Winter 2009 Final

1.C
2A
3.C
4.A
5.B
6.D
7.C
8.B
9.B
10.A

11.
we have r(B),we need to calculate Tax shield (TcB).
we have rs, we need cost of capital(r0) and we also need to know the tax.

13.a). the total market value 4000/1000shares, so the price of stock today is $4.

b).same as the 2008 final exam, $4-$1=$3.

c) i). $2.5*500=1250
4000-1250=2750

ii) 1.5*500=750
4000-750=3250

iii) 2750/500=5.5
3250/500=6.5

14. Liquidating value $15billion-$5.5 billion=9.5 billion
9.5b-administrative cost 0.5billion= 9billion
9billion*(12/(12+15))=$4billion
9billion*(15/(12+15))=$5billion

15.EBIT(1-0.34)/0.16=5000000, so the EBIT is $1212121.212
APV=NPV+NPVF
I DO NOT KNOW wheither I need to use this formula to get NPVF

16.
If no test, 50%*100000=$50000(success), 50%*(-50000)=
-25000(unsuccessful). Total NPV=50000-25000=$25000

small test, 80%*100000=$80000(success), 20%*(-50000)=
$-10000(unsuccess), Total NPV=80000-10000=$70000.
20%*100000=$20000(success), 80%*(-50000)=$-40000(unsuccess),
Total NPV=20000-40000=-$20000
So, 50%*70000+50%*0=$35000, and we discount back
35000/1.1=31818.182
31818.182-10000=$21818.182

Large test, 95%*$100,000(success) -5%*$50,000(unsuccess) = $92,500

5%*$100,000(success) -95%*$50,000(unsuccess) = -$42,500.

50%*92,500 + 50%*0 = $46,250

-50,000 + 46,250/(1.10^2) =$-11776.86