

Feedback for EEE* Session:2007-2008**

Feedback: Please write simple statements about how well students addressed the exam paper in general and each individual question in particular including common problems/mistakes and areas of concern in the boxes provided below. Increase row height if necessary.

General Comments:

Generally a students performed well on this paper. The overall average was similar to that of previous years.

Question 1:

Part a) Main mistake was presenting the field patterns of a magnetic dipole or electric monopole
Part b) Failure to formulate initial equation equating fields to zero
Part c) Presenting derivation of field for a FULL ring of electric charge off-axis – as per lecture notes – instead of the simplified problem set in the question

Question 2:

Part a) Attempted well by most students but some students considered a wire instead of a plate!
Part b) Some students did not know that $E=0$ inside conducting sphere. Another common mistake was to use the wrong radius at which to calculate the field
Part c) Failure to realise that $E=0$ inside a perfect conductor; considered the 2 capacitors to be in parallel instead of series

Question 3:

Part a) Attempted well by most students
Part b) Mistakes included: failure to analyse geometry of problem; algebraic mistakes when letting n tend to infinity
Part c) Failure to equate fields to zero; error in direction of magnetic fields from circle and square

Question 4:

Part a) Caused some problems – students did not realise that the field was time-varying, some could not differentiate the expression for B-field
Part b) Attempted well by most students but some students considered a solenoid instead of a wire
Part c) Almost all students got full marks

Question 5:

Question 6:

Question 7:

Question 8: