

**Birla Institute of Technology & Science, Pilani (Rajasthan) 333031**  
**Business Analysis and Valuation (MBA G593/ECON F355/BITS F493)**  
 Mid Term Examination (1<sup>st</sup> Semester 2017 – 18)  
 Faculty Incharge: Dr. Saurabh Chadha

**Date:** 12 October 2017

**Time Allotted:** 90 Minutes  
 (All Questions are compulsory)

**MM:** 40 Marks

**Name:**

**ID No:**

**Q1.** You are looking at the valuation of a stable firm, Net Ltd, done by an investment analyst. Based on an expected free cash flow of Rs 54 million for the following year and an expected growth rate of 9 percent, the analyst has estimated the value of the firm to be Rs 1800 million. However, he committed a mistake of using the book values of debt and equity. You do not know the book value weights employed by him but you know that the firm has a cost of equity of 20 percent and a post-tax cost of debt of 10 percent. The market value of equity is thrice its book value, whereas the market value of its debt is nine-tenths of its book value. What is the correct value of the firm? **(5 Marks)**

**Q2. From the following information, Calculate the DCF value of the firm:** **(10 Marks)**

<b>Financial Forecasts (Rs in Millions)</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
Revenues	950	1000	1200	1450	1660	1770
EBDIT	195	200	210	305	330	374
Depreciation	55	85	80	83	85	87
Investment in Capex	100	100	85	100	105	120
Investment in Working Capital	10	17	70	70	70	54

**Additional information includes:** Debt-Equity ratio of 0.4 : 1.0, Tax Rate 35%, Pre – tax cost of debt 12% and cost of equity 16.48%.

**Q3. From the following information, Calculate the enterprise value of the firm:** **(20 Marks)**

**Base Year (Year 0) Information:**

Revenues = Rs 4000 million, EBIT (12.5% of revenues) = Rs 500 million, Capital Expenditure = Rs 300 million, Depreciation = Rs 200 million, Net Working Capital as a percentage of revenues (for all time) = 30 percent, Corporate tax rate (for all time) = 40 percent.

**Inputs for the High Growth Rate**

Length of the high growth phase = 5 years, Growth rate in revenues, depreciation, EBIT and Capital expenditure = 10 percent

**Inputs for the stable Growth Period**

Perpetuity growth rate = 6 percent, Cost of debt = 15 percent (pre – tax), Debt – Equity ratio = 2 : 3, Risk free rate = 12 percent, Market risk premium = 7 percent, Equity beta = 1.0

**Q4.** On June 30, 2017, Thor Company's total current assets were Rs 250,000 and its total current liabilities were Rs 125,000. On July 1, 2017, Thor issued a long-term note to a bank for Rs 25,000 cash. **Required**

- a.** Compute Thor's working capital before and after issuing the note.
- b.** Compute Thor's current ratio before and after issuing the note.

**(5 Marks)**

---