PHYS 202 Test 2 Preparation

Do you know the terminology?

|  |  |  |  |
| --- | --- | --- | --- |
| Quantity | Symbol | Units | Vector or Scalar |
| Acceleration | a | m/s2 | vector |
| Mass | m | kg | scalar |
| Electric Potential Energy | U | J |  |
| Electric Force | F | N |  |
| Electric Dipole | p | C·m | vector |
| Electric Charge | q | C |  |
| Electric Potential | V | V |  |
| Permittivity | ε | C2 / (Nm2) |  |
| Electric Flux | Φ | Nm2/C |  |
| Net Charge | Q | C |  |
| Surface Charge Density | σ | C/m2 |  |
| Electric Field | E | N/C |  |
| Volume Charge Density | ρ | C/m3 |  |
| Potential Difference | Vab | V |  |
| Linear Charge Density | λ | C/m |  |
| Capacitance | C | F (not temp) |  |
| Dielectric Constant | K | NULL |  |
| Energy Density | *u* | N/m2 | J/m3 |  |
| Resistivity | ρ | Ω·m |  |
| Resistance | R | Ω |  |
| Temperature Coefficient of Resistivity | α | C-1 |  |
| Equivalent Resistance | Req | Ω |  |
| Time Constant | τ | s |  |
| Current | I | A |  |
| Rate at which energy is dissipated | P | J/s - W |  |
| Voltage | V | V |  |
| Magnetic Field | B | T | Vector |
| Magnetic Force | F | N |  |
| Velocity | v | m/s |  |
| EMF | ξ |  |  |

Math/Geometry:

Circumference of a circle =

Area of a circle =

Area of a sphere =

Volume of a sphere =

Circumference of a square =

Area of a square =

Area of a cube =

Volume of a cube =

PHYS 201:

Newton’s 2nd Law: F =

Kinetic Energy: K =