

## Session 21: Post Class tests

1. In recent years, analysts have shifted away from PE ratios to EV/EBITDA multiples in large segments of the equity markets. Which of the following is a sensible reason for this shift? (The others may be reasons but they may not be sensible).
  - a. EV/EBITDA multiples will yield values that are generally lower than PE ratios
  - b. EV/EBITDA multiples are not affected by growth
  - c. EBITDA is a good measure of free cash flow to the firm
  - d. EV/EBITDA can be compared across companies that use different depreciation methods
  - e. EBITDA can be used to service debt
  - f. All of the above
2. In computing the EV/EBITDA multiple, we estimate the enterprise value of a firm by adding together the values of debt and equity and netting out cash. Which of the following is the reason for netting out cash in computing this multiple?
  - a. Cash is easy to value.
  - b. Cash is liquid
  - c. Cash can be used to pay down debt
  - d. The income from cash is not part of EBITDA
  - e. None of the above
3. Infrastructure companies often trade at low multiples of EV to EBITDA. Which of the following is the best explanation for this phenomenon?
  - a. They pay little in taxes
  - b. They have high earnings
  - c. They have high growth
  - d. They have high depreciation and amortization
  - e. They have high net capital expenditures (difference between capital expenditures and depreciation)
4. You are trying to value Zimco Telecom Inc., a money losing company that reported EBITDA of -\$80 million in the most recent year on revenues of \$ 1 billion. You expect revenues to grow 6% a year for the next 5 years and the EBITDA/Revenue margin to improve to 8% by year 5. If healthy telecom companies trade at a multiple of 6 times EBITDA and you choose to apply this multiple to the fifth year's expected EBITDA, estimate the value of equity per share today. (You have a cost of capital of 12% for the next 5 years, a cash balance of \$ 50 million, debt outstanding of \$200 million and 12 million shares outstanding today.)
  - a. \$0.00
  - b. \$10.19
  - c. \$17.87
  - d. \$41.03
  - e. None of the above
5. You have run a regression of EV/EBITDA multiples across all companies in the market and arrived at the following:

$$\text{EV/EBITDA} = 5 + 80 * (\text{Growth rate}_{\text{Revenues}}) - 20 * (\text{Cost of capital}) - 12 * (\text{Effective tax rate})$$

Astor Inc. is a publicly traded company with EBITDA of \$100 million and enterprise value of \$ 480 million; it has an expected growth rate in revenues of 6% for the next 5 years and a cost of capital of 10%. Assuming that this stock is fairly priced, what is Astor's effective tax rate?

- a. 0%
- b. 15%
- c. 25%
- d. 40%
- e. 50%