Subject	Corporate Valuation		
Roll No.		Marks	60 Marks
Total No. of Questions	7	Duration	3 Hours
Total No. of printed pages	3	Date	28.10.2015

Note: Q1 is compulsory and solve any FOUR from the remaining SIX questions.

Q1) 20 Marks (Compulsory)

1. (A) State whether the following statements are true or false: [1x5=5]

1. Cost of debt is the rate at which a firm can borrow money today and will depend upon the default risk embedded in the sector in which firm operates.
2. When valuing a firm the cash flows that are discounted should be after taxes and reinvestment needs but before debt payments.
3. Intrinsic value of a share decreases after options are issued.
4. In relative valuation, we estimate the value of an asset by looking at how differently assets are priced.
5. The Cost of Equity is a key ingredient of every discounted cash flow model.

1. (B) Solve the Following: [2x5=10]

1. A firm has EPS of 18 with a retention ratio of 40% find the DPS.
2. A Company borrowed fund from the equity investors with a promise of risk premium of 4% when the risk free rate prevailing in the market is at 7%. If β of the Company is 1.55. Find the Cost of Equity.
3. A firm borrowed funds of Rs. 75,00,000/-. These funds shall be invested for 3 years promising a return of 9.5%. Find Future Value of this investment.
4. Find the Price of share using Dividend Discount Model where Dividend is Rs. 8 with Cost of Equity of 11% and growth rate is 5%.
5. If EPS of a company is Rs. 27.65 and the price of the share is 235 find P/E ratio. If the sector P/E stands at 32, then what should be the market value of the share of this company?

1. (C) Choose the correct option: [1x5=5]

1. If the expected rate of return on a stock exceeds the required rate
   (a) The stock is experiencing super normal growth
   (b) The stock should be sold
   (c) The company is not probably trying to maximize price per share
   (d) The stock is a good buy

2. The reason for popularity of Relative Valuation is
   (a) It is easier to sell
   (b) It is easier to prepare
   (c) It is easier to show
   (d) It is easier to compare.

3. Inflation means _____
   (a) When the prices of the things rise as per expectations
   (b) When the prices of the things rise faster than they actually should
   (c) When the prices of the things rises slowly than they actually should

(d) None of the above

4. For Future Value of Rs. 25,00,000/- being invested in an fund for 4 years having rate of return of 8%. The Present Value of the investment is:
(a) 18,27,774.63
(b) 18,37,574.63
(c) 18,73,754.36
(d) 18,37,574.36

5. The PEG ratio of a firm is 25 if the Price of a share is Rs. 50 and EPS is 19 hence the expected growth rate of the firm is:
(a) 10.00%
(b) 10.53%
(c) 10.25%
(d) None of the above

Attempt Any FOUR from the Remaining SIX Questions

Q2) *Any two from (a) or (b) or (c)* ——————— *(5x2) = 10 Marks*

a) A Company declared dividend of Rs. 22 expecting a growth rate of 5% forever. The required rate of return for equity shareholders is derived considering risk free rate of 6.5% while β as 1.25 while paying market premium of 5%. Find the Value of the Stock.

b) The following table reports the revenues for PQR Ltd. for each year from 2010 to 2015. Find the Arithmetic and Geometric average growth rates.

Year	Revenues (in Crores)
2010	42,525.20
2011	53,771.00
2012	72,518.00
2013	109,483.00
2014	120,375.00
2015	106,611.00

c) What are different approaches to Valuation?

Q3) *Any two from (a) or (b)*

a) Explain H Model for Valuing Growth.   [10]

XYZ Ltd. is a Company having its subsidiary in Mauritius. It paid dividends per shares ofINR. 480 (post conversion **1 Mau. Re= approx. 2 INR**) on the reported earnings per share of INR. 1014 in 2014. The firm's earnings per share have grown at 12% over the previous 5 years, but that growth is expected to decline linearly over the next 5 years by 4%, while payout ratio decreases by 20%. The beta of stock is 0.85 and the risk free rate is 5% and the market rate is 8.5%. Find Value of Stock using H Model in Mauritian Currency.

b) Write Short Notes on (Any Two):   [10]
   a. CAPM Model
   b. Trademarks, Copyright and Licenses
   c. Three-Stage Dividend Discount Model

Q4) *Any two from (a) or (b)*

a) What is terminal Value of a Firm? Concorde Realtors Ltd. is a Real Estate firm currently reporting after tax operational income of Rs. 125 Crores. The firm has a

Return on Capital of 15% and Cost of Capital of 11%. It reinvests 75% of its earnings back into the firm. After 05 years the growth of the firm is pegged at 5% whereas the Return on Capital is expected to stay the same. Find the Terminal Value and Value of Concorde Realtors Ltd. today. [10]

b) What are different equity bases compensation and reasons to use options?

