Roll No…………………

Time allowed : 3 hours | *Maximum marks : 100*

Total number of questions : 7 | *Total number of printed pages : 7*

***NOTE** : 1. Answer FIVE Questions including Question No.1 which is compulsory. All working notes should be shown distinctly.*

2. Tables showing the present value of ₹1 and the present value of an annuity of ₹1 for 15 years are annexed.

1. Comment on the following. Attempt ***any four :***

(i) Financing decisions are affected by liquidity analysis.

(ii) Capital asset pricing model (CAPM) is a tool to work out cost of equity.

(iii) A treasury manager has a significant role to play in the overall functioning of a firm.

(iv) Dividend policy is irrelevant in decision making.

(v) Apart from the retention of profits and capitalising the accumulated earnings, the bonus shares serve several other objectives.

(5 marks each)

2. (a) Annual sales of Sangam Handlooms Ltd. (SHL) is ₹300 crore. About 85% of its sales is on credit basis and the average collection period is 45 days. The company's annual cost of administering credit sales is ₹80 lakh. It is possible to save ₹60 lakh, out of the bad debts and sales administering costs, if the company avails of full-factor service from a factoring company. SHL approached a factoring company and got the following terms :

Advance payment	: 85%
Discount rate	: 15% p.a.
Commission of service	: 1.1% (to be paid upfront)

Answer the following —

(i) What will be the effective cost of factoring (assume 360 days in a year) ?

(ii) SHL can borrow an amount equivalent to the advance offered by the factoring company from a bank at 7% p.a. Should the company avail the services of factoring company ?

(8 marks)

(b) Mohan, an Indian importer has to settle an import bill for \$1,30,000. The exporter has given him two options :

Option-1 : Pay immediately without any interest charge.

Option-2 : Pay after three months with interest @ 5% per annum.

The importer's bank charges 15% per annum on overdrafts. The exchange rates in the market are as follows :

Spot rate for \$1	:	₹58.35/58.36
3-months forward rate for \$1	:	₹58.81/58.83

Advise Mohan.

(6 marks)

(c) A wheat trader has planned to sell 4,40,000 Kgs. of wheat after 6 months from now. The spot price of wheat is ₹19 per Kg. and 6 months future on the same is trading at ₹18.50 per Kg. (contract size = 2,000 Kgs.). The price is expected to fall to as low as ₹17 per Kg. 6 months hence.

What the trader can do to mitigate its risk of reduced profit ? If he decides to make use of future market what would be effective realised price for its sale when after 6-months spot price is ₹17.50 and future contract price for 6 months is ₹17.55.

(6 marks)

3. (a) Skyline Ltd. is planning an expansion programme which will require ₹30 crore and can be funded through one of the following three options :

Option-1 : Issue further equity shares of ₹100 at par

Option-2 : Raise loans @ 15% interest

Option-3 : Issue preference shares @ 12%.

Present paid-up capital is ₹60 crore and average annual EBIT is ₹12 crore. Assume tax rate at 30%. Post expansion EBIT is expected to be ₹15 crore p.a.

Calculate EPS under the three financing options indicating the alternative giving the highest return to the equity shareholders. Also determine the point of indifference between equity share capital and debt financing options.

(10 marks)

(b) You as an investor had purchased a 4-month call option on the equity shares of Sound Ltd. of ₹10, of which the current market price is ₹132 and the exercise price ₹150. You expect the price to move in the range between ₹120 to ₹190. The expected share price of Sound Ltd. and related probability are given below :

Expected Price (₹)	120	140	160	180	190
Probability	0.05	0.20	0.50	0.10	0.15

Compute the following —

(i) Expected share price at the end of 4 months.

(ii) Value of call option at the end of 4 months, if the exercise price prevails.

(iii) In case the option is held to its maturity, what will be the expected value of the call option ?

(10 marks)

4. Distinguish between the following. Attempt ***any four*** :

(i) 'Interest rate parity' and 'purchasing power parity'.

