Note Title 4/4/200 pos chuje ZFy = gE = ma ,q€ q€ _> d 2F = goB-gE=ma=0 778= 85R Now there is an E=JB electric tild 0V=- S€.ae =-Ed by having a soltmeter Measure B N = 5Bd drift vel f from current measured force that more changes then win: charaterized by - Batteries have Emt (voltage) von de Great generator NV=- JE-LE E from Games's law V (r=00) = 0



goBh = q Surt - de Bida angle cha Bida angle cha with this Bida angle cha Flerx cal TS. da > Ø d= Bhx X = Bhv = - Smf JE due to changing the x

-Equation sheet must be turned in Thursday 5 PM. Condense all your equation to fit on one sheet of paper but you can write on both sides. Only formulas allowed. No examples, problems, etc. -Ask any question you have about the exam on the forum or see me.

On exam 3, I expect you to be able to

(1) calculate the force on a charged object which moves in a magnetic field (remember surface and volume elements in cylindrical and spherical coordinates).

(2) understand the differential and integral forms of conservation of charge.

(3) write an integral expression for B using the law of Biot and Savart.

(4) use Ampere's law to find B for symmetric current distributions.

(5) Find the vector potential given current density or find J given A.

(6) Apply Ohm's law to determine current flow with a constant voltage applied in a symmetric geometry.