

**P.E.S. College of Engineering, Mandya - 571 401***(An Autonomous Institution affiliated to VTU, Belagavi)***Second Semester - Master of Business Administration (MBA)****Semester End Examination; May/ June - 2019****Financial Management***Time: 3 hrs**Max. Marks: 100*

*Note: i) Answer all **FOUR** full questions from **PART - A** and **PART - B** (Case Study) is compulsory.  
ii) Present value and Future value Tables shall be allowable.*

**PART - A**

- 1 a. What are the important functions generally looked after by a finance manager? 10  
b. Differentiate between commercial paper and certificate of deposit. 10

**OR**

- 2 a. What is meant by profit maximization objective and wealth maximization objective? In what respect is the objective of 'Wealth maximization' superior to profit maximization objective? 10  
b. Explain the significance and limitations of debenture as a means of financing. 10  
3 a. Explain in brief the different approaches of cost of capital. 10  
b. AB Ltd. Estimates the cost of equity and debt components of its capital for different levels of debt equity mix as follows:

Debt as % of (total capital)	Cost of equity	Cost of debt (before tax)
0	16%	12%
20%	16%	12%
40%	20%	16%
60%	25%	20%

Suggest the best debt: equity mix for the company. Tax rate applicable to the company is 50%.  
Show workings.

**OR**

- 4 a. Write a note on : 10  
i) Bit coins                      ii) Green Finance  
b. Assuming no taxes and given the Earnings Before Interest and Taxes (EBIT) Interest (I) at 10% and equity capitalization rate (K), as under, calculate the total market value of each item:

Firms	EBIT	I	K
X	2,00,000	20,000	12.0%
Y	3,00,000	60,000	16.0%
Z	5,00,000	2,00,000	15.0%
W	6,00,000	2,40,000	18.0%

Also determine the weighted average cost capital for each firm.

- 5 a. I) Suppose that investor wins the lottery. The winnings consist of 20 equal annual payments of ₹ 50,000. Investor decides to save all of this money for retirement and deposit it into account that earns 8% per year. What is the amount of retirement, due after 20 years? 10
- II) What will be in your retirement account after 35 years, if investor makes ₹ 2,000 annual deposits that earn i) 10%    ii) 50%    iii) 12%
- b. Suppose investor has decided to buy a new car as a reward for acing finance exam. Investor will need a loan of ₹ 1,50,000 and would like to make payments for 2 years. The dealership has offered a 12% rate on the loan. What will your monthly payment be? 10

**OR**

- 6 a. Stocks A and B have the following historical returns.

Year	Stock A's returns (K <sub>A</sub> ) %	Stock B's returns (K <sub>B</sub> ) %
1997	-12.24	-5.00
1998	23.67	19.55
1999	35.45	44.09
2000	5.82	1.20
2001	28.30	21.16

10

You are required to calculate the average rate of return for each stock during the period 1999 through 2001. Assume that someone held a portfolio consisting 50% of stock A and 50% of stock B. What would have been the realized rate of return on portfolio in each year from 1999 through 2001? What would have been the average return on the portfolio during the period?

- b. The probability distribution of returns for stock A and the market is given below :

Probability	Conditional returns (%)	
	Stock A	Market
0.20	(12)	(15)
0.15	30	20
0.30	40	30
0.10	20	35
0.25	(15)	(10)

10

You are required to calculate the;

- i) Mean return and standard deviation of returns for stock A
- ii) Beta of stock A and state its implications

- 7 a. A firm is considering the introduction of new product which will have a life of five years. Two alternative methods of promoting the product have been identified.

Alternative - I

This will involve employing a large number of agents. An immediate expenditure of ₹ 5,00,000 will be required to advertise the product. This will produce net annual cash flow ₹ 3,00,000 at the end of each subsequent five years. However, the agents will have to be paid ₹ 50,000 each year. On termination of the contract, the agents will have to be paid a lump sum ₹ 1,00,000 at the end of the fifth year.

