WwM: electrochemie version

1) According to ohm law; resistance is defined as the ratio of

1. Voltage to current
2. Voltage to Power
3. Power to current
4. Current to voltage

2) In which of these fields is EIS NOT commonly used

a) Corrosion Studies

b) Fuel Cells

c) Batteries

d) Combustion engines

3) EIS is commonly measured by applying a:

a) AC potential, measuring AC current

b) DC potential, measuring DC current

c) DC current, measuring AC potential

d) AC current, measuring DC potential

4) The impedance of which circuit element has no imaginary part

a) Resistor

b) Capacitor

c) Inductance

d) Warburg element

5) How are the axis in a Nyquist plot labeled [x-axis/y-axis]

a) [Re (Z)/-Im(Z)]

b) [-Re(Z)/Im(Z)]

c) [Re(Z)/Intensity ]

d) [-Re(Z)/-Im(Z)]

6) The high frequency resistance in a Nyquist plot for a Randles circuit is equal to the impedance of what element

a) Resistor

b) Capacitor

c) Inductance

d) None of the above