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 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 speed of light?

a) 300,000 km/s
b) 400,000 km/s
c) 500,000 km/s
d) 600,000 km/s

13. What is the force on an object with mass 10kg and acceleration 5m/s²?

a) 50 N
b) 100 N
c) 150 N
d) 200 N

14. What is the formula for kinetic energy?

a) $KE = mv^2$
b) $KE = 1/2\ mv^2$
c) $KE = mv$
d) $KE = m^2v^2$

15. What is the unit of electric current?

a) Volt
b) Ampere
c) Ohm
d) Coulomb

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

a) 9.8 m/s²

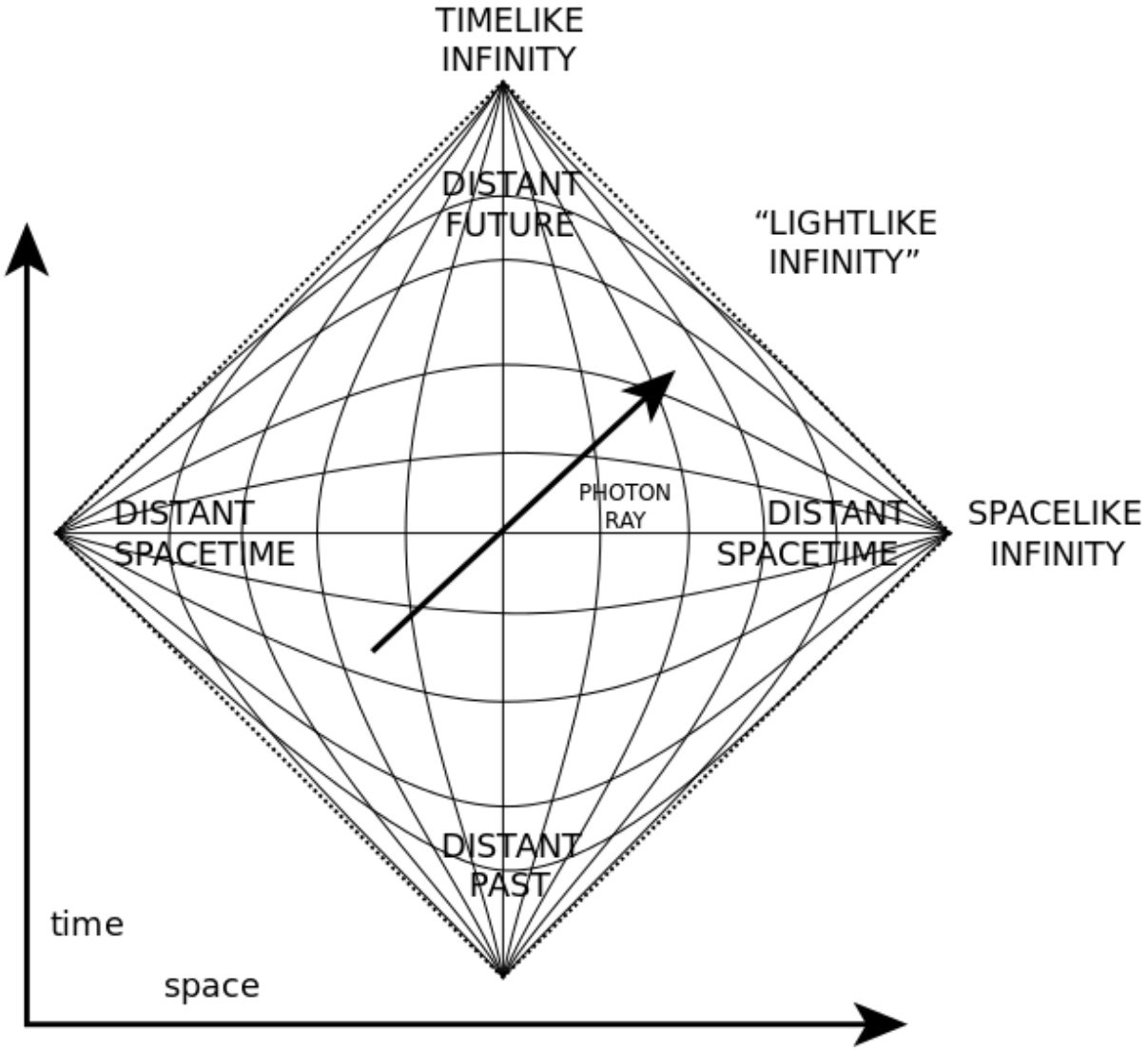
b) 10 m/s²

c) 9.5 m/s²

d) 9.2 m/s²

Diagram Questions

17. Draw and label a free body diagram of an object on an inclined plane.



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18. Illustrate the electric field lines around a positive and negative charge.