K.J. Somaiya Institute of Management Studies & Research

Course: MFM II Semester (2017-20 Batch)

Sub: Financial Management

Date of Exam: 9/4/2018 Time: 3 Hours Marks: 50

Please Note:

1. **Each question in Section A carries 20 marks. Attempt any one.**
2. **Each question in Section B carries 10 marks. Attempt any three.**
3. **Use of Calculators is allowed**
4. **PV Tables are provided with the question paper**

SECTION A

Q1. Essentials Limited is considering an investment proposal to purchase a machine costing Rs. 2,50,000. The machine has a life expectancy of 5 years and no salvage value. The company's tax rate is 40%.The firm uses straight line method for providing depreciation. The cost of capital of the company is 10%. The estimated cash flows after tax (CFAT) from the machine are as flows:

YEAR	CASH INFLOWS
1	60,000
2	70,000
3	90,000
4	1,00,000
5	1,50,000

Calculate:

1. NPV
2. Profitability Index (PI or BCR)
3. IRR

Should the company accept the proposal? Comment.

OR

Q 2. A company adopts a six-monthly time span, subdivided into monthly intervals for its cash budget.

(a) The following information is available in respect of its operations :

(Rs lakh)

Particulars	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6
Sales	40	50	60	60	60	60
Purchases	1	1.5	2	2	2	1
Direct labour	6	7	8	8	8	6
Manufacturing Overheads	13	13.5	14	14	14	13
Administrative Expenses	2	2	2	2	2	2
Distribution Expenses	2	3	4	4	4	2
Raw materials (30 days credit)	14	15	16	16	16	15

(b) Assume the following financial flows during the period :

(1) Inflows (i) Interest received in month 1 and month 6, Rs. 1 lakh each

(ii) Dividend received in month 3 and month 6, Rs. 2 lakhs each

(iii) Sales of shares in month 6, Rs. 160 lakhs

(2) Outflows (i) Interest paid during month 1 Rs. 0.4 lakh

(ii) Dividend paid during month 1 and month 4, Rs. 2 lakhs each

(iii) Instalment payment on machine in month 6, Rs. 20 lakhs

(iv) Repayment of loan in month 6, Rs. 80 lakhs

(3) Assume that 10 % of each month's sales are for cash; the balance 90 % are on credit. Credit sales from preceding period are not to be considered while preparing the current cash budget. The terms and credit experience of the firm are:

(i) No cash discount

(ii) 1% of credit sales are returned by the customers

(iii) 1% of total accounts receivable is bad debt

(iv) 50% of all accounts that are going to pay, do so within 1 month from the month of sale

(v) The remaining accounts that are going to pay, do so within 2 months from the month of sale

Using the above information, prepare a cash budget and comment on the results.

SECTION B

Q 3. "Equity Capital represents ownership capital as equity shareholders collectively own the company. They enjoy the rewards as well as bear the risks of ownership." Explain the statement.

OR

Q 4. (a) A firm wants to raise debt by issue of a short-term bond with a face value of Rs. 100 with a coupon rate of 11%, payable annually redeemable at a premium of 5% at the end of three years. The firm will have to incur floatation cost of 5%. Find the cost of debt with tax rate of 40%.

(b) Raj Plastic has been in operation for the last 15 years and its shares in the stock market are currently trading at Rs. 120. The most recent dividend paid by the firm is Rs.10 per share. Historically, the dividend of Raj Plastics has been growing at 10%. Calculate its cost of equity.

Q5. Tubes Ltd. are the manufactures of picture tubes for TV. The following are the details of the operation during the current year:

Annual usage	5200 units
Ordering cost per order	Rs. 100
Price per unit	Rs. 500
Inventory carrying cost (% per	20% or 0.20

annum)	

Use the information given above to answer:

a. What is the EOQ (Economic order quantity) for Tube Ltd. ?

b. If the supplier is willing to supply 1500 units per order at a discount of 5%, is it worth accepting?

