1. A 10ụf capacitor is connecting to a 200V battery. Calculate the charge stored on the capacitor?

1b. A 50uf is charged to 400V. Calculate the energy Stored in the capacitor.

1. Two capacitors, 8uf and 12uf are connected in series. Find their equivalent capacitance.

2b. A charge 1.6 × 10-19 C is placed in an electric field of 5×10⁴ N/C. What is the force acting on the charge?

1. Find the workdone in moving a charge of 2x10–6 C through a potential difference of 500V.

3b. Two capacitors, 6uf and 9uf are connected in parallel. Find their equivalent capacitance.

1. A 5 ohms resistor and a 10 ohms resistor are connected in series to a 60 V battery. Find the current flowing in the circuit.

4b. A circuit consists of a 6 ohms resistor and a 9 ohms resistor connected in series. If the current is 2 A, find the voltage across the 9 ohms resistor.

1. A projectile is fired at 60m/s at an angle of 60º to the horizontal. Find its maximum height. Take g = 9.8m/s².

5b. A ball is thrown vertically with a speed of 18m/s from a height of 45m. Find the time it takes to reach the ground. Take g = 9.8m/s².

1. An object is thrown vertically upwards with a speed of 30m/s. How long will it take to reach the highest point, where g is constant.

6b. An object falls freely from a height of 45m. Find its velocity just before hitting the ground, where g is constant.