

CBSE Class 12 Physics 2025 Compartment Question Paper

Time Allowed :3 Hour	Maximum Marks :70	Total questions :33
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General Instructions

Read the following instructions very carefully and strictly follow them:

1. This question paper contains 33 questions. All questions are compulsory.
2. This question paper is divided into five sections Sections A, B, C, D and E.
3. In Section A Questions no. 1 to 16 are Multiple Choice type questions. Each question carries 1 mark.
4. In Section B Questions no. 17 to 21 are Very Short Answer type questions. Each question carries 2 marks.
5. In Section C Questions no. 22 to 28 are Short Answer type questions. Each question carries 3 marks.
6. In Section D Questions no. 29 and 30 are case study based questions. Each question carries 4 marks.
7. In Section E Questions no. 31 to 33 are Long Answer type questions. Each question carries 5 marks.
8. There is no overall choice given in the question paper. However, an internal choice has been provided in few questions in all the Sections except Section A.
9. Kindly note that there is a separate question paper for Visually Impaired candidates.

1. An electric dipole consists of charges $\pm 4\mu C$ separated by a distance of 6 cm . Calculate the electric field at a point on the axial line at a distance 20 cm from its center.

2. A parallel plate capacitor is charged to potential $V = 300\text{ V}$ and then disconnected from the battery. If the separation between the plates is doubled, what will be the new potential difference across the plates?

3. A convex lens of focal length $f = 15\text{ cm}$ forms a real image of a 6 cm tall object placed at 30 cm . Find the position, nature, and height of the image.

4. Find the magnetic field at a point 5 cm away from a long straight wire carrying current $I = 20\text{ A}$.

5. The half-life of a radioactive element is 10 minutes . Find the time in which its activity reduces to $1/16$ of the original.
