



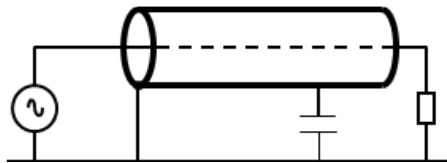
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QUESTION	a	b	c
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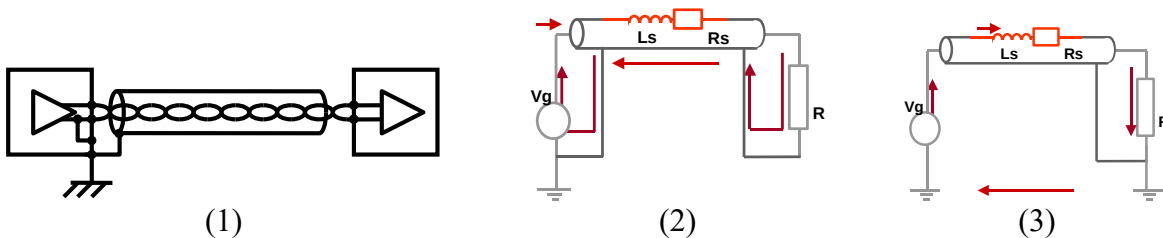
*All the items have been prepared thinking of the field of Industrial Electronic Equipment.
Correct answer: +1 Wrong answer: -1/3 No answer: 0*

1.- The connexion shown in the following figure is used to:



- a) Protect the connexion from external magnetic field noise at low frequency
- b) Attenuates the generation of magnetic field noise at low frequency
- c) Protect the connexion from external magnetic field noise at high frequency

2.- Which is the most recommendable connection?

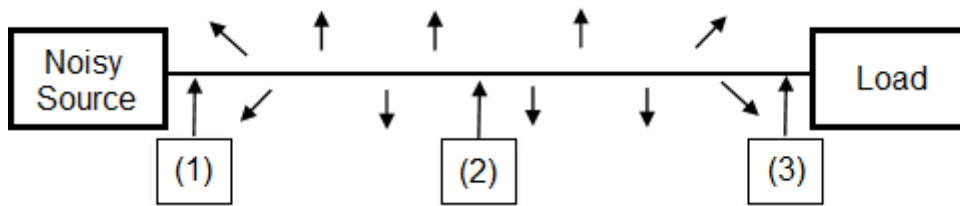


- a) N° 1 because it protects from electric fields
- b) N° 2 because it protects from electric and magnetic fields
- c) N° 3 because it protects from electric and magnetic fields

3.- To reduce common mode currents in a transformer

- a) the windings should be placed as close as possible from each other.
- b) the windings should be placed as far as possible from each other.
- c) interleaving should be used in the windings.

4.- To reduce the radiated noise in the cable a ferrite filter should be placed



- a) close to the source (1)
- b) in the middle of the cable (2)
- c) close to the load (3)

5.-Common mode currents

- a) flow in opposite direction in the power cables.
- b) flow in the same direction in the power cables.
- c) normally operate at low frequency.

6.- To reduce common impedance

- a) the distance between cables should be reduced.
- b) the thickness of conductors should be reduced.
- c) a ground plane should be used.

7.- Capacitive coupling

- a) increases with the surface.
- b) increases when distance increases.
- c) decrease when frequency increases.

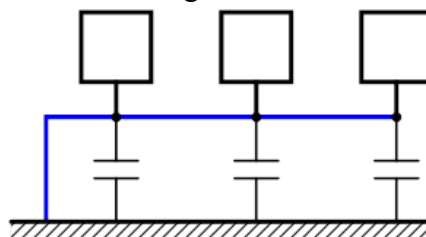
8.- Magnetic coupling

- a) increases with the surface.
- b) increases when distance increases.
- c) decreases when frequency increases.

9.- Twisted cables

- a) reduce capacitive coupling.
- b) reduce magnetic coupling.
- c) increase the global transfer impedance.

10.- The grounding connection shown in the figure



- a) allows multipoint grounding at high frequency.
- b) allows multipoint grounding at low frequency.
- c) allows multipoint grounding at high and low frequency.