

Pak Army **Armed Force Nursing Service**



Important Academic Topics

Subjects Included:

1. Physics
2. Chemistry
3. Biology

4.English

Total Mcq's: 50

Passing % : 50%

These topics will cover 85–90% of your preparation.



For AFNS Preparation whatsapp us: 0336-7632708

Biology Important Topics

- Living and Non-Living
- Enzymes
- Cell Structure and Function
- Plant Physiology
- Animal Physiology
- Reproduction in Plants and animals
- Origin and evolution of life

- Human disorder
- Ecology and Ecosystem
- Meiosis
- Non-Disjunction
- Level of Structure Protein
- Emergence and implication of cell theory
- All Organelles
- Structure of Bacteria
- Digestion in Man and Functions
- Human Skeleton
- Deformities of skeleton
- Locomotion in Protoctista and invertebrates
- Nervous Disorders
- Thyroid Gland
- Gonads (Ovary , Testes)
- Male and Female Reproductive System

-
- Composition of Chromosomes
 - Mitosis
 - Cell Structure and Function
 - Nutrition + Growth and Respiration of Bacteria
 - Characteristics of Bacteria
 - Classification of Algae
 - Kingdom Fungi
 - Composition of Chromosomes
 - Biological Molecules (Carbs, Proteins, Fats, Nucleic Acids)
 - Immunity / Immune System
 - Homeostasis (Kidney, Osmoregulation)
 - Gas Exchange / Respiration (Detailed)
 - Coordination & Control – Pituitary, Hypothalamus etc.

- Transport system in Human – Heart, Blood, Vessels
- Inheritance (Basic Mendelian Genetics)

Chemistry Important Topics

- The Atomic structure
- Chemical Bonding
- Chemical Reactions
- Mixture , Solution and Solubility
- Gas Laws
- Elements and compounds
- The Periodic Table
- Oxidation State
- Oxides
- Electronic configuration

-
- Nitrogen and its compound
 - Freon and Teflon
 - Oxidation state of Transition Elements
 - Nomenclature of Alkane , Alkene and Alkyne and their preparation method
 - Structure of benzene
 - Orientation in electrophilic substitution reaction
 - Nomenclature of alkyl halide and preparation method
 - Reaction of Grignard Reagent
 - Geometry of Complex ion
 - Hybridization of orbitals and shape of molecule
 - Isomerism
 - Alcohol , Phenol and ester
 - Aldehydes and ketones
 - Acetic ACid and amino acid

- Reaction Kinetics
- Environmental Chemistry
- Acids, Bases & pH
- Electrolysis / Electrochemistry (detail)
- Thermochemistry
- Chemical Equilibrium

Physics Important Topics

- Physical Quantities (units + Dimension)
- Torque
- Projectile motion
- Non conventional energy sources
- Angular Displacement
- Angular velocity

- Relation b/t angular and linear velocity
- Simple pendulum
- Speed of sound in air
- Least distance and distinct vision
- CRO
- Faraday's law
- Lenz law
- Real and apparent weight
- Bernoulli's equation+Application
- Ohm's Law / Resistance / Series & Parallel circuits

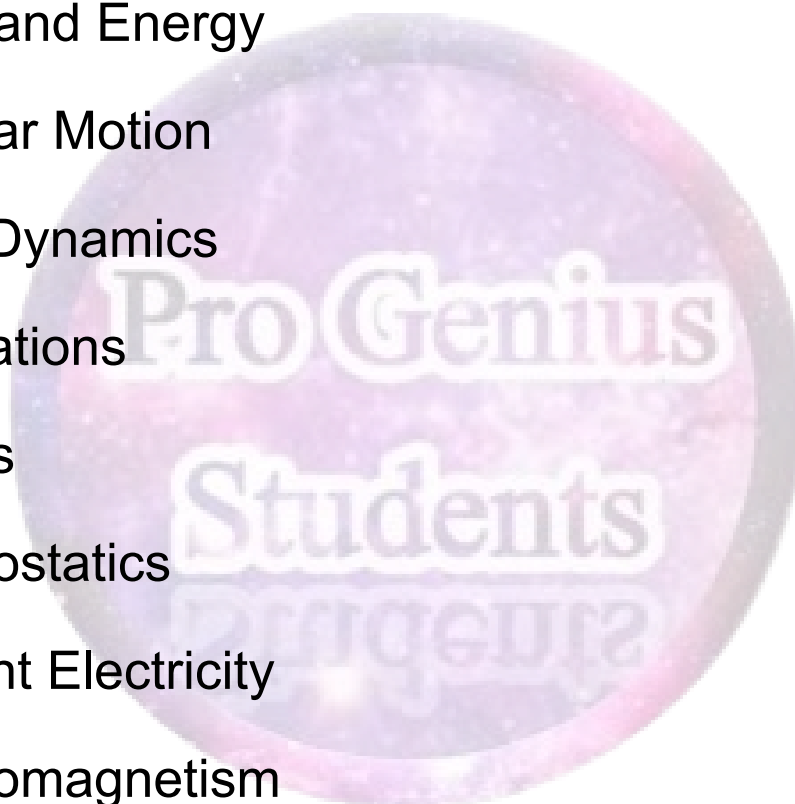
Wave Properties – Reflection, Refraction,

- Photoelectric Effect & X-rays
- Radioactivity – Alpha, Beta, Gamma Rays
- Nuclear Energy & Uses in Medicine (AFNS relevant)

- Motion Graphs (Distance-Time, Velocity-Time)
- Basics of Electronics (Logic gates, Diodes)

Important Chapters for Numericals

- Vectors and Equilibrium
- Motion and Force
- Work and Energy
- Circular Motion
- Fluid Dynamics
- Oscillations
- Waves
- Electrostatics
- Current Electricity
- Electromagnetism



- Electromagnetic Induction
- Alternating Current

English Important Topics

- Parts of speech
- Synonyms
- Antonyms
- Active and Passive voice
- Direct indirect
- Punctuations
- Correct spelling
- Idioms and phrases
- Correct uses of tenses

