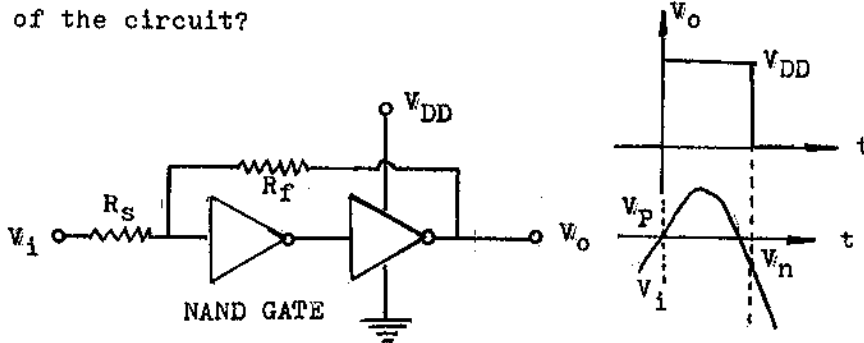


國立中央大學九十一年度碩士班研究生入學試題卷

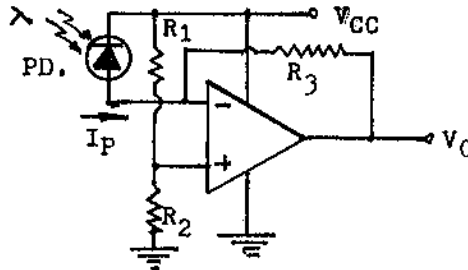
所別: 光電科學研究所 不分組 科目: 電子學 共 1 頁 第 1 頁

1. An op-amp having a single-pole rolloff at 100Hz and a low-frequency gain of 10^5 . Find f_T (unit gain-bandwidth product.) of the Op-amp. (20%)

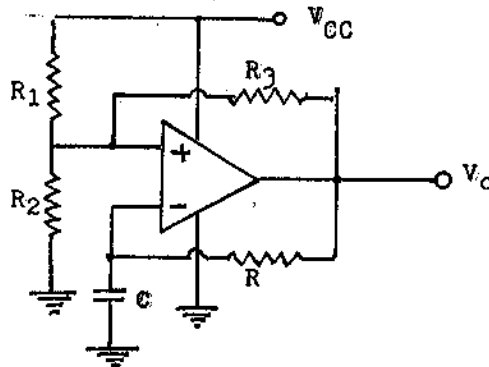
2. For the Schmitt trigger circuit as shown. Assume $V_{th} = V_{DD}/2$. Determine the V_P and V_n of the circuit? (20%)



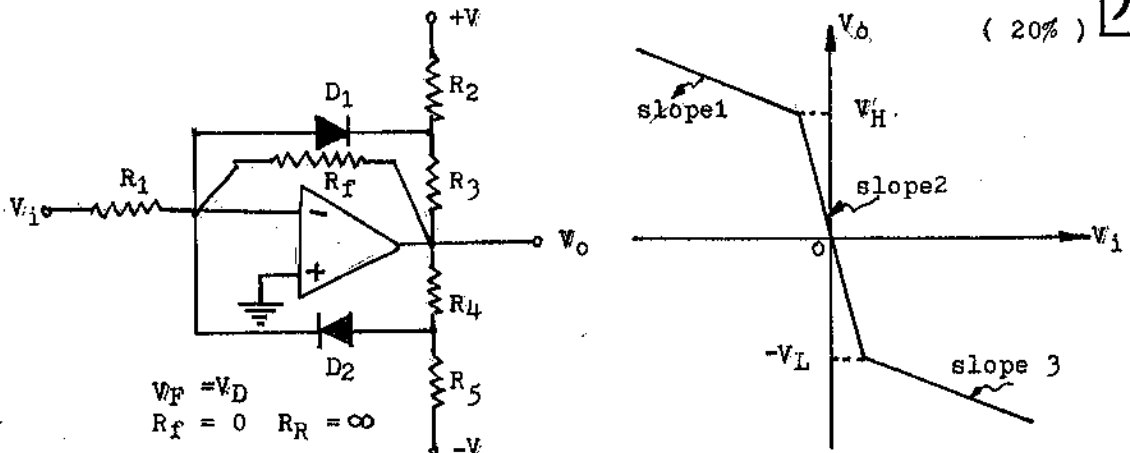
3. A photo-diode detector circuit as shown. If photo-current is I_p . Find output voltage V_o ? (20%)



4. An astable multivibrator as shown. If the Op-amp saturation voltage be V_{CC} . Find the frequency of oscillation. (20%)



5. The limiter circuit is shown. Find its transfer characteristic of the limiter circuit. (20%)



參考用