Worksheet: Electric Charges and Fields

Rajasthan State Board · Class 12 · Physics · 5 questions · 13 marks

Name: _____	Date: _____	Score: _____ / 13

Q1. Find the flux through a cube of side 0.1 m with 10 uC at its centre. *[2 marks]*

Q2. Charges 2 uC and -2 uC are 1 cm apart. Find the field at 50 cm on the perpendicular bisector. *[3 marks]*

Q3. An infinite line charge has linear density 5 uC/m. Find the field at 10 cm. *[2 marks]*

Q4. A conducting sphere of radius 0.1 m carries 5 uC. Find E at r = 0.05 m and r = 0.3 m. *[3 marks]*

Q5. A dipole (p = 1e-7 C m) is at 30 degrees to a field of 2e4 N/C. Find torque and potential energy. *[3 marks]*