10

Alternative - II

Under this alternative, the firm will not employ agents but will sell directly to the consumers. The initial expenditure on advertising will be ` 2,50,000. This bring in cash inflows of ` 1,50,000 at the end of the each year. However this alternative will involve out-of-pocket cost per sales administration to the extent of ` 50,000. The firm also proposes to allocate fixed costs worth ` 20,000 per year to this product if this alternative is pursued.

Required:

- i) Advise the management as to the method of promotion to be adopted
  - ii) Define the internal rate of return. Calculate the internal rate of return for Alternative II. You may assume that firm's cost of capital is 20% p.a.
- b. Calculate operating leverage and financial leverage under situations A, B and C and financial plans I, II and III respectively from the following information relating to operation and capital structure of XYZ Co. Also find out the combination of operating and financial leverage which gives the highest value and least value. How are these calculations useful to the finance manager in a company?

Installed Capacity	1200 units
Actual production and sales	800 units
Selling price per unit	` 15
Variable cost per unit	` 10
Fixed cost : Situation A	` 1,000
Situation B	` 2,000
Situation C	` 3,000

10

Capital Structure	Financial Plan		
	I	II	III
Equity	` 5,000	` 7,500	` 2,500
Debt	` 5,000	` 2,500	` 7,500
Cost of Debt			12%

**OR**

- 8 a. A Ltd. is considering the purchase of new machine which will cost ` 4,00,000. It is estimated that the machine will have a life of seven years, at the end of which, it will have scrap value of ` 10,000. This will also involve an investment of working capital ` 1,00,000. The net pre-tax cash flows which this machine produces are as follows:

Year	`	Discount of factor @ 15%
1	1,00,000	0.870
2	1,00,000	0.756
3	1,40,000	0.658
4	1,30,000	0.572
5	1,10,000	0.497
6	1,20,000	0.432
7	1,00,000	0.376

10

The company has a target return of 15% on this basis. You are required to prepare a statement evaluating the above project. Assume taxation @ 50%.

Contd...4

- b. On 1<sup>st</sup> January 2008, the Board of Directors of Milan Ltd. wishes to know the amount of working capital that will be required to meet the programme they have planned for the year. From the following information, forecast the working capital requirements by preparing the projected balance sheet.

	`
Issued share capital	2,00,000
8% debentures	1,00,000
Fixed Assets on 1 <sup>st</sup> Jan, value at	1,00,000
The expected ratio of cost to selling price are:	
Materials	50%
Direct Wages and overhead	50%

- i) Estimated production 48,000 units per annum
- ii) Raw materials are expected to remain in stock on an average 1½ months before issue to production
- iii) Processing time is 2 months
- iv) Finished goods will stay in warehouse awaiting dispatch to customers is 2 months
- v) Credit to debtors is for 2½ months
- vi) Credit from creditors is 1 month
- vii) Time lag in payment of wages and overheads is 1½ months
- viii) Selling price is `10 per unit

There is regular production and sales cycle. Ignore depreciation.

**PART - B ( Case study - Compulsory)**

9. Calculate the amount of working capital requirements for Jolly and Co. Ltd for the following information:

	` Per unit
Raw materials	160
Direct Labour	60
Overheads	120
Total Cost	340
Profit	60
Selling Price	400

- Raw materials are held in stock on an average for one month
- Materials are in process on an average for 2 weeks
- Finished goods are in stock on an average for one month
- Credit allowed by supplier is one month and credit allowed to debtors is two months. Time lag in payment of wages is 1½ week. Time lag in payment of overhead expenses is one month. One fourth of the finished goods are sold against cash
- Cash in hand and at bank is expected to be ` 50,000; and expected level of production amounts to ` 1,04,000 units.

You may assume that production is carried on evenly throughout the year, wages and overheads accrue similarly

\* \* \* \*