| Name:<br>Enrolment No: | UPES UNIVERSITY WITH A PURPOSE |
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**UNIVERSITY OF PETROLEUM AND ENERGY STUDIES**
**Online End Semester Examination, Dec 2020**
**Course: Corporate Valuation Sem: III Program: MBA(Core) Time 03 hrs. Course Code: FINC 8010P Max. Marks: 100**

**SECTION A**

1. **Each Question will carry 5 Marks**
2. **Instruction: Complete the statement / Select the correct answer(s)**

| S. No. | **Question** | |
|---|---|---|
| Q 1 | Which of the following is not a method for estimation of growth rates of a firm<br>(A) Arithmetic Average based<br>(B) Geometric Average based<br>(C) Regression Approach<br>(D) All are known methods | **CO3** |
| Q2 | State whether the following statements is true or false<br>1) To estimate the terminal value of a firm you may take a multiple of the firm's earnings or revenues in the current year.<br>2) Small changes in the stable growth rate might change the terminal value significantly | **CO4** |
| Q3 | State whether the following statement is true or false<br><br>All firms become stable growth firms | **CO3** |
| Q4 | State whether the following statements is true or false<br><br>Growth rate in stable phase growth cannot be negative | **CO3** |

| | | |
|---|---|---|
| Q5 | Identify whether the statement is true or false<br><br>Investing in developing or developed markets is equally risky and hence the equity risk premium is the same for both | **CO1** |
| Q6 | Identify whether the statement is true or false<br><br>The risk free rate chosen in computing the equity risk premium has to be consistent with the risk free rate chosen to compute expected returns | **CO3** |

**SECTION B**

**1. Each question will carry 10 marks**

**2. Instruction: Write short / brief notes**

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|---|---|---|
| | | |
| Q 7 | 1) (i) Assume that the average beta for a set of shipping companies is 0.79 and the average debt to equity ratio is 0.7504 and the average tax rate is 27 % estimate the unlevered beta..<br><br>(ii) Comment on averaging the beta across industries . | **CO1** |
| Q8) | For the following years kindly calculate the average growth in EBITDA and EBITincome for a Motorola employing arithmetic and geometric average of the growth rates | **CO3** |

| Year | EBITDA | %change | EBIT | % change |
|---|---|---|---|---|
| 2004 | 4151 | | 2604 | |
| 2005 | 4850 | | 2931 | |
| 2006 | 4268 | | 1960 | |
| 2007 | 4276 | | 1947 | |
| 2008 | 3019 | | 822 | |
| 2009 | 5398 | | 3216 | |

Comment on why the arithmetic average growth rate might not be appropriate for this context

Q9 **CO1**

| Company Name | Price-to-Equity Ratio | Expected growth | Standard Deviation |
|---|---|---|---|
| Coca Cola Bottling | 29.18 | 9.5% | 59.36% |
| Molson inc | 43.65 | 19.5% | 38.87% |

| | | | |
|---|---|---|---|
| AB breweries | 24.31 | 11.00 | 56.51% |
| Corby Distilleries | 16.24 | 7.5% | 58.34% |
| Chalone Wine group | 21.76 | 14.00% | 51.06% |
| Andres Wines | 8.96 | 3.5% | 21.77% |
| Todhunter Intl | 8.94 | 3% | 31.61% |
| Brown Foreman | 10.07 | 11.5% | 45.31% |
| Coors | 23.02 | 10% | 19.56% |
| PepsiCo | 33 | 10.5% | 31.35% |
| Coca Cola | 44.33 | 19.00% | 35.51% |
| Boston | 10.59 | 17.13% | 39.58% |
| Whitman | 25.19 | 11.50% | 44.26% |
| Hansen Natural | 9.7 | 17% | 62.45% |
| Mondavi | 16.47 | 14.00% | 45.84% |
| Coca Cola | 37.14 | 27.00% | 51.34% |

9 contd

Regressing the price-to-equity ratio against the expectd growth and standard deviation in stock prices, we get

PE = 20.87 + 183.24Expected Growth – 63.98Standard Deviation $R^2$ = 51%

Kindly calculate projected PE ratio for Pepsi Co,Coca cola, Boston, Whitman and hansen Natural.Comment on whether they are underpriced or overpriced.

**Q 10** **CO1**

Assume that the P/E ratio for the firm is given by Payout ratio *( 1+gn) /(ke-gn)m where Ke refers to the cost of capital and gn the growth rate

Calculate the P/E ratio for a stock with a payout ratio 2, cost of capital to be 11.5% and growth rate 25%

**Q11** **CO2**

Given the following information for years 2014 project the cash flows in the years 2015 ,2016 and 2017.

Assume sales in successive year to be 120% of the previous year figure

COGS,SG & A expenses have the same ratio to Sales Revenue as they have in the year 2014.

R& D expenses are to be assumed as 0

Depreciation should be taken as 3% of (75% of the value of Sales Revenues of 2014)

Delta Capex values need to be projected as 0.3 % of Sales Revenue of the year

Delta NWC values for the three years are Rs 42635, 102325 and 89534

Tax Rates are to be taken as 35%

| | | | |
|---|---|---|---|
| **Sales** | 4132517 | 7491187 | 11000000 |
| **CGS** | 1303416 | 1632722 | 2397476 |
| **Gross Margin** | 2829101 | 5858465 | 8602524 |
| **(-)SGA** | 2449200 | 4342500 | 6376493 |
| **(-)R & D** | 0 | 0 | 0 |
| **EBITDA** | 379901 | 1515965 | 2226031 |
| **(-)D &A** | 41800 | 149007 | 24750 |
| **EBIT** | 338101 | 1366958 | 2201281 |
| **(-) Corporate Tax** | 4421 | 74191 | 770448.4 |
| **After Tax EBIT** | 333680 | 1292767 | 1430833 |
| **(+)D & A** | 41800 | 149007 | 24750 |
| **(-) Delta Capex** | 142212 | 1194393 | 33000 |
| **(-)Delta NWC** | 10800 | 271200 | 68000 |

**Section C**

1. **Each Question carries 20 Marks.**
2. **Instruction: Write long answer.**

| | | |
|---|---|---|
| Q12 | Explain the advantages and pitfalls of using relative valuation (both enterprise and price based multiples. | **CO2** |