In ABC Ltd. the number of primary shares outstanding is 5,27,32,467. The value of equity is 105.46Crores. The Company in order to retain talent decided to issue equity options which shall be 25% of the primary shares. Find Value per share (Primary) & (Diluted) for ABC Ltd. [10]

Q5) Any two from (a) or (b)

a) Godrej & Boyce Ltd. reported net income of Rs. 511.74Croreson revenue of Rs. 8,269.39 Croresin the Financial Year 2014-2015. The Book Value of equity of XYZ ltd. is 4, 304.44 Crores. The firm's payout ratio is 35% for the next 4 years. After 4th year the growth rate drops to 6% whereas ROE drops by 4%. With a risk free rate of 7% and Market premium of 4% the firm has β of 1.05. Find it's P/E, PEG, P/BV ratio. [10]

b) What is Relative Valuation? Give reasons for Popularity and Pitfalls of Relative Valuation [10]

Q6) Any two from (a) or (b)

a) What is EVA? A Firm has existing assets in which the Capital invested is Rs. 1000 Crores. The after tax operating income on assets in place is, Rs. 50 Crores. The Return on Capital is expected to be sustained till perpetuity. The Cost of Capital for the firm is 9%. The firm decides to invest 125 Crores at the beginning of each year for next 5 years with the expected return on Capital to be the same along with Cost of Capital. Find The Value of the Firm. [10]

b) What is Franchise? Give value & excess return in Franchise Model of business along with some special issues related to Franchise. [10]

Q7) Any two from (a) or (b) or (c) —————— (5x2) = 10 Marks

a) Give the different motives of a Company/Firm for holding Cash. [05]
b) A company during its Financial Year 2014-2015 had an operating income of Rs. 55.85Crores. The tax rate applicable is 33%. The Company during the F.Y. made a capital expenditure of Rs. 35.67 Crores. The depreciation accounted on the Company's fixed assets was 5.80 Crores. With Inventories at Rs. 3.89 Crores and receivables at 7.21 Crores (both part of Non-Cash Working Capital). Find the Free Cash Flow to the firm. [05]
c) State the reasons/explanation for the following (Any Two): [05]

    a. Options are Non-Cash Expense.
    b. Option grants do not affect current earnings and it is pure speculation as to whether they will affect future earnings.
    c. Young firms will not be able to hire employees if they have to expense options.
    d. The information about employee options is already available in financial statements and expensing is just a formality.

CORPORATE VALUATION

FORMULA SHEET (SET A)

(1) H - Model for Valuing Growth:

$$P_0 = \frac{DPS_0 \times (1+g_n)}{(Ke-g_n)} + \frac{DPS_0 \times H \times (g_a-g_n)}{(Ke-g_n)}$$

$\quad\quad\quad\quad\quad$ Stable growth $\quad\quad\quad$ Extra ordinary growth.

(2) $\quad$ Terminal Value $= \dfrac{EBIT_{n+1}(1-t) \times (1 - \text{Reinvestment Rate})}{\text{Cost of Capital}_n - \text{Stable growth Rate}}$

(3) $\dfrac{P_0}{EPS_0} = \left[\dfrac{\text{Payout Ratio} \times (1+g) \times \left[1 - \dfrac{(1+g)^n}{(1+Ke,hg)^n} \right]}{(Ke,hg-g)} \right]$

$\quad\quad\quad\quad\quad\quad\quad\quad + \left[\dfrac{\text{Payout Ratio} \times (1+g)^n \times (1+g_n)}{(Ke,st-g_n)(1+Ke,hg)^n} \right]$

$PEG = \dfrac{1}{g} \times \left[\text{As above} \right] + \dfrac{1}{g} \times \left[\text{As above} \right]$

$P_0/BV = \left(ROE_{hg} \right) \times \left[\text{As above} \right] + \left(ROE_{st} \right) \left[\text{As above} \right]$

$P_0/\text{sales} = \text{Net Margin} \times \left[\text{As Above} \right] + \text{Net Margin} \left[\text{As Above} \right]$.

(4) $\quad$ Two Stage DDM :-

$$P_0 = \frac{DPS_0 \times (1+g) \times \left[1 - \dfrac{(1+g)^n}{(1+Ke,hg)^n} \right]}{Ke,hg - g} + \left[\frac{DPS_{n+1}}{(Ke,st-g_n)(1+Ke,hg)^n} \right]$$