: Cell structure, various Cell Organelles and their Functions. Tissue and their types structure and functions. Skeleto-Muscular System, Different types of Muscles and their Function.

Hematology

Topics Covered: Blood Composition, Properties, Functions, Coagulation and Blood groups. RBC, WBC and Platelet Counting with their normal values. Lymphatic system, Reticule Endothelial Systems & Defense Mechanism of the body.

Cardio-Vascular System

Topics Covered: Cardiac Cycle, Heart Sounds (PCG), Cardiac Outputs, Blood Flow, Blood Pressure, Arterial Pulse and Heart Rate, Electrocardiogram (ECG).

Respiratory System

Topics Covered: Mechanics of Respiration, Lung Volumes and Capacities, Transport of Gases and Control of Respiration.

Renal System

Topics Covered: Process involved in Urine Formation, Micturication, Composition of Urine, Principles of Haemodialysis and Temperature Regulation.

Print Shots of SKU-Human Physiology-I

Skeleto-Muscular System

Skeletal System + Muscular system = Skeleto-Muscular System

Bio Medical Engineering

Bio Medical Engineering is a connecting link between medical and engineering fields

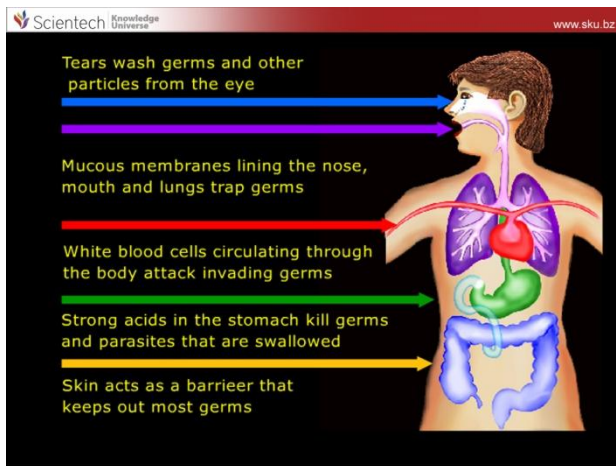
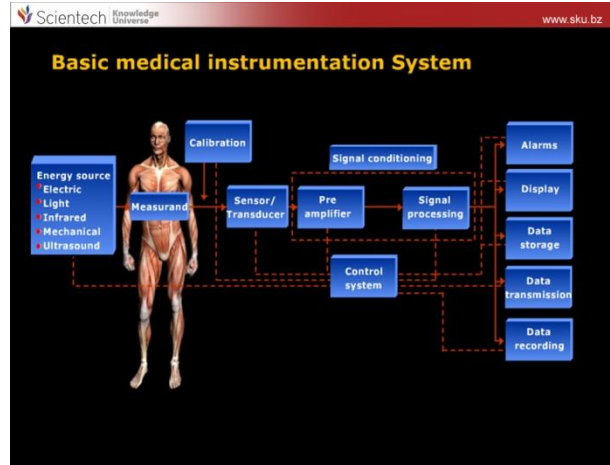
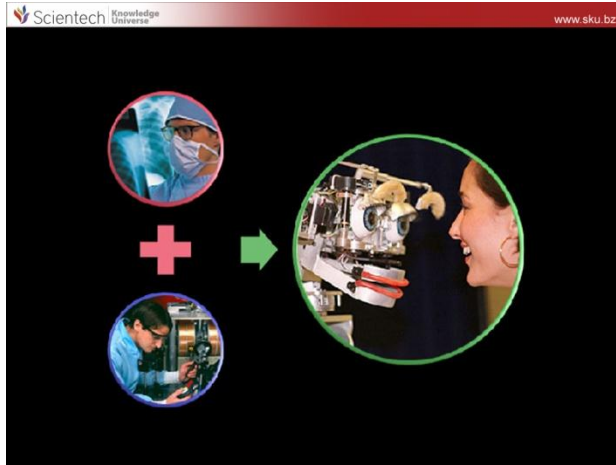
It is the application of engineering principles and techniques to the medical field

White Blood Cells

Red Blood Cells

Platelets

ST Segment : It is due to the depolarization wave which spreads upward from the apex



Nerve Tissue

- Nerve tissue constitutes the nervous system
- This tissue is made up of elongated cells called neurons or nerve cell