# VPM's <br> DR VN BRIMS, Thane <br> Programme: PGDM (2019-21) <br> PGDM Trimester V Examination January 2020 

| Subject |  |  |  |
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| Roll No. |  | Marks | 60 Marks |
| Total No. of Questions | 7 | Duration | 3 Hours |
| Total No. of printed pages | 4 | Date | $\mathbf{0 9 . 0 1 . 2 0 2 0}$ |

Note: Q1 is compulsory and solve any FOUR from the remaining SIX questions. Q1) 20 Marks (Compulsory) [15 + 5]
a) Micro-gem Ltd. is planning to acquire Cipher Ltd. in the first quarter of the calendar year 2020 as part of its inorganic growth programme. The CFO of Micro-gem, Mrs. Smith, is of the opinion that before we make an appropriate offer, we must find the intrinsic value of Cipher Ltd.
For valuing Cipher Ltd., she has identified 3 proxy firms and some relevant information about them which is as follows:
(\$ mn)

| Company | Cipher <br> Ltd. | Code <br> Ltd. | Passwor <br> d Ltd. | Puzzle <br> Ltd. |
| :--- | :--- | :--- | :--- | :--- |
| Sales | 270 | 250 | 210 | 300 |
| PAT | 60 | 50 | 44 | 65 |
| Total Book Value | 150 | 160 | 100 | 130 |
| Market Capitalization | $?$ | 250 | 300 | 450 |

Mrs. Smith feels that we can take a simple average of three values found out using sales, PAT and Book Value for a particular company. However, while finding final value of $\mathrm{Ci}-$ pher, it is appropriate to give weightage of 2:2:1 to values based on Code, Password \& Puzzle respectively. As you are her assistant, she has asked you to find the relative value of Cipher Ltd.
[15 Marks]
b) After she explained you the above assignment, she has also asked you to prepare a manual for reference by other analysts on 'What are the different steps which are there in a Merger\& Acquisition process?'.
[5 Marks]

## Attempt Any FOUR from the Remaining SIX Questions

Q2) Any two from (a) or (b) or (c)
(5x2) = 10 Marks
a) Glow Ltd. Has beta coefficient of 1.2. The company has been maintaining $15 \%$ rate of growth in dividends and earnings. The last dividend paid was Rs. 5 per share. Return on Government securities is $10 \%$. Return on market portfolio is $15 \%$.
The current market price of one share of Target Ltd. is Rs. 85.
(i) What will be the equilibrium price per share of glow Ltd.?
(ii) Would you advise purchasing the share?
b) FaceFrom the under mentioned facts determine the cost of equity shares of Dream Ltd.:
(i) Current market price of a share = Rs. 200.
(ii) Cost of floatation per share on new shares, Rs. 5
(iii) Dividend paid on the outstanding share over the past 5 years are as follows
(iv) Expected dividend on the new shares at the end of the current year is Rs. 16 per share.

| Year | Dividend Per share |
| :---: | :---: |
| 1 | 10 |
| 2 | 11 |
| 3 | 12.10 |
| 4 | 13.32 |
| 5 | 14.63 |

c) The following figures are collected from the annual report of XYZ Ltd:

| Net Profit | Rs.60 Lacs |
| :--- | :--- |
| Outstanding 12\% Preference Shares | 100 Lacs |
| No. of Equity Shares | 3 lacs |
| Return on Investment in Retained Earnings | $10 \%$ |
| Cost of Equity | $15 \%$ |
| Expected Dividend Pay-out | $60 \%$ |

Calculate price as per Walter's Model.
Q3) Any one from (a) or (b) (10x1) = 10 Marks
a) Sock Ltd. is foreseeing a growth rate of $14 \%$ per annum in the next 2 year. The growth rate is likely to fall to $12 \%$ for the third year and fourth year. After that the growth rate is expected to stabilize at $10 \%$ per annum.
If the last dividend paid was Rs. 3 per share and the investors' required rate of return is $18 \%$, find out the intrinsic value per share of Sock Ltd. as of date.
b) Valuation of ICICI Bank using H -Model

D0 = 3
EPS0 = 6
Growth in Earnings $=8 \%$ which is expected to linearly decline over the next 5 years to $3 \%$.
The pay-out ratio will remain unchanged.
Beta $=1.2$
Rf = 6\%
Market Risk Premium = 5\%

