

1. An alternating current or voltage

A. fluctuates off and on

B. varies in magnitude alone

C. changes its direction again and again

D. changes its magnitude harmonically and reverses its direction of flow after regularly recurring intervals.

**Answer:** Option C

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2. A changing magnetic flux produces around itself an induced

A. Magnetic field

B. Electric field

C. Electromagnetic force

D. Artificial gravitational field

**Answer:** Option C

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3. Maxwell derived mathematically that the velocity of the electromagnetic waves is

A.  $1/c$

**Answer:** Option B

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4. Electromagnetic waves travel in free space with the speed of

A.  $\gamma$ -rays

B. Positive rays

C. Cathode rays

D. More than sound waves

**Answer:** Option A

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5. The direction of propagation of an electromagnetic waves is

A. Perpendicular to electric field

B. Perpendicular to both electric and magnetic field

C. Perpendicular to magnetic field

D. Parallel to electric and magnetic field

**Answer:** Option B

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6. An electromagnetic wave consists of

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|--|---|
| <u>A.</u> Electric and magnetic fields moving parallel to each other | <u>B.</u> Magnetic field moving with velocity of light in space           |
| <u>C.</u> Electric field moving with velocity of light               | <u>D.</u> Electric and magnetic fields moving perpendicular to each other |

**Answer:** Option D

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7. Electromagnetic waves transport

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|------------------|--------------------|
| <u>A.</u> Energy | <u>B.</u> Momentum |
| <u>C.</u> Mass   | <u>D.</u> Heat     |

**Answer:** Option A

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8. Waves emitted from the antenna are

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|-----------------------|---------------------------------|
| <u>A.</u> Sound waves | <u>B.</u> Electromagnetic waves |
| <u>C.</u> Radio waves | <u>D.</u> Modulated waves       |

**Answer:** Option B

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9. Electromagnetic waves emitted from antenna are

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|----------------------|-------------------------|
| <u>A.</u> Stationary | <u>B.</u> Longitudinal  |
| <u>C.</u> Transverse | <u>D.</u> All the above |

**Answer:** Option C

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10. Natural or resonant frequency of an LC circuit is

**Answer:** Option D