Q 6. Use the information given in the summarized balance sheet and statement of profit & loss of KP Systems Ltd. to prepare a common size and common base statement.

Statement of Profit and Loss of KP Systems Ltd. (Rs. in million)

	20X1	20X0
Total Revenues	810	700
Expenses excluding financing cost and tax	592	520
Profit before financing cost and tax	218	180
Financing cost	60	50
Proft before tax	158	130
Tax	47.4	39
Proft(loss) for the period	110.6	91

Balance Sheet of KP Systems Ltd. (Rs. in

	20X1	20X0
Shareholders' Funds	440	400
Non-current liabilities	130	100
Other non-current liabilities	50	40
Current liabilities	286	208
Total	906	748
Non- current assets	355	300
Other non-current assets	75	110
Current assets	476	338
Total	906	748

Q7. Calculate the operating leverage for each of the four firms, A, B, C and D from the following price and cost data. What conclusions you can draw with respect to levels of fixed cost and the degree of operating leverage result? Explain. Assume the number of units sold to be 5000.

Particulars	Firm A	Firm B	Firm C	Firm D
Sales per unit	Rs. 20	Rs. 32	Rs. 50	Rs. 70
Variable cost per unit	6	16	20	50
Fixed operating	60,000	40,000	1,00,000	NIL

cost				

sent value interest factor of $1 per period at i% for n periods, PVIF(i,n).

1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%	16%	17%	18%	19%	20
0.990	0.980	0.971	0.962	0.952	0.943	0.935	0.926	0.917	0.909	0.901	0.893	0.885	0.877	0.870	0.862	0.855	0.847	0.840	0.83
0.980	0.961	0.943	0.925	0.907	0.890	0.873	0.857	0.842	0.826	0.812	0.797	0.783	0.769	0.756	0.743	0.731	0.718	0.706	0.69
0.971	0.942	0.915	0.889	0.864	0.840	0.816	0.794	0.772	0.751	0.731	0.712	0.693	0.675	0.658	0.641	0.624	0.609	0.593	0.57
0.961	0.924	0.888	0.855	0.823	0.792	0.763	0.735	0.708	0.683	0.659	0.636	0.613	0.592	0.572	0.552	0.534	0.516	0.499	0.48
0.951	0.906	0.863	0.822	0.784	0.747	0.713	0.681	0.650	0.621	0.593	0.567	0.543	0.519	0.497	0.476	0.456	0.437	0.419	0.40
0.942	0.888	0.837	0.790	0.746	0.705	0.666	0.630	0.596	0.564	0.535	0.507	0.480	0.456	0.432	0.410	0.390	0.370	0.352	0.33
0.933	0.871	0.813	0.760	0.711	0.665	0.623	0.583	0.547	0.513	0.482	0.452	0.425	0.400	0.376	0.354	0.333	0.314	0.296	0.27
0.923	0.853	0.789	0.731	0.677	0.627	0.582	0.540	0.502	0.467	0.434	0.404	0.376	0.351	0.327	0.305	0.285	0.266	0.249	0.23
0.914	0.837	0.766	0.703	0.645	0.592	0.544	0.500	0.460	0.424	0.391	0.361	0.333	0.308	0.284	0.263	0.243	0.225	0.209	0.19
0.905	0.820	0.744	0.676	0.614	0.558	0.508	0.463	0.422	0.386	0.352	0.322	0.295	0.270	0.247	0.227	0.208	0.191	0.176	0.16
0.896	0.804	0.722	0.650	0.585	0.527	0.475	0.429	0.388	0.350	0.317	0.287	0.261	0.237	0.215	0.195	0.178	0.162	0.148	0.13
0.887	0.788	0.701	0.625	0.557	0.497	0.444	0.397	0.356	0.319	0.286	0.257	0.231	0.208	0.187	0.168	0.152	0.137	0.124	0.11
0.879	0.773	0.681	0.601	0.530	0.469	0.415	0.368	0.326	0.290	0.258	0.229	0.204	0.182	0.163	0.145	0.130	0.116	0.104	0.09