

Paper 1: Fitness and Body Systems

1. Applied Anatomy & Physiology

- Skeletal system
 - Bones & functions
 - Types of joints
 - Movements at joints
- Muscular system
 - Major muscles
 - Agonist/antagonist pairs
 - Muscle fibre types
- Cardiovascular system
 - Heart structure
 - Blood vessels
 - Blood redistribution
- Respiratory system
 - Lungs & gas exchange
 - Breathing rates
 - Aerobic vs anaerobic exercise
- Effects of exercise
 - Short-term effects
 - Long-term effects

2. Movement Analysis

- Lever systems
- Mechanical advantage
- Planes and axes of movement

3. Physical Training

- Components of fitness
- Fitness testing
- Principles of training
- Training methods
- Long-term effects of training
- Injury prevention