|  | \# | 1 | question | Answer | 0 | <--score |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \# | 1 | 5 | square meters is the area of a capacitor of spacing 2 ee -4 m and 250 volts and $K=150$. Find the capacitance for this capacitor in Farads |  | 0 |  |
| \# | 2 | 5 | find the capacitance in microfarads ( $\mu \mathrm{F}$ ) |  | 0 |  |
| \# | 3 | 5 | Find the energy stored in this capacitor |  | 0 |  |
| \# | 4 | 5 | find the charge on this capacitor |  | 0 |  |
| \# | 5 | 4 | farads is the separate value of two capacitors then connected in parallel. Find C for the combination. |  | 0 |  |
| \# | 6 | 4 | repeat the last question, only this time the capacitors are in series |  | 0 |  |
| \# | 7 | 4 | $\mu$ coulombs is the charge on two charges spaced 25 cm apart. Find the force on the charges |  | 0 |  |
| \# | 8 | 8 | farads is the value of a capacitor charged with 200 volts. What is the charge on this capacitor? |  | 0 |  |
| \# | 9 | 8 | what is the energy in this capacitor? |  | 0 |  |
| \# | 10 | 8 | If the voltage were doubled, what would the new energy be? |  | 0 |  |

## Extra Credit:

Explain how a cloud over the ground is similar in electrical nature to a capacitor. Include terms such as dielectric in your answer

