NORTHWEST TERRITORIES PHYSICS 12 (MPH--12) · UNIT D · 10 QUESTIONS

# Circuits and Electromagnetism — Practice Test

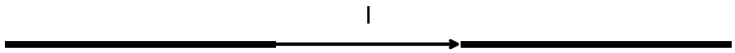
This practice test was made by AI and there may be mistakes. If a question or answer looks wrong, use the Flag a mistake button to let Brett know so he can fix it.

**1** **A current of 2 A flows through a 10 ohm resistor. The power dissipated, in watts, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

**2** **The diagram shows a straight wire carrying current to the right. The magnetic field direction just above the wire is**




A. into the page

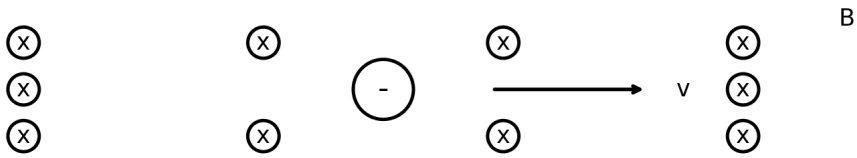
B. out of the page

C. to the left

D. to the right

Understand It with Pulse | Flag a mistake

**3** **The diagram shows a negative particle moving to the right in a magnetic field pointing into the page. The force on the particle is**




- **A** into the page
- **B** out of the page
- **C** upward
- **D** downward

Understand It with Pulse | Flag a mistake

**4** **When a magnet moves toward a solenoid, the changing magnetic flux in the solenoid**

- **A** stops all current
- **B** has no effect
- **C** reverses gravity
- **D** induces a current

Understand It with Pulse | Flag a mistake

5 **A step up transformer increases the**

A voltage

B current only

C resistance

D frequency of the wire

Understand It with Pulse | Flag a mistake

6 **Outside a bar magnet, the magnetic field lines run from**

A south to north

B east to west

C the centre outward

D north to south

Understand It with Pulse | Flag a mistake

7 **Two identical bulbs in parallel across the same supply are each compared with one bulb alone**

A dimmer

B brighter

C unlit

D equally bright

Understand It with Pulse | Flag a mistake

8 **A voltage of 10 V is applied across a 20 ohm resistor. The power dissipated, in watts, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

9 **In a parallel circuit, the total current from the supply equals**

A the sum of the branch currents

B the smallest branch current

C zero

D the largest branch current

Understand It with Pulse | Flag a mistake

10 **The magnetic field inside a long solenoid is strongest**

A near the ends

B at the centre

C outside the coil

D only when current stops

Understand It with Pulse | Flag a mistake

# ANSWER KEY

1. 40
2. B
3. D
4. D
5. A
6. D
7. D
8. 5
9. A
10. B

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