

PHYSICS SSC-I 2009

Time allowed: 2:40 Hours

Total Marks Sections B and C: 53

NOTE: Sections "B" and "C" comprise pages 1–2 and questions therein are to be answered on the separately provided answer book. Answer any eleven parts from Section "B" and attempt any two questions from Section "C". Use supplementary answer sheet i.e. Sheet-B if required. Write your answers neatly and legibly.

SECTION - B (Marks 33)

Q. 2 Attempt any ELEVEN parts. The answer to each part should not exceed 3 to 4 lines. (11 x 3 = 33)

- (i) Write any three methods to reduce friction.
- (iii) Explain the graph:
 - a. Line O.4
 - b. Point #
 - e. Point B



- (iii) A player throws a cricket ball with a velocity of 40 m x⁻¹ at an angle of 60° with the ground. Find the horizontal and vertical components of the velocity of the ball.
- (iv) Why is the outer bank of the road kept slightly higher than the inner bank?
- (v) Is there any difference between the values of 'g' at the equator and at the poles? Explain.
- (vi) An electric motor lifts a weight of 2N up to a height of 5m in 4 seconds. Find the power of the motor.
- (vii) What are "Geostationary Satellites"?
- (viii) According to the given figure, a piece of ice has been lifted by applying an effort of 1.5 N. If the length of the tongs is 10 cm, then find out the weight of the piece of ice?



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Table of Contents O Level Physics Practical Past Papers

- 1. Understanding the eBook O Level Physics Practical Past Papers
 - The Rise of Digital Reading O Level Physics Practical Past Papers
 - $\circ\,$ Advantages of eBooks Over Traditional Books
- 2. Identifying O Level Physics Practical Past Papers
 - Exploring Different Genres
 - Considering Fiction vs. Non-Fiction
 - Determining Your Reading Goals
- 3. Choosing the Right eBook Platform
 - Popular eBook Platforms
 - $\circ\,$ Features to Look for in an O Level Physics Practical Past Papers
 - User-Friendly Interface
- 4. Exploring eBook Recommendations from O Level Physics Practical Past Papers
 - Personalized Recommendations
 - o O Level Physics Practical Past Papers User Reviews and Ratings
 - $\circ\,$ O Level Physics Practical Past Papers and Bestseller Lists
- 5. Accessing O Level Physics Practical Past Papers Free and Paid eBooks
 - O Level Physics Practical Past Papers Public Domain eBooks
 - O Level Physics Practical Past Papers eBook Subscription Services

- O Level Physics Practical Past Papers Budget-Friendly Options
- 6. Navigating O Level Physics Practical Past Papers eBook Formats
 - ∘ ePub, PDF, MOBI, and More
 - O Level Physics Practical Past Papers Compatibility with Devices
 - O Level Physics Practical Past Papers Enhanced eBook Features
- 7. Enhancing Your Reading Experience
 - Adjustable Fonts and Text Sizes of O Level Physics Practical Past Papers
 - Highlighting and Note-Taking O Level Physics Practical Past Papers
 - Interactive Elements O Level Physics Practical Past Papers
- 8. Staying Engaged with O Level Physics Practical Past Papers
 - Joining Online Reading Communities
 - Participating in Virtual Book Clubs
 - Following Authors and Publishers O Level Physics Practical Past Papers
- 9. Balancing eBooks and Physical Books O Level Physics Practical Past Papers
 - Benefits of a Digital Library
 - Creating a Diverse Reading Collection O Level Physics Practical Past Papers
- 10. Overcoming Reading Challenges
 - Dealing with Digital Eye Strain
 - Minimizing Distractions
 - Managing Screen Time
- 11. Cultivating a Reading Routine O Level Physics Practical Past Papers
 - Setting Reading Goals O Level Physics Practical Past Papers
 - Carving Out Dedicated Reading Time
- 12. Sourcing Reliable Information of O Level Physics Practical Past Papers
 - Fact-Checking eBook Content of O Level Physics Practical Past Papers
 - Distinguishing Credible Sources
- 13. Promoting Lifelong Learning
 - Utilizing eBooks for Skill Development
 - Exploring Educational eBooks
- 14. Embracing eBook Trends

- Integration of Multimedia Elements
- Interactive and Gamified eBooks

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