

淡江大學 103 學年度日間部轉學生招生考試試題 44

系別：電機工程學系三年級

科目：電子學

考試日期：7月20日(星期日) 第1節

本試題共 5 大題， 2 頁

1. In the circuit of Fig.1, D_1 and D_2 have different cross section areas but are otherwise identical. Determine the current flowing through each diode.

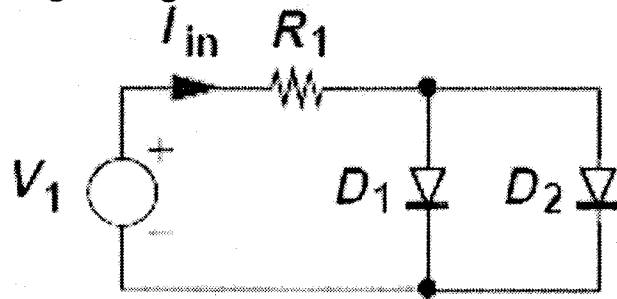


Fig.1

2. As shown in Fig. 2, find R_{in} , R_{out} and A_v of Common-Source by using small signal model ($\lambda \neq 0$) (20%)

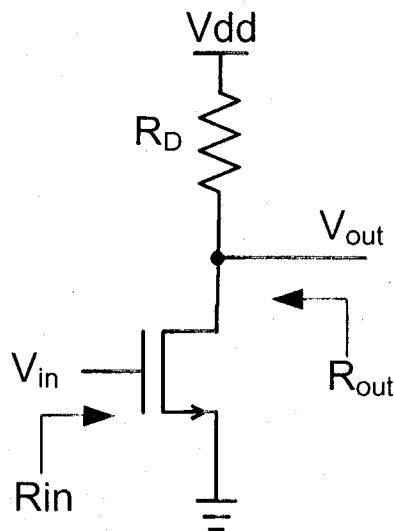


Fig. 2

3. As shown in Fig. 3, find R_{in} , R_{out} and A_v of Common-Source with R_S circuit by using small signal model ($\lambda \neq 0$). (20%)

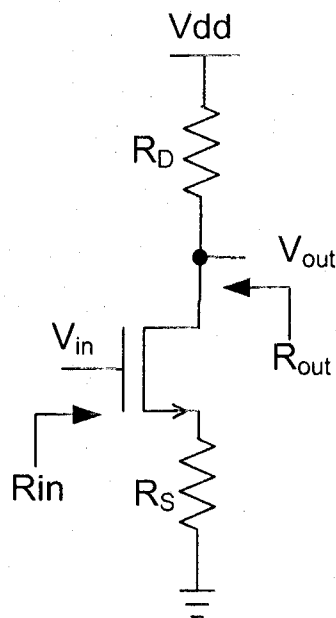


Fig.3

本試題雙面印刷

背面尚有試題

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4. As shown in Fig. 4, find R_{in} , R_{out} and A_v of Common-Gate circuit by using small signal model ($\lambda = 0$). (20%)

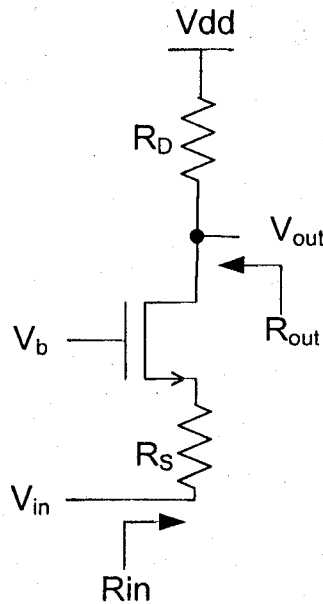


Fig.4

5. As shown in Fig. 5, find R_{in} , R_{out} and A_v of Source-Follower circuit by using small signal model ($\lambda \neq 0$). (20%)

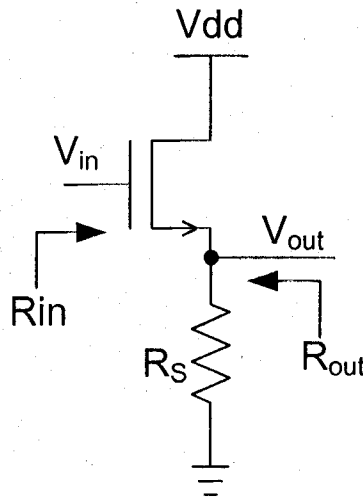


Fig.5