

NEET ELECTRIC CHARGES AND FIELDS — CONTINUOUS CHARGE DISTRIBUTIONS — PYQS

Max. Marks: 12
Questions: 3

Section A (MCQ) — 3 questions

Q.1 A metal cube of side 5 cm is charged with $6\ \mu\text{C}$. The surface charge density on the cube is

[RE-NEET (UG) 2024]

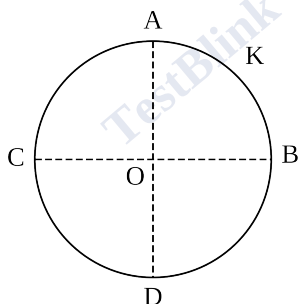
- (1) $0.125 \times 10^{-3}\ \text{C m}^{-2}$ (2) $0.25 \times 10^{-3}\ \text{C m}^{-2}$
 (3) $4 \times 10^{-3}\ \text{C m}^{-2}$ (4) $0.4 \times 10^{-3}\ \text{C m}^{-2}$

Scan or tap for the full solution



Q.2 A thin conducting ring of radius R is given a charge $+Q$. The electric field at the centre O of the ring due to the charge on the part AKB of the ring is E . The electric field at the centre due to the charge on the part $ACDB$ of the ring is

[AIPMT 2008]



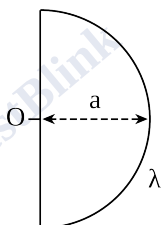
- (1) E along KO (2) $3E$ along OK
 (3) $3E$ along KO (4) E along OK

Scan or tap for the full solution



Q.3 Electric field at centre O of semicircle of radius a having linear charge density λ is given as

[AIPMT 2000]



- (1) $\frac{2\lambda}{\epsilon_0 a}$ (2) $\frac{\lambda\pi}{\epsilon_0 a}$ (3) $\frac{\lambda}{2\pi\epsilon_0 a}$ (4) $\frac{\lambda}{\pi\epsilon_0 a}$

Scan or tap for the full solution



ANSWER KEY

Ques.	1	2	3								
Ans.	4	4	3								