## The Physics of Energy, Explained Simply & The Physics of Energy For Beginners

## **Magnetic Energy Questions**

Equation:  $U = \frac{1}{2} LI^2$ 

U = Magnetic energy stored (J),

L = Inductance (H), I = Current (A)

- 1. A solenoid has an inductance of 2 H and carries a current of 3 A. Calculate the magnetic energy stored.
- 2. A coil with an inductance of 0.5 H has a current of 4 A flowing through it. What is the stored magnetic energy?
- 3. A solenoid with an inductance of 1.5 H carries a current of 2 A. Find the energy stored.
- 4. A 3 H inductor has a current of 1.5 A. Calculate the magnetic energy stored.
- 5. A coil has an inductance of 0.8 H and a current of 5 A. What is the magnetic energy stored?

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Equation:  $U = \frac{1}{2} LI^2$ 

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- 6. A solenoid has an inductance of 1.2 H and a current of 2.5 A. Find the magnetic energy stored.
- 7. A coil with 0.3 H inductance carries 3 A of current. What is the energy stored?
- 8. A solenoid has an inductance of 2.5 H and carries a current of 1.2 A. Calculate the magnetic energy stored.
- 9. A 1 H coil carries a current of 4.5 A. What is the energy stored in the magnetic field?
- 10. A solenoid with 0.9 H inductance has a current of 3.5 A. Find the magnetic energy stored.

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