

VPM's
DR VN BRIMS, Thane
Programme: PGDM (2017-19)
Third Trimester Examination April 2018

Subject	Financial Management II		
Roll No.		Marks	60 Marks
Total No. of Questions	7	Duration	3 Hours
Total No. of printed pages	3	Date	11.04.2018

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

Q. 1 (a) Case Study: 10 Marks)

Modern Footwear is considering the purchase of a new leather stitching machine to replace an existing machine. The existing machine has a book value of Rs. 2 lakh and a salvage value of Rs. 3 lakh. The useful life of machine is 5 more years and at the end of it, its salvage value is Nil. The new machine costs Rs. 8 lakh. It is expected to bring an annual saving of Rs. 3 lakh in operating costs. The new machine will fetch a salvage value of Rs. 5 lakh after 5 years. The tax rate of the firm is 40 percent. The cost of capital is 15%.

Required:

- i. Derive the net cash flows associated with the replacement decision.
- ii. Appraise the replacement proposal using Net Present Value criterion and
- iii. Advise the management.

(b) Fill in the Blanks: (5 Marks)

- 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.

(c) Expand the following abbreviations: (5 Marks)

- i. DDM
- ii. CAPM
- iii. DCF
- iv. IRR
- v. PVIF

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) Calculate the Payback period & Net Present Value for the following investment:

Year	Cash Flow (Rs.)
0	(30,000)
1	4,000
2	10,000
3	20,000
4	11,000

The cost of capital used for discounting the cash flow is 12%. Discounting Factors @ 12% for years 1 to year 4 are 0.893, 0.797, 0.712, 0.636 respectively.

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 takeover 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.
- b) 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) 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 3rd 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
- Par
 - 10% discount
 - 10% premium

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

- a) 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) X Limited has paid a dividend of Rs. 2.5 per share on a face value of Rs. 10 in the financial year ending on 31st March, 2018. The details are as follows:
- | | |
|---------------------------------------|--------|
| Current market price of share | Rs. 60 |
| Growth rate of earnings and dividends | 10% |
| Beta of share | 0.75 |
| Average market return | 15% |
| Risk free rate of return | 9% |
- Calculate the intrinsic value of the share.
- 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.