The open circuit output voltage
from a function generator is 10 V.
A 50 Ω resistor is connected across the output.
and the output voltage drops to half its open circuit value.
The output impedance is

1. 5 Ω
2. 10 Ω
3. 50 Ω
4. 500 Ω

19 Thévenin's theorem

The indicated output impedance of a function generator is 500 Ω
When a 1000 Ω resistor is connected across the output terminals, the output voltage decreases to

1. Half of the open circuit value

2. Two thirds of the open circuit value

3. One third of the open circuit value

4. Remains unchanged

19 Thévenin's theorem

The output impedance of a particular circuit is large (greater than 100 kΩ)
A 100 Ω resistor is connected across the output
The output voltage will now be

1. Zero

2. Reduced by a factor of 1000

3. reduced by a factor of 100

4. Unchanged.

19 Thévenin's theorem

The power transferred to a load resistor is a maximum when

1. The load resistance equals the output impedance

2. The load resistance is less than the output impedance

3. The load resistance is greater than the output impedance