## Q4) Any one from (a) or (b) —__ (10x1) = 10 Marks

a) On what basis one can value Patents, Trademarks, Brands \& Copyrights?
b) Write whether the following statements are True or False (Just write True or False; don't rewrite the entire sentence)
i. Using Corporate Valuation techniques everybody can always arrive at the same, perfect price of an instrument.
ii. In an acquisition, if intrinsic value is greater than market value of the target firm, then Intrinsic value becomes the minimum value that the acquirer will offer.
iii. If Intrinsic value > Current Market Price, one must sell the equity share.
iv. Dividend based valuation is preferred for valuation from Minority Shareholders' point of view
v. FCFE approach is preferred over FCFF when Financial Leverage is constant
vi. Relative Valuation need not always involve finding a proxy firm.
vii. EVA is also called as residual income after paying all costs including finance costs.
viii. Gordon's model works only when $G>K e$
ix. Illiquidity Premium means an additional compensation for shareholders because the particular shares cannot be sold easily in the market.
x. Beta of proxy firm can directly be applied for valuation.

## Q5) Any one from (a) or (b)or (c)

- (5x2) = 10 Marks
a) Assume that you are valuing MMT a privately owned Travel business for sale in a private transaction. You have estimated a value of $\$ 600 \mathrm{mn}$ for the equity in this firm, assuming that the existing management of firm continues into the future and a value of $\$ 800 \mathrm{mn}$ for the equity with new \& more creative management in place. Estimate value of a majority stake ( $51 \%$ )\& value of a minority stake (49\%). Also comment on your finding.
b) Calculate economic value added (EVA) with the help of the following Information

Financial leverage
: 1.4 times
Capital structure
Equity Capital Rs, 270 lacs
Reserves and surplus
: Rs. 230 lacs
10\% Debentures Rs : 500 lacs
Cost of Equity : 15.5\%
Income Tax Rate : 30\%
c) Write the difference between Absolute Valuation and Relative Valuation. Also explain the different methods used under both the approaches.

Q6) Any one from (a) or (b) —_ (10x1) = 10 Marks
a) The following data pertains to XYZ Inc. engaged in software consultancy business as on 31st December, 2018.

Income from Consultancy
EBIT
Less: Interest on Loan
EBT
Tax @ 35\%
Net Profit

| Liabilities | In lakhs | Assets | In lakhs |
| :--- | :--- | :--- | :--- |
| Equity Stock (1 million |  | Land and Building | 200 |
| shares of Rs. 10 each) | 100 | Computers \& Software | 205 |
| Reserves and Surplus | 325 | Debtors | 150 |
| Loans | 180 | Non-operating Investment | 90 |
| Current Liabilities | 180 | Bank | 100 |
|  |  | Cash | 40 |
|  | 785 |  | 785 |

With the above information and following assumption you are required to compute
(a) Economic Value Added
(b) Market Value Added.

Assuming that:
(i) WACC is $12 \%$ (ii) The share of company currently quoted at Rs. 50 each.
b) Calculate value of Goodwill in the following example using
i) Average Profit Method (assume 4 years of purchase)
ii) Super Profit Method (assume 4 years of purchase)
iii) Capitalization method
iv) Annuity method (assume 4 years of purchase)

Year Profit
1 25,000
2 65,000
$3 \quad(20,000)$
4 10,000
5 40,000
Normal rate of return on capital employed is $8 \%$. The total capital employed is 2,00,000
Q7) Any two from (a) or (b) $\qquad$ (10x1) = 10 Marks
a) Find value of equity from the following data using both FCFF and FCFE approach

| Year | Cash Flows to Equity |
| :---: | :---: |
| 1 | 100 |
| 2 | 120 |
| 3 | 110 |
| 4 | 80 |
| 5 | 90 |

Tax rate $50 \%$, Ke $15 \%$ and Rate of Interest $10 \%$. Assume that D/E is 2:1. Level of Debt has been constant throughout.
Terminal value of FCFE is 1,600 and that of FCFF is 2,400 . Value of debt 800 .
b) Fundamentals of Jinx Ltd. for the year ended are as follows

## Particulars

Sales
Operating Cost (Excluding Depreciation)
Capital Spending
Depreciation

Amount
4,000 1,800
800 360

| Decrease in Working Capital | 70 |
| :--- | :---: |
| Ke | $20 \%$ |
| Target Debt Equity | 1 |
| Growth | $5 \%$ p.a forever |
| 14\% perpetual debt | 700 |

$\begin{array}{lc}\text { Decrease in Working Capital } & 70 \\ \text { Ke } & 20 \%\end{array}$
Target Debt Equity 1
Growth
14\% perpetual debt 700
The market value of debt today is 700 and the current share price of one share is Rs. 100/. The firm has 10 lacs share outstanding. Tax rate is $30 \%$. Find the IV of the shares as per FCFF Approach and advise whether the share should be purchased or not.

