# VPM's DR VN BRIMS, Thane

Programme: PGDM (2018-20)

#### **Second Trimester Examination December 2018**

Subject	Corporate Finance		
Roll No.		Marks	60 Marks
Total No. of Questions	7	Duration	3 Hours
Total No. of printed pages		Date	24.12.2018

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

#### Q. 1 (a) Case Study:

Balance Sheet of Dayal Ltd. as on March 31, 2018 is given below:

Liabilities	Rs. In Crores	Assets	Rs. in Crores
Equity Shares	20.80	Fixed Assets	105.60
Long-term Liabilities	104.00	Current Assets	57.60
Current Liabilities	78.40	P&LA/c	40.00
	203.20		203.20

The following are the additional information:

- (i) Depreciation written off Rs.8 crores.
- (ii) Preliminary Expenses written off Rs. 1.60 crore.
- (iii) Net loss Rs.25.60 crores.

You are required to ascertain the stage of sickness and comment on them. (5 Marks)

- (b) Fill in the Blanks:
  - i. Present value is the current value of a ----- amount.
  - ii. Fixed Dividend is paid on ----- share capital.
  - iii. In ----- interest, interest is earned on the earlier interest as well as on the original principal.
  - iv. If earning before tax is Rs. ----- and tax rate is 20% then earning after tax will be Rs. 1,60,000.
  - v. The price at which the debentures are currently sold or bought is called the -----value.

(5 Marks)

- **(c)** Expand the following abbreviations:
  - i. DDM
  - ii. NPM
  - iii. FVIFA
  - iv. ROE
  - v. PVIF

(5 Marks)

- (d) Name two important ratios from the point of view of each of the following:
  - (i) Lender
  - (ii) Vendor
  - (iii) Investor
  - (iv) Management

(5 Marks)

# Attempt Any FOUR from the Remaining SIX Questions

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

- a) X Ltd. earns Rs. 6 per share having a capitalization rate of 10 percent and has a return on investment of 20%. According to Walter's model, what should be the price of the share at 25% dividend payout?
- **b)** (i) The following information is related to A Ltd.:

Current liabilities Rs. 400 lakh

Inventory turnover ratio 2
Quick ratio 2
1.5

Cost of goods sold Rs. 180 lakh Opening stock Rs. 40 lakh

Compute the total of current assets of A Ltd.

(ii) R Ltd. furnishes the following information for the year 2017-18:

Opening balance of trade creditors 1,80,000
Closing balance of trade creditors 2,00,000
Net credit annual purchases 7,30,000

Compute the average payment period (assuming 365 days a year) for the year 2017-18.

c) You are planning to retire in 40 years. Currently, the typical asset pleases you costs Rs. 3 lakhs, but you expect inflation to increase the price of the asset at a rate of 5% over the next 40 years. In order to buy the house on retirement how much must you save each year in equal annual end-of-year deposits, if you can earn 10 percent annually? Given that FVIF (5%, 40 years) = 7.04 & FVIFA (10%, 40 years) = 442.5926.

# Q3) Any two from (a) or (b) or (c) ——— (5x2) = 10 Marks

- a) A bank sells bonds of face value of Rs. 1,000, which carry a coupon rate of 8% per annum payable annually, with a maturity period of 9 years. The bond sells at a yield to maturity of 9% per annum. What is the selling price of the bond? Given that PVIFA (9%, 9 years) = 5.995, PVIF (9%, 9 years) = 0.460.
- **b)** List the factors affecting Dividend Policy of a Firm.
- c) Ramon Co. wants to take over a company that will generate a net cash flow of Rs. 5 Lakhs at the end of one year. The future cash flows are expected to grow at a rate of 8% p.a. and the required rate of return is 15%. How much must Ramon Company pay for the takeover, if it produces cash flows forever?

