Topic/Chapter of lecture note	Problem#	Answer/Note
DA,CM,multi-stage amp	7.49	100 micro A, Vo,min=0.2V,Vo,nom=0.7V, 5 micro A
	7.57	0.2 mA, 10%
	8.21	Ad=gm*RD/(1+gm*Rs/2), continue
(Ch.2)	8.24	ID(Q1,Q2)=50 micro A, find other ID values
		Vov7=0.3, Vov6=-0.3 etc.
		W/L=2*ID/(mu*Cox*Vov^2) etc.
	8.49	RC=6.19 k ohms, RE=235 ohms
	8.59	50, 50.5*1E3 ohms
	8.61	diff pair:alpha*Rc/(2*re); cascade: same
Freq. resp. of amp.	9.18	routine analysis
	9.57	CI=200.2pF, fH=795kHz, fu=(1000/2*pi)*(1/CI*Rsig)
(Ch.3)	9.61	fH=652kHz, AM=-80; tau|gs=16.4%, tau|gd=67.2% etc
	9.75	gain=16, fp1=398MHz, fp2=3.79MHz, fH=3.79MHz (app)
	D9.81	Vov=0.2V, ID=0.2mA,fH=56.7MHz, fT=284.2MHz, AM=-99
		fH=2.92MHz, fT remains about the same
	9.94	work with half circuit, assume ro=infinity
		A(low freq)=-66.22, fH=452kHz, GBW=30MHz
	9.96	Ad=50, fp1=15.9MHz, fp2=1.6GHz, fz=3.2GHz
	9.112	(a)-(d) as follows
	(a)	A(DC)=10,000
	(b)	Cin1=525fF
	(c)	fp1=30.3MHz
	(d)	Cin2=530fF
Negative feedback	10.16	fL'=1Hz, fH'=1MHz
	10.31	AF=9.9, Rif=202, Rof=19.8
(Ch.4)	10.43	Af=9.4 m mho, Rin=474.2 k ohms, Rout=1.76 Mega ohms
	10.53	Af=-9.87 k ohms, Rin=11.08 ohms, Rout=1.085 ohms
	10.83	w=1.1E5 rad/sec, beta>=0.0244
	10.89	fc=1MHz, phase margin=90 deg
	10.92	fc=3.16E5, beta=49E-6, AcL=16.9E3
Output stage	11.9	dead zone +-7 mV, slope (gain)=0.99, without feedback
(Ch.5)		dead zone +-700 mV, slope (gain) =1
	11.11	PL(max)=0.5W; Ps+=Ps-=0.318W; efficiency=78.5%
		for half output: PL=1/8W; Ps(tot)=0.318W, eff=39.3%
	11.15	IQ=6.25mA; VBB=1.26V
	E11.9	see ref book #1, p.935
	D11.19	n=relative size:1.25/0.1=12.5
	D11.25	RL/(RL+1/(2*gm)), gm=24.5 mA/V;n=12.25; IQ=1.225mA
Oscillator	17.10	frequency shift 15%; new freq. of osc.=1.15/(RC)

(Ch.6) 17.13 L(s)=sCR/(1+3sCR+(sCR)^2); R2/R1>=2; w(freq)=1/(CR)

17.21 (b) gm+(1/R)+s(C1+C2)+(s^2*C2*L)/R+s^3*C1*C2*L=0

w(freq)=sqrt((C1+C2)/C1C2L); gm*R=C2/C1