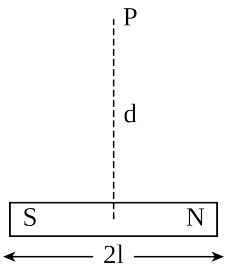
PYQSide PYQSide.com — free PYQs with solutions Powered by PrepBlink Your Potential Unlocked

JEE MAIN MAGNETISM AND MATTER — BAR MAGNET AS AN EQUIVALENT SOLENOID, MAGNETIC FIELD LINES — PYQS

Max. Marks: 8 **Questions:** 2

Section A (MCQ) — 1 question

Q.1



A bar magnet has total length 2l = 20 units and the field point P is at a distance d = 10 units from the centre of the magnet. If the relative uncertainty of length measurement is 1%, then uncertainty of the magnetic field at point P is :

[JEE Main 2025 (Online) 28th January Evening Shift]

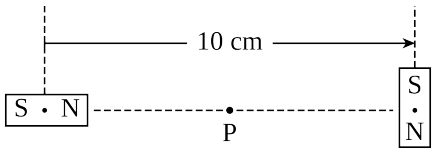
(1) 10% (2) 5% (3) 3% (4) 4%

Scan or tap for the full solution

Section B (Numerical) — 1 question

Q.2 Two identical small bar magnets each of dipole moment $3\sqrt{5}$ J/T are placed at a center to center separation of 10 cm, with their axes perpendicular to each other as shown in figure. The value of magnetic field at the point P midway between the magnets is $\alpha \times 10^{-3}$ T. The value of α is _____.
($\mu_0 = 4\pi \times 10^{-7}$ Tm/A)

[JEE Main 2026 (Online) 4th April Evening Shift]



Scan or tap for the full solution

ANSWER KEY

Section A (MCQ) — 1 question

Ques.	1						
Ans.	3, 4						

Section B (Numerical) — 1 question

Ques.	2										
Ans.	12										