# BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE, PILANI - K. K. BIRLA GOA CAMPUS 

## First Semester 2019-20, Mid-Semester Examination October, 2019

 BUSINESS ANALYSIS AND VALUATION (ECON F355)(Answer all questions)
Date: 04/10/2019
Time: $\mathbf{9 0}$ Minutes
Total Marks: $\mathbf{3 0}$

## A. Each question carries 1 mark.

1. A firm has a higher quick (or acid test) ratio than the industry average, which implies
A. The firm has a higher P/E ratio than other firms in the industry
B. The firm is more likely to avoid insolvency in short run than other firms in the industry
C. The firm may be less profitable than other firms in the industry
D. A and B E. B and C
2. Felton farm Supplies Inc. has an 8 percent return on total assets of $\$ 300,000$ and a net profit margin of 5 percent. What are its sales?
A. $3,750,000$
B. $\$ 480,000$
C. 300,000
D. $1,500,000$
3. Which of the following would not improve the current ratio?
A. Borrow short term to finance additional fixed assets.
B. Issue long-term debt to buy inventory
C. Sell common stock to reduce current liabilities.
D. Sell fixed assets to reduce account payable.
4. A coverage ratio of -------- implies that the firm is barely covering its interest expense through its operating activities, which is a very risky situation.
A. Less than one
B. Greater than one
C. Equal to one
D. None of the above
5. The economic effect of borrowing is positive as long as the return on operating asset is greater than the $\qquad$
A. Cost of debt
B. Cost of equity
C. Cost of sales
D. None of the above
6. -----------------is the rate at which a firm can grow while keeping its profit ability and financial policies unchanged.
7. Financial leverage effect of ROE is the function of Net financial leverage and $\qquad$
8. Cash from operations will be lower than working capital from operations when current assets $\qquad$ and current liability $\qquad$ . (Increase/decrease, increase/decrease).
9. Account receivables and inventory could be ----------- if the firm's customers are having difficulty paying for goods or services, or if sales have slowed causing inventories to climb.(increasing/decreasing)
10. ----------------occurs when, as a result of the hidden action problem, the agent engages in behavior that is damaging to the principal.

## B. Each question carries 4 marks.

(4*5=20 Marks)

1. Competitive advantage is measured by profit share -- a company's share of an industry's profits. This definition means that a competitive advantage is impossible if an industry lacks profitability. Based on the financial results of Lyft and Uber, there are no profits to be had in the ride-sharing industry. For instance, Lyft posted a $\$ 900$ million loss in 2018 and Uber topped that with a $\$ 3$ billion loss from operations. Use the Porter's five forces industry analysis and Generic strategy framework to explain why Uber lacks a sustainable competitive advantage.
2. In early 2019, Bolar Beverages announced that it would have to restate its financial statement as a result of stuffing as much as $\$ 120$ million worth of products into wholesalers' warehouse for the year 2017. Moreover, an analyst identified that during the financial year, 2016-17 Bolar's days' receivables had increased from 100 to 120 days an increase of $20 \%$ due to the improper revenue recognition. An analyst, who had observed the increased days' receivables, wanted to adjust the company's revenues and estimated the impact of the increase on sales and profit. Upon investigation he founds that the worth of improper revenue recognition is $\$ 180$ million. Bolar's marginal tax rate was $35 \%$, and the company's sales and cost of sales during this period are $\$ 12,350$ million and $\$ 5054$ million, respectively. What adjustments are required to correct Bolar's income statement and balance sheet for December 2017?
3. The relentless competition and potential technological obsolescence raised questions on the inventory management of Innovative Style Technology. Growth in inventory far outpaced growth in sales, leading to a $50 \%$ increase in day's inventory from 120 days for the quarter ending September 30, 2017 to 180 days for the quarter ending March 31, 2018. Inventory at the end of March 2018 was valued at $\$ 780$ million. Given the company's effective tax rate of $39 \%$, calculate the inventory impairment charge for Innovative Technology if 60 percent of this excess inventory is deemed to be worthless and provide the necessary adjustment in the books of account for Innovative Technology.
4. On December 31, 2017 and 2018 Deutsche Telecom AG had net trade receivables in the amount of $€ 8000$ million and $€ 10,000$ million, respectively. The following proportion of the receivables was past due on the reporting date.

|  | $\mathbf{2 0 1 7}$ | $\mathbf{2 0 1 8}$ |
| :--- | :--- | :---: |
| Not past due on the reporting date | $(35 \%), 2,800$ | $(30 \%) 3,000$ |
| Past due on the reporting date | $(65 \%), 5,200$ | $(70 \%) 7,000$ |
| Total | $(100 \%), 8000$ | $(100 \%) 10,000$ |

The changes in Deutsche Telecom's allowance for doubtful receivables were as follows:

| Item | $\mathbf{2 0 1 7}$ | $\mathbf{2 0 1 8}$ |
| :--- | :--- | :--- |
| Allowance on January 1 | 1,560 | 1,600 |
| Additions (allowance recognized as expense) | 780 | 775 |
| Allowance on December 31 | 1,600 | 1,680 |

Assume that Deutsche Telecom's statutory tax rate was 30.7 percent in 2017 and 2018. Further assume that an analyst wishes to recognize an additional allowance for 25 percent of the receivables that are past due on the reporting date.
a) What adjustments should the analyst make to Deutsche Telecom's balance sheet at the end of 2017?
b) What adjustments should the analyst make to deutsche Telecom's 2018 income statement?
5. Microsoft expenses its software R\&D costs, arguing that all material research and development costs are incurred before technological feasibility is reached (US GAAP allows capitalization of development costs once technical feasibility is established until the product is released to the market). What adjustment would be required if the analyst decided to capitalize Microsoft's software R\&D and to amortize the intangible asset using the straight-line method over the expected life of software (approximately seven years)? Assume that R\&D spending occurs evenly throughout the year and R\&D outlays for 2011, 2012, 2013, 2014, 2015, 2016, 2017 and 2018 are $\$ 7.9, \$ 8.1, \$ 8.2, \$ 8.2, \$ 8.6$, $7.5,8.9$, and $\$ 9.2$, respectively. Given R\&D outlays for the years 2011 to 2018 , the R\&D asset at the end of the 2018 is $\$ 30.9$ billion. Since Microsoft will continue to expense software R\&D immediately for tax purposes, the change in reporting method will give rise to a Deferred Tax Liability. Given a marginal tax rate of $35 \%$, provide the adjustments required in the financial statements for the financial year 2018.

