

NEEV ACADEMY

Class 12 Physics: Ultimate Master Workbook

Complete Database: 2009–2024 PYQs + 2025–26 Model Papers

1. Electric Charges & Fields

22 Qs

1. What is the electric flux through a closed surface enclosing a charged particle?
1M Model 2026 (MQP1) New Mastered
2. If a body contains n_1 protons and n_2 electrons, what is the net charge?
1M Model 2026 (MQP2) New Mastered
3. What is the nature of force between unlike and like charges respectively?
1M Model 2026 (MQP3) Basic Mastered
4. Sketch electric field lines for: (a) positive point charge, (b) electric dipole.
2M Model 2026 (MQP2) High Mastered
5. State Coulomb's Law.
1M PYQ 2014, 2015, 2017, 2019 V. High Mastered
6. Define S.I. unit of charge.
1M PYQ 2015 Medium Mastered
7. What is the smallest electric charge carried by a body?
1M PYQ 2011 Low Mastered
8. Write the SI unit of electric flux.
1M PYQ 2020 Medium Mastered
9. Define electric field at a point. What is meant by 'source charge'?
2M Model 2026 (MQP1) New Mastered
10. The electrostatic potential energy of a system of two like charges is positive. Explain.
2M Model 2026 (MQP1) New Mastered
11. State Coulomb's law in vector form and explain terms.
2M Model 2026 (MQP2), PYQ 2015 High Mastered
12. State and explain Gauss's law in electrostatics.
2M Model 2026 (MQP2), PYQ 2010, 2011 V. High Mastered
13. Mention three important results regarding electrostatics of conductors.
3M Model 2026 (MQP2) Medium Mastered
14. Define linear charge density. Write expression for electric field due to infinite line of charge.
3M Model 2026 (MQP3) High Mastered
15. Mention three properties of electric field lines.
3M PYQ 2016, 2024 High Mastered
16. Using Gauss's law, derive electric field at a point OUTSIDE and ON SURFACE of a charged spherical shell.
5M Model 2026 (MQP2), PYQ 2023, 2024 V. High Mastered
17. Derive an expression for torque acting on an electric dipole in a uniform electric field.
5M Model 2026 (MQP1) Medium Mastered
18. Derive electric field due to a dipole on the AXIAL line.
5M Model 2026 (MQP3), PYQ 2016 High Mastered