Problems

1. In a RC type generator, the maximum charging voltage is 80 V and the charging capacitor is 100 μF. Determine spark energy.

2. If in a RC type generator, to get an idle time of 500 μs for open circuit voltage of 100 V and maximum charging voltage of 70 V, determine charging resistance. Assume C = 100 μF.

3. For a RC type generator to get maximum power dissipation during charging $V_c^* = V_o x 0.716$. Determine idle time for R_c = 10 Ω and C = 200 μF

4. Determine on time or discharge time if V_o = 100 V and V_d^* = 15 V. Spark energy = 0.5 J. Generator is expected for maximum power during charging. Machine resistance = 0.5 Ω.

5. در یک مدار RC ژنراتور تولید جرقه برای ماشین EDM مقدار R مساوی 10 اهم ومقدار C مساوی 1 میکروفاراد است.اگر ولتاژ منبع 300 ولت باشد ماکزیمم توان جرقه چند وات خواهد بود؟