

# PHYSICS Exam Paper

## Subjective Questions

1. Explain Newton's laws of motion and provide real-life examples for each.

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Answer:

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2. Describe the process of nuclear fission and how it differs from nuclear fusion.

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Answer:

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3. What is the concept of work and energy in physics? Explain with examples.

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Answer:

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4. Explain the law of conservation of momentum with an example.

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Answer:

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5. Describe the structure and properties of an atom according to the Bohr model.

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Answer:

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6. What is the principle of superposition of waves?

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Answer:

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7. Explain the phenomenon of diffraction of light with an example.

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Answer:

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8. Discuss the concept of entropy and its significance in thermodynamics.

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Answer:

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9. How does the Doppler effect apply to sound and light waves?

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Answer:

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10. Describe the working of an electric motor and explain the factors affecting its efficiency.

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Answer:

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11. who was einstien?

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Answer:

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### MCQ Questions

12. What is the speed of light?

a) 300,000 km/s

b) 400,000 km/s

c) 500,000 km/s

d) 600,000 km/s

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13. What is the force on an object with mass 10kg and acceleration  $5\text{m/s}^2$ ?

a) 50 N

b) 100 N

c) 150 N

d) 200 N

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14. What is the formula for kinetic energy?

a)  $\text{KE} = mv^2$

b)  $\text{KE} = 1/2 mv^2$

c)  $\text{KE} = mv$

d)  $\text{KE} = m^2v^2$

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15. What is the unit of electric current?

a) Volt

b) Ampere

c) Ohm

d) Coulomb

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16. What is the value of gravitational acceleration on Earth?

a)  $9.8 \text{ m/s}^2$

b)  $10 \text{ m/s}^2$

c)  $9.5 \text{ m/s}^2$

d)  $9.2 \text{ m/s}^2$

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