

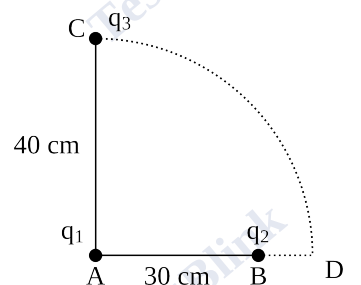
NEET ELECTROSTATIC POTENTIAL AND CAPACITANCE — POTENTIAL ENERGY OF A SYSTEM OF CHARGES — PYQS

Max. Marks: 8
Questions: 2

Section A (MCQ) — 2 questions

- Q.1** Two charges q_1 and q_2 are placed 30 cm apart, as shown in the figure. A third charge q_3 is moved along the arc of a circle of radius 40 cm from C to D.

The change in the potential energy of the system is $\frac{q_3}{4\pi\epsilon_0}k$, where k is [AIPMT 2005]



- (1) $8q_1$ (2) $6q_1$ (3) $8q_2$ (4) $6q_2$

Scan or tap for the full solution



- Q.2** Identical charges $(-q)$ are placed at each corner of a cube of side b then electrostatic potential energy of charge $(+q)$ which is placed at centre of cube will be [AIPMT 2002]

- (1) $\frac{-4\sqrt{2}q^2}{\pi\epsilon_0 b}$ (2) $\frac{-8\sqrt{2}q^2}{\pi\epsilon_0 b}$
 (3) $\frac{-4q^2}{\sqrt{3}\pi\epsilon_0 b}$ (4) $\frac{8\sqrt{2}q^2}{4\pi\epsilon_0 b}$

Scan or tap for the full solution



ANSWER KEY

Ques.	1	2								
Ans.	3	3								