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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 μC. The surface charge density on the cube is

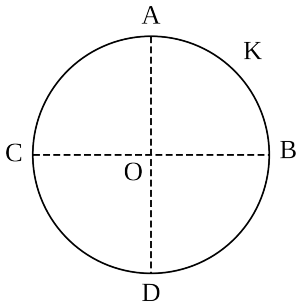
[RE-NEET (UG) 2024]

(1) 0.125×10^{-3} C m^{-2} (2) 0.25×10^{-3} C m^{-2}

(3) 4×10^{-3} C m^{-2} (4) 0.4×10^{-3} 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]



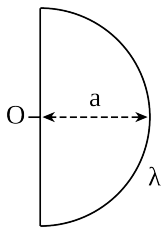
(1) E along KO (2) 3E along OK

(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) $\frac{2\lambda}{\varepsilon_0 a}$ (2) $\frac{\lambda\pi}{\varepsilon_0 a}$ (3) $\frac{\lambda}{2\pi\varepsilon_0 a}$ (4) $\frac{\lambda}{\pi\varepsilon_0 a}$

Scan or tap for the full solution

ANSWER KEY

Ques.	1	2	3								
Ans.	**4**	**4**	**3**								