Name : Khairul Fikri

Registration No : D400154001

Class : International

1. **Tenol / Timah**

t = 4,6 cm

r = 0.5 mm

R = 18 ohm

**Area of timah** = 2πr(r+t)

= 2 x 3.14 x 0.5 x 10-3 (0.5 x 10-3 + 4.6 x 10-2)

= 0.00144597 m2

Resistivitiy = R.A / l

= 18. 0.00144597 / 0.046

= 0.57 Ωm

**Iron Ruler**

p = 32 cm

l = 2.6 cm

t = 0.5 mm

R = 68 ohm

**Area of Iron Ruler** = p x l x t

= 32 x 10-2 x 2.6 x 10-2 x 0.5 x 10-3

= 4.16 x 10-4 m2

Resistivitiy = R.A / l

= 68 x 4.16 x 10-4 / 32 x 10-2

= 0.0884 Ωm

**Koin tembaga/copper coin**

t = 2 mm

r = 0.5 mm

R = 3 ohm

R = 1,2cm

**Area of copper coin** = 2πr(r+t)

= 2 x 3.14 x 12x 10-3 (12x 10-3 + 2 x 10-2)

=24.3 x 3.14x 10-3(0.014)

= 0.001 m2

Resistivitiy = R.A / l

= 3 x 10-3 / 2 x 10-3

= 1.5 Ωm

1. Diode type which can be used in 10 A and reversed voltage in 1000 V is **10A10**