(ii) 'Net income approach to capital structure' and 'net operating income approach to capital structure'.

(iii) 'Average accounting rate of return' and 'internal rate of return'.

(iv) 'Financial distress' and 'insolvency'.

(v) 'Financing decisions' and 'dividend decisions'.

(5 marks each)

5. (a) The summarised balance sheet of Lily Ltd. is given as under :

		₹
I	*EQUITY AND LIABILITIES*	
	Equity capital (₹10 per share)	90,000
	Retained earnings	30,000
	10% Long-term debt	1,20,000
	Current liabilities	60,000
		3,00,000
II	*ASSETS*	
	Net fixed assets	2,25,000
	Current assets	75,000
		3,00,000

The company's total assets turnover ratio is 3.00, its fixed operating cost is ₹1,50,000 and its variable operating cost ratio is 50%. The income-tax rate is 50%.

You are required to —

(i) Calculate different type of leverages for the company.

(ii) Determine the likely level of EBIT if EPS is (i) ₹1; (ii) ₹2; and (iii) ₹0.

(12 marks)

(b) The following information is available in respect of Sober Ltd. :

—	No. of shares outstanding	:	1 lakh
—	Earnings per share	:	₹4
—	Dividend payout per share	:	₹2.4
—	Equity capialisation rate	:	12%
—	Rate of return on investment	:	15%

You are required to calculate —

(i) Market value per share as per Walter's Model.

(ii) Dividend payout ratio to keep share price at ₹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.

(4 marks)

(c) Return on Lucky Ltd.'s shares has a standard deviation of 22%, as against the standard deviation of the market at 12%. The correlation co-efficient between market and stock of Lucky Ltd. is 0.7%.

Compute the Beta (β) value, systematic risk and unsystematic risk of Lucky Ltd.'s shares.

(4 marks)

6. Smile Ltd. is presently operating at 60% level of its capacity producing 36,000 packets of snack foods and proposes to increase capacity utilisation in the coming year by $33\frac{1}{3}$% over the existing level of production.

The following information has been supplied :

(i) Unit cost structure of the product at current level :

	₹
Raw material	4.00
Wages (variable)	2.00
Overheads (variable)	2.00
Fixed overheads	1.00
Profit	3.00
Selling price	12.00

(ii) Raw materials will remain in stores for 1 month before being issued for production. Material will remain in process for further 1 month. Suppliers grant 3 months credit to the company.

(iii) Finished goods remain in godown for 1 month.

(iv) Debtors are allowed credit for 2 months.

(v) Lag in wages and overheads payments is 1 month and these expenses accrue evenly throughout the production cycle.

(vi) No increase either in cost of inputs or selling price is envisaged.

You are required to prepare a projected profitability statement and the working capital requirement of Smile Ltd. at the new level, assuming that a minimum cash balance of ₹19,500 has to be maintained.

(20 marks)

7. Write notes on the following. Attempt ***any four*** :

(a) Company Secretary as a forex manager

(b) Credit rating

(c) Economic value added (EVA)

(d) Optimal capital structure

(e) Role of participants of commodity market.

(5 marks each)

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TABLE - 1 : **PRESENT VALUE OF RUPEE ONE**

