PHYSICS Exam Paper

Subjective Questions

| 1. Explain Newton's laws of motion and provide real-life examples for each. | | |
|--|--|--|
| Answer: | | |
| | | |
| | | |
| 2. Describe the process of nuclear fission and how it differs from nuclear fusion. | | |
| Answer: | | |
| | | |
| | | |
| 3. What is the concept of work and energy in physics? Explain with examples. | | |
| Answer: | | |
| | | |
| | | |
| 4. Explain the law of concernation of momentum with an example | | |
| 4. Explain the law of conservation of momentum with an example. | | |
| Answer: | | |
| | | |
| | | |
| | | |

| 5. Describe the structure and properties of an atom according to the Bohr model. | | |
|--|--|--|
| Answer: | | |
| | | |
| | | |
| | | |
| 6. What is the principle of superposition of waves? | | |
| Answer: | | |
| | | |
| | | |
| | | |
| 7. Explain the phenomenon of diffraction of light with an example. | | |
| Answer: | | |
| | | |
| | | |
| | | |
| 8. Discuss the concept of entropy and its significance in thermodynamics. | | |
| Answer: | | |
| | | |
| | | |
| | | |
| 9. How does the Doppler effect apply to sound and light waves? | | |
| Answer: | | |
| | | |
| | | |
| | | |

| 10. Describe the working of an electric motor and explain the factors affecting its efficiency. | | |
|---|----------------------------|--|
| Answer: | | |
| | | |
| | | |
| | | |
| 11. who was einstien? | | |
| Answer: | | |
| | | |
| | | |
| | | |
| MCQ Questions | | |
| 12. What is the unit of force? | | |
| a) Kilogram | b) Meter | |
| c) Newton | d) Joule | |
| | | |
| 13. Who is known as the father of modern p | hysics? | |
| a) Isaac Newton | b) Albert Einstein | |
| c) Nikola Tesla | d) Galileo Galilei | |
| | | |
| 14. What is the speed of light? | | |
| a) 3 x 10^8 m/s | b) 1 x 10^8 m/s | |
| c) 5 x 10 ⁸ m/s | d) 2.99 x 10^8 m/s | |
| | | |
| 15. What is the formula for kinetic energy? | | |
| a) $KE = mv^2$ | b) $KE = 1/2 \text{ mv}^2$ | |
| c) KE = $1/2 \text{ m}^2$ | d) $KE = mv$ | |

| a) Newton's 1st Law | b) Newton's 2nd Law |
|---------------------|---------------------|
| c) Newton's 3rd Law | d) Law of Inertia |
| | |
| | |
| | |

16. Which law states that for every action, there is an equal and opposite reaction?