

INDEX

1. MEASURING PHYSICAL QUANTITIES

- MES 1.1 Measuring length by means of measuring tape and caliper
- MES 1.2 Volume of solid and liquid materials
- MES 1.2.1 Volume of gases
- MES 1.3 Time measurement
- MES 1.4 Mass and units of mass
- MES 1.5 Density of solid bodies
- MES 1.6 Density of liquids
- MES 1.6.1 Determination of densities of liquids (U-tube-method)

2. FORCES

- MES 2.1 Force of weight
- MES 2.2 Force measuring
- MES 2.3 Elongation of a coil spring – **Hooke's Law**
- MES 2.4 Direction of force and point of impact
- MES 2.5 Composition of forces – parallelogram of forces
- MES 2.5.1 Composition of three forces
- MES 2.6 Inclined plane
- MES 2.7 Decomposition of forces on an inclined plane
- MES 2.8 Frictional force
- MES 2.8.1 Determination of the coefficient of friction

3. SIMPLE MACHINES

- MES 3.1 Two-sided lever
- MES 3.2 Model of a beam-balance
- MES 3.3 One-sided lever
- MES 3.4 Simple fixed pulley
- MES 3.5 Pulley
- MES 3.6 Single block and tackle
- MES 3.7 Compound block and tackle
- MES 3.8 Mechanical work
- MES 3.9 Work on an inclined plane
- MES 3.10 Stability
- MES 3.11 Tipping work

4. HYDROSTATICS

- MES 4.1 Communicating vessel
- MES 4.2 Effects of air pressure
- MES 4.3 Buoyancy
- MES 4.4 **Archimedes' Principle**
- MES 4.5 Load capacity of a ship
- MES 4.6 Model of a hydrometer
- MES 4.7 Hydrostatic pressure
- MES 4.8 Capillarity