RATE	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10	YEAR 11	YEAR 12	YEAR 13	YEAR 14	YEAR 15
5%	0.9524	0.9070	0.8638	0.8227	0.7835	0.7462	0.7107	0.6768	0.6446	0.6139	0.5847	0.5568	0.5303	0.5051	0.4810
6%	0.9434	0.8900	0.8396	0.7921	0.7473	0.7050	0.6651	0.6274	0.5919	0.5584	0.5268	0.4970	0.4688	0.4423	0.4173
7%	0.9346	0.8734	0.8163	0.7629	0.7130	0.6663	0.6227	0.5820	0.5439	0.5083	0.4751	0.4440	0.4150	0.3878	0.3624
8%	0.9259	0.8573	0.7938	0.7350	0.6806	0.6302	0.5835	0.5403	0.5002	0.4632	0.4289	0.3971	0.3677	0.3405	0.3152
9%	0.9174	0.8417	0.7722	0.7084	0.6499	0.5963	0.5470	0.5019	0.4604	0.4224	0.3875	0.3555	0.3262	0.2992	0.2745
10%	0.9091	0.8264	0.7513	0.6830	0.6209	0.5645	0.5132	0.4665	0.4241	0.3855	0.3505	0.3186	0.2897	0.2633	0.2394
11%	0.9009	0.8116	0.7312	0.6587	0.5935	0.5346	0.4817	0.4339	0.3909	0.3522	0.3173	0.2858	0.2575	0.2320	0.2090
12%	0.8929	0.7972	0.7118	0.6355	0.5674	0.5066	0.4523	0.4039	0.3606	0.3220	0.2875	0.2567	0.2292	0.2046	0.1827
13%	0.8850	0.7831	0.6931	0.6133	0.5428	0.4803	0.4251	0.3762	0.3329	0.2946	0.2607	0.2307	0.2042	0.1807	0.1599
14%	0.8772	0.7695	0.6750	0.5921	0.5194	0.4556	0.3996	0.3506	0.3075	0.2697	0.2366	0.2076	0.1821	0.1597	0.1401
15%	0.8696	0.7561	0.6575	0.5718	0.4972	0.4323	0.3759	0.3269	0.2843	0.2472	0.2149	0.1869	0.1625	0.1413	0.1229
16%	0.8621	0.7432	0.6407	0.5523	0.4761	0.4104	0.3538	0.3050	0.2630	0.2267	0.1954	0.1685	0.1452	0.1252	0.1079
17%	0.8547	0.7305	0.6244	0.5337	0.4561	0.3898	0.3332	0.2848	0.2434	0.2080	0.1778	0.1520	0.1299	0.1110	0.0949
18%	0.8475	0.7182	0.6086	0.5158	0.4371	0.3704	0.3139	0.2660	0.2255	0.1911	0.1619	0.1372	0.1163	0.0985	0.0835
19%	0.8403	0.7062	0.5934	0.4987	0.4190	0.3521	0.2959	0.2487	0.2090	0.1756	0.1476	0.1240	0.1042	0.0876	0.0736
20%	0.8333	0.6944	0.5787	0.4823	0.4019	0.3349	0.2791	0.2326	0.1938	0.1615	0.1346	0.1122	0.0935	0.0779	0.0649
21%	0.8264	0.6830	0.5645	0.4665	0.3855	0.3186	0.2633	0.2176	0.1799	0.1486	0.1228	0.1015	0.0839	0.0693	0.0573
22%	0.8197	0.6719	0.5507	0.4514	0.3700	0.3033	0.2486	0.2038	0.1670	0.1369	0.1122	0.0920	0.0754	0.0618	0.0507
23%	0.8130	0.6610	0.5374	0.4369	0.3552	0.2888	0.2348	0.1909	0.1552	0.1262	0.1026	0.0834	0.0678	0.0551	0.0448
24%	0.8065	0.6504	0.5245	0.4230	0.3411	0.2751	0.2218	0.1789	0.1443	0.1164	0.0938	0.0757	0.0610	0.0492	0.0397
25%	0.8000	0.6400	0.5120	0.4096	0.3277	0.2621	0.2097	0.1678	0.1342	0.1074	0.0859	0.0687	0.0550	0.0440	0.0352