# Q4) Any two from (a) or (b) or (c) ——— (5x2) = 10 Marks

- a) The profit after tax for a firm is Rs. 20,000. The dividend pay-out ratio is 50%. If the growth rate of the earnings is 4% and the scrip trades at 2.5 times its EPS in the market, calculate the required rate of return by equity shareholders, if the number of outstanding shares is 5,000.
- Rs.1,000 par value bond with Coupon rate of 13% p.a. payable annually, matures in 3 years. The required rate of return is 9% per annum. Compute value of the bond. Given that PVIFA (9%, 3 years) = 2.531, PVIF (9 %, 3 years) = 0.772.
- c) The following information is available in respect of Sober Ltd.:

No. of shares outstanding = 1 Lakh

**EPS = Rs. 4** 

Dividend payout per share = Rs.2.4

Equity capitalisation rate = 12%

Rate of return on investment = 15%

Calculate:

- (i) Market value per share as per Walter's Model.
- (ii) Dividend payout ratio to keep share price at Rs.40.
- (iii) Optimum dividend payout ratio as per Walter's Model.
- (iv) Market Value per share at the optimum dividend payout ratio based on Walter's Model.

# Q5) Any two from (a) or (b) or (c) ——— (5x2) = 10 Marks

- A bond with face value of Rs. 100 provides 12% annual return and pays Rs. 105 at the time of maturity, which is 10 years from now. If the investor's required rate of return is 13%, at what price should the company issue the bond? Given that PVIFA (13%, 10 years) = 5.426, PVIF (13 %, 10 years) = 0.295.
- b) Mr. Rohan has following investments in two Banks I and II:

	Bank I	Bank II		
Amount invested (Rs.)	1,20,000	6,00,000		
Compounded Rate of Interest	10% p.a.	8% p.a.		
Period	3 Years	3 Years		

Calculate the Future value of investment at the end of 3<sup>rd</sup> year.

- c) Company 'P' issues 12% 2,000 Debentures of Rs. 100 each and company 'Q' issues 15% 3,000 Debentures of Rs. 100 each. The debentures are redeemable after 8 years. Both companies are in tax bracket of 30%. Calculate the cost of debt after tax for both companies, if the Debentures are issued at
  - i. Par
  - ii. 10% discount

# Q6) Any two from (a) or (b) or (c) ———— (5x2) = 10 Marks

- A bond of Rs. 1,000 value carries a coupon rate of 10% and a maturity period of 6 years. Interest is payable semiannually. If the required rate of return is 12%, what is the value of the bond? Given that PVIFA (6%, 12) = 8.384, PVIF (6 %, 12) = 0.947, PVIFA (12%, 6) = 4.111, PVIF (12 %, 6) = 0.507.
- **b)** (i) K Ltd., furnished the following information :

9% Preference share capital6,00,00012% Debentures4,00,000Equity Shareholder's fund25,00,000

Compute the capital gearing ratio of K Ltd.

(ii) The following information is related to A Ltd.:

Current liabilities and provisions Rs.150 lakh

Net sales = Rs. 700 lakh Inventory turnover ratio = 7

Current ratio = 1.50

Receivables / Quick Assets Ratio = 0.8

What is the amount of cash and bank balance? (Assume 360 days in a year).

**c)** The following information is collected from the annual report of Joy Ltd.:

Profit before tax = Rs. 2.50 crores.

Tax rate = 40%

Retention ratio = 40%

Number of outstanding shares = 50,00,000

Equity capitalisation rate = 12%

Rate of return on investment = 15%

What should be the market price per share according to Gordon's model of dividend policy?

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

a) Following are the details of KBS Ltd.:

10% Debentures (Rs.100 per debenture) - Rs.10 Lakhs

8% Preference Shares (Rs.100 per share) - Rs. 5 Lakhs

Equity Shares (Rs. 10 per share) – Rs. 20 Lakhs

Dividend is expected at the end of the year Rs. 3 per share, growth rate in dividend is 10% and tax rate is 40%.

Calculate the weighted average cost of capital by considering the above information.

b) S Limited has issued convertible debentures with coupon rate of 12%. Each debenture has an option to convert to 20 equity shares at any time until the date of maturity. Debentures will be redeemed at Rs. 100 on maturity of 5 years. An investor generally requires a rate of return of 8% p.a. on a 5 year security. As an investor, when will you exercise conversion for given market prices of the equity share of (i) Rs. 4, (ii) Rs. 5 and (iii) Rs. 6.

Cumulative PV factor for 8% for 5 years = 3.993

PV factor for 8% for year 5 = 0.681

c) Critically examine Modigliani- Miller Model (MM Hypothesis) of dividend payments.