## JAIPURIA INSTITUTE OF MANAGEMENT, NOIDA

## POST GRADUATE DIPLOMA IN MANAGEMINNT

THIRD TRIMESTER (Batch 2017-19)
RE-APPEAR END-TERM EXAM, FEBRUARY-2018

| Course Name | Financial Management-I |  | Course Code | FIN 202 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Max. Time | 2 hours |  | Max. Marks | 40 |

## Attempt all questions

## Q. 1 (8 marks)

A company currently has annual sales of Rs 500000 and an average collection period of 30 days. It is considering a more liberal credit policy. If the credit period is extended, the company expects sales and bad debt losses to increase in following manner:

| Credit <br> Policy | Increase in <br> Credit <br> Period | Increase in <br> Sales(Rs) | Bad Debt\% <br> of Total <br> Sales |
| :---: | :---: | :---: | :---: |
| A | 10 days | 25000 | 1.2 |
| B | 15 days | 35000 | 1.5 |
| C | 30 days | 40000 | 1.8 |
| D | 42 days | 50000 | 2.2 |

The selling price per unit is Rs 2 . Variable cost per unit is Rs 1.20 . If the current bad debt loss is $1 \%$ of sales and ROI pre tax is $20 \%$, which credit policy should be undertaken assume 360 days a year?

## Q. 2 (9 marks)

Zenith Ltd has the following capital structure

|  | Rs (Crores) |  |
| :---: | :---: | :---: |
|  | Book <br> Value | Market <br> Value |
| Ordinary Shares | 20 | 50 |
| Reserves | 10 |  |
| Preference <br> Shares | 10 | 15 |
| Debt | 60 | 45 |



The tax rate is $30 \%$
a) The firm's debenture has face Value Rs 100 Coupon rate $13 \%$ and floatation cost is $3 \%$ and will be redeemed after 10 years at premium of $5 \%$
b) Rs 100 preference Shares with $11 \%$ dividend rate and will be redeemed at par after 10 years
c) The ordinary shares of the firm is selling for Rs 180 and the firm is expected to pay a dividend of Rs 15 and the dividend payment would grow at rate of 5\%

Calculate WACC using both book value and market value method and what is the relevance of Cost of Capital in decision making

## Q. 3 (2+5+3 marks)

Torrent Manufacturing, an established producer of printing equipment, expects its sales to remain flat for the next 3 to 5 years. Weak economic outlook and an expectation of low technology development over that period, being the primary reasons. On the basis of his scenario, the firm's management has been instructed by its board to institute programs that will allow it to operate more efficiently, earn higher profits and most important, maximize share value.

In this regard, the firm's Chief Financial Officer, Aakash Dhingra has been charged with evaluating the firm's capital structure. Aakash believes that the current capital structure, which contains $10 \%$ debt and $90 \%$ equity, may lack adequate financial leverage. To evaluate the firm's capital structure, Aakash has gathered the data summarized in the following table on the current capital structure ( $10 \%$ debt ratio) and two alternative capital structures - Option A with $30 \%$ debt in the capital structure and Option B with $50 \%$ debt in the capital structure.

| Sources of Capital | Capital Structures |  |  |
| :--- | :---: | :---: | :---: |
|  | Current | A | B |
|  | $(\mathbf{1 0 \%} \mathbf{~ d e b t )}$ | $\mathbf{( 3 0 \%} \mathbf{~ d e b t )}$ | $\mathbf{( 5 0 \%}$ debt) |
| Long term debt | 1 Million | 3 Million | 5 Million |
| Coupon interest rate | $9 \%$ | $10 \%$ | $12 \%$ |
| Equity shares | 100,000 shares | 70,000 shares | 40,000 shares |
| Total Capital | Rs 10 Million | Rs 10 Million | Rs 10 Million |

Aakash expects the firm's earnings before interest and tax (EBIT) to remain at its current level of Rs 1.2 Million. The corporate tax rate is $40 \%$.
a) Calculate cost of equity given the risk free rate being $6 \%$, expected market return of $18 \%$ and equity beta of the firm is 1.2 .
b) Calculate EPS and WACC for every capital structure alternative and comment on the following
i) Which capital structure will maximize Torrent's EPS at its expected level of EBIT of Rs. 1.2 Million
ii) Which capital structure will minimize Torrent's WACC at its expected level of EBIT of Rs. 1.2 Million
iii) On the basis of your finding above, which capital structure will you recommend for the Company and why?
c) Calculate the Degree of Financial Leverage and interpret the values.

## Q. 4 (4+3+1 marks)

A firm has two mutually exclusive proposals A and B under consideration requiring an initial outlay of Rs 1,000 each. Both the projects have life of 7 years with following cash flows:

| Cash flows in Rs |  |  |
| :---: | :---: | :---: |
| Year | Project A | Project B |
| 0 | -1000 | -1000 |
| 1 | 50 | 500 |
| 2 | 100 | 350 |
| 3 | 250 | 250 |
| 4 | 300 | 60 |
| 5 | 400 | 100 |
| 6 | 450 | 100 |
| 7 | 500 | 150 |

a) Find out the NPVs of both the projects at cost of capital of $12 \%$ and $15 \%$.
b) Find out the internal rate of returns (IRRs) for both the projects.
c) Which of the two projects is preferable if the cost of capital is i) $12 \%$, ii) $15 \%$.

## Q. 5 (5 marks)

For each of the companies described below, would you expect it to have a medium/high or a low dividend payout ratio? Explain Why.

1) A company with a large proportion of inside ownership, all of whom are high income individuals.
2) A growth company with an abundance of good investment opportunities
3) A company experiencing ordinary growth that has high liquidity and much unused borrowing capacity
4) A dividend paying company that experiences an unexpected drop in earnings from a trend.
5) A company with volatile earnings and high business risk.