TABLE - 2 : **PRESENT VALUE OF AN ANNUITY OF RUPEE ONE**

RATE	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10	YEAR 11	YEAR 12	YEAR 13	YEAR 14	YEAR 15
5%	0.9524	1.8594	2.7232	3.5460	4.3295	5.0757	5.7864	6.4632	7.1078	7.7217	8.3064	8.8633	9.3936	9.8986	10.3797
6%	0.9434	1.8334	2.6730	3.4651	4.2124	4.9173	5.5824	6.2098	6.8017	7.3601	7.8869	8.3838	8.8527	9.2950	9.7122
7%	0.9346	1.8080	2.6243	3.3872	4.1002	4.7665	5.3893	5.9713	6.5152	7.0236	7.4987	7.9427	8.3577	8.7455	9.1079
8%	0.9259	1.7833	2.5771	3.3121	3.9927	4.6229	5.2064	5.7466	6.2469	6.7101	7.1390	7.5361	7.9038	8.2442	8.5595
9%	0.9174	1.7591	2.5313	3.2397	3.8897	4.4859	5.0330	5.5348	5.9952	6.4177	6.8052	7.1607	7.4869	7.7862	8.0607
10%	0.9091	1.7355	2.4869	3.1699	3.7908	4.3553	4.8684	5.3349	5.7590	6.1446	6.4951	6.8137	7.1034	7.3667	7.6061
11%	0.9009	1.7125	2.4437	3.1024	3.6959	4.2305	4.7122	5.1461	5.5370	5.8892	6.2065	6.4924	6.7499	6.9819	7.1909
12%	0.8929	1.6901	2.4018	3.0373	3.6048	4.1114	4.5638	4.9676	5.3282	5.6502	5.9377	6.1944	6.4235	6.6282	6.8109
13%	0.8850	1.6681	2.3612	2.9745	3.5172	3.9975	4.4226	4.7988	5.1317	5.4262	5.6869	5.9176	6.1218	6.3025	6.4624
14%	0.8772	1.6467	2.3216	2.9137	3.4331	3.8887	4.2883	4.6389	4.9464	5.2161	5.4527	5.6603	5.8424	6.0021	6.1422
15%	0.8696	1.6257	2.2832	2.8550	3.3522	3.7845	4.1604	4.4873	4.7716	5.0188	5.2337	5.4206	5.5831	5.7245	5.8474
16%	0.8621	1.6052	2.2459	2.7982	3.2743	3.6847	4.0386	4.3436	4.6065	4.8332	5.0286	5.1971	5.3423	5.4675	5.5755
17%	0.8547	1.5852	2.2096	2.7432	3.1993	3.5892	3.9224	4.2072	4.4506	4.6586	4.8364	4.9884	5.1183	5.2293	5.3242
18%	0.8475	1.5656	2.1743	2.6901	3.1272	3.4976	3.8115	4.0776	4.3030	4.4941	4.6560	4.7932	4.9095	5.0081	5.0916
19%	0.8403	1.5465	2.1399	2.6386	3.0576	3.4098	3.7057	3.9544	4.1633	4.3389	4.4865	4.6105	4.7147	4.8023	4.8759
20%	0.8333	1.5278	2.1065	2.5887	2.9906	3.3255	3.6046	3.8372	4.0310	4.1925	4.3271	4.4392	4.5327	4.6106	4.6755
21%	0.8264	1.5095	2.0739	2.5404	2.9260	3.2446	3.5079	3.7256	3.9054	4.0541	4.1769	4.2784	4.3624	4.4317	4.4890
22%	0.8197	1.4915	2.0422	2.4936	2.8636	3.1669	3.4155	3.6193	3.7863	3.9232	4.0354	4.1274	4.2028	4.2646	4.3152
23%	0.8130	1.4740	2.0114	2.4483	2.8035	3.0923	3.3270	3.5179	3.6731	3.7993	3.9018	3.9852	4.0530	4.1082	4.1530
24%	0.8065	1.4568	1.9813	2.4043	2.7454	3.0205	3.2423	3.4212	3.5655	3.6819	3.7757	3.8514	3.9124	3.9616	4.0013
25%	0.8000	1.4400	1.9520	2.3616	2.6893	2.9514	3.1611	3.3289	3.4631	3.5705	3.6564	3.7251	3.7801	3.8241	3.8593