Session 19a: Post class test solutions

1. **a. Mature companies with separable, stand alone assets.** Growth assets and interrelated assets are difficult to value in asset based valuation.
2. **e. A relative valuation of assets in place.** Relative valuation works better than intrinsic valuation at estimating what you can get for the assets in the market place today. You cannot liquidate growth assets.
3. **d. To estimate the relative value of assets in place**, Since fair value accounting requires you to estimate what a market participant will pay for an asset in an arms-length transaction rather than the value of the asset, it is really a relative valuation assessment. And since growth is entirely in the future, it is difficult to see how you can fair value that number and put it on an accounting balance sheet.
4. **c. $3,650 million.** To estimate the value of each business, you first have to estimate the reinvestment rate:
   Reinvestment rate = Expected growth rate/ ROIC
   The value can then be estimated as follows:
   Value = Expected EBIT (1-t) (1- Reinvestment rate)/ (Cost of capital –g)

Business	EBIT (1-t)	ROIC	Reinvestment rate	Cost of capital	Value
Steel	150	9%	33.33%	8%	2000
Chemicals	100	12%	25.00%	9%	1250
Technology	50	15%	20.00%	13%	400
Company					3650

5. **c. $3,500 million.** Value the company first by estimating the value of the businesses:

Business	EBITDA	EV/EBITDA multiple	
Steel	300	8	2400
Chemicals	200	5	1000
Technology	100	6	600
			4000

Value of equity = 4000 + 1000 – 500 = $3,500 million