

Assignment-1

Winter_2025

Basic Electronics (ECE113)

Instructions

- **Institute Plagiarism Policy Applicable.** This will be subjected to strict plagiarism check.
- A maximum marks for this assignment is **15**. All questions are compulsory.
- **File Submission:** Only a **.pdf** file are acceptable, which you have to submit on Google Classroom. Use A4 size sheets only (ruled or blank) to solve your assignment and scan it to create a **.pdf** file. Attempt each question on a different sheet. Do not start a new question at the back of the previous one. Do not forget to mention Page Number (bottom center) clearly on each sheet of the assignment. Submit a **.pdf** file named **A1_RollNo.pdf** (e.g., **A1_24500.pdf**), which containing the quality scan copy of your solved assignment.
- **Submission Policy:** Turn-in your submission as early as possible to avoid late submissions. In case of multiple submissions, the latest submission will be evaluated. Expect **No Extensions**. Late submissions will not be evaluated and hence will be awarded zero marks strictly.
- **Clarifications:** Symbols have their usual meaning. Assume the missing information & mention it in the report. Use Google Classroom for any queries. In order to keep it fair for all, no email queries will be entertained.
- There could be multiple ways to approach a question. Please justify your answers. Questions without justification will get zero marks.

[CO3] Q1: [7.5 Marks] Find the value of voltage of each capacitor at $t = 0^+$ (in Figure-1), when $V_{C1}(0^-) = 2 \text{ V}$ and $V_{C2}(0^-) = 0 \text{ V}$.

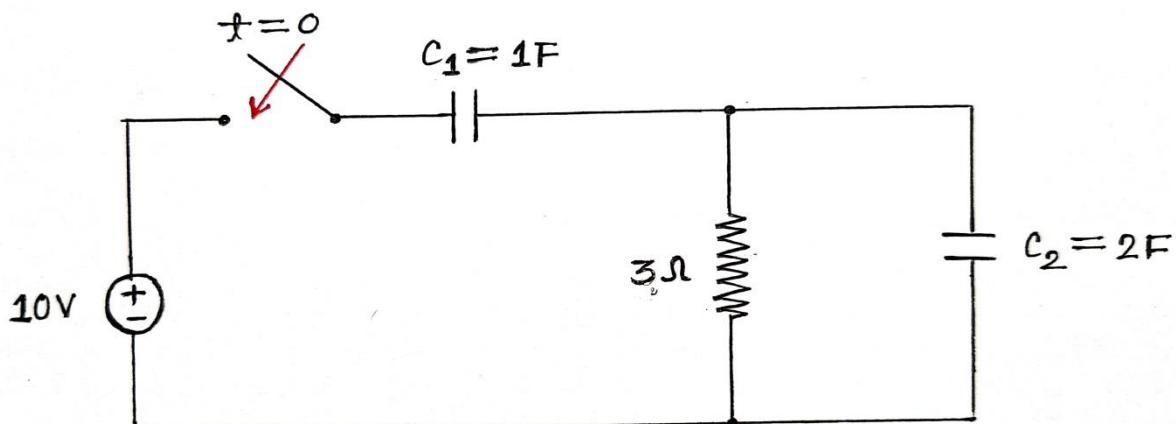


Figure 1

[CO1, CO2] Q2: [7.5 Marks] In the given Figure-2, if $V_P = 300 V$, $V_Q = 100 V$ then find the value of $(V_R - V_S)$.

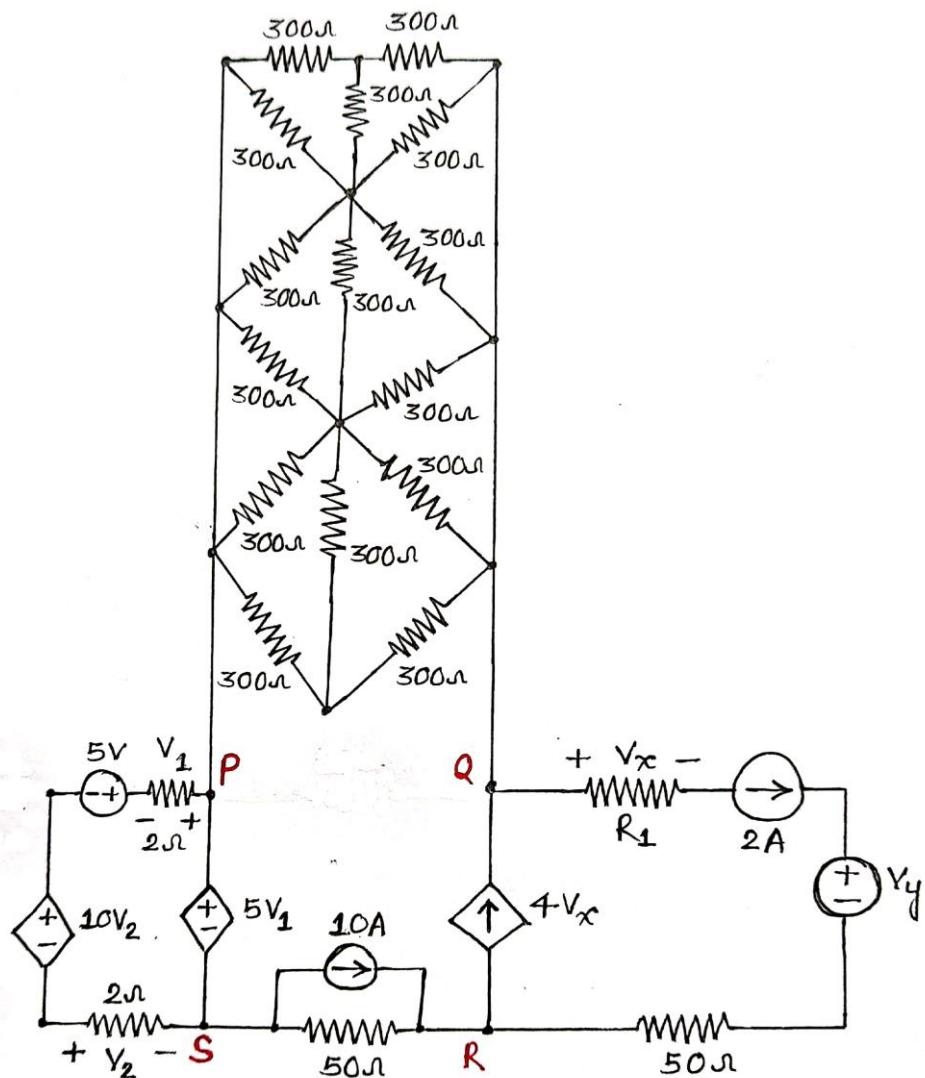


Figure 2