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 ***any four*** of the following :

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

(ii) A firm's stock price is not related to its mix of debt and equity financing.

(iii) Depreciation is a source of internal finance.

(iv) A stable dividend policy is always preferable to fluctuating dividend policy.

(v) Risk and uncertainty are quite inherent in capital budgeting decisions.

(5 marks each)

2. (a) Indigo Ltd. has the following capital structure :

	₹ in Lakhs
Ordinary shares of ₹1 each	1,000
Retained earnings	160
8% Debentures	440
	1,600

In order to undertake a programme of expansion, the company requires to raise additional capital of ₹400 lakh and three alternative financing schemes are under consideration :

(i) A rights issue, at nominal value, of an additional 400 lakh ₹1 ordinary shares; or

(ii) Issue, at nominal value, 400 lakh, 10% preference shares of ₹1; or

(iii) Issue an additional ₹400 lakh of 8% debentures.

Without the expansion programme, Indigo Ltd.'s estimated annual profit before interest and tax in the foreseeable future is ₹200 lakh. If the programme proceeds, this will rise to ₹280 lakh. At present, the market values of the company's securities are :

Ordinary shares	₹5.40 (*ex-dividend*) per share
Debentures	₹110 per ₹100 nominal

and the last ordinary dividend was 20 paise per share. If expansion does not take place, ordinary dividends are expected to grow at a constant rate of 2.5% per annum. After some initial fluctuations, the anticipated effect of expansion on dividends and market values is expected to stabilise as follows :

	Expansion Financed by		
	Rights Issue	*Preference Shares*	*Debentures*
Market value of an ordinary share	₹5.60	₹5.80	₹6.00
Market value of debentures per ₹100 nominal	₹110	₹110	₹108
Market value of a preference share	NA	₹1.14	NA
Annual growth rate in ordinary shares	3.5%	4.0%	5.0%

The company's profit is subject to corporation tax at 35% and this rate is unlikely to change. You are required to calculate for each alternative financing scheme :

(i) the gearing ratio

(ii) the profit available per ordinary share

(iii) Weighted average cost of capital based on market value.

Calculations may be restricted to two decimal places.

(14 marks)

(b) Rani has invested in a share whose dividend is expected to grow at 15% for 5 years and thereafter at 5% till life of the company. Find out value of the share, if current dividend is ₹4 and investor's required rate of return is 6%.

(6 marks)

3. (a) Peacock Ltd. has been engaged in manufacturing of textiles. It has a current sales of ₹30 lakh per annum. The cost of sales is 75% of sales and bad debts are 1% of sales. The cost of sales comprises 80% variable costs and 20% fixed cost, while the company's required rate of return is 12%. The company currently allows customers 30 days' credit, but is now considering increasing this to 60 days' credit in order to attract more customers.

It has been estimated that this change in policy will increase sales by 15%, while bad debts will increase from 1% to 4%. It is expected that the policy change will not result in any increase in fixed costs, creditors and stock level.

Should Peacock Ltd. introduce proposed policy ?

(10 marks)

(b) The following information is related to Evergreen Ltd. :

Unit cost	₹200
Order cost	₹320
Inventory carrying cost	₹40
Back order cost (stock out cost)	₹20
Annual demand	2,000 units

You are required to compute the following :

(i) Minimum cost order quantity

(ii) Time between orders

(iii) Minimum number of back orders

(iv) Maximum inventory level

(v) Overall annual cost.

(2 marks each)

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

(i) 'Current account' and 'capital account' in balance of payment.

(ii) 'Foreign direct investment' and 'portfolio investment'.

(iii) 'Ask price' and 'bid price'.

(iv) 'Horizontal capital structure' and 'vertical capital structure'.

(v) 'Investment' and 'speculation'.

(5 marks each)

5. (a) Excel Ltd. is considering investing in a risky project which would be added to an existing portfolio of investment projects, also subject to risk. It envisages six possible states of the economy for which it has estimated probabilities and outcome as follows :

State of Economy	*Probability*	*Return on Existing Portfolio*	*Return on Proposed Projects*
1	0.1	12%	8%
2	0.2	14%	10%
3	0.2	15%	12%
4	0.3	16%	10%
5	0.1	18%	14%
6	0.1	20%	6%

You are required to determine whether the project should be accepted. The risk-free rate of return is 6%.

(10 marks)

(b) The following details of Alpha Ltd. for the year ended 2010 are furnished :

Financial leverage	2:1
Operating leverage	3:1
Interest charges per annum	₹20 lakh
Corproate tax rate	40%
Variable cost as percentage of sales	60%

Prepare income statement of the company.

(6 marks)

(c) Mohan has a portfolio of 6 securities, each with a market value of ₹10,000. The current beta (β) of the portfolio is 1.30 and β of the riskiest security is 1.80. Mohan wishes to reduce his portfolio β to 1.15 by selling the riskiest security and replacing it with another security with a lower β. What must be the β of the replacement security ?

(4 marks)

6. Following information is extracted from the books of Perfume Ltd. at the end of financial year 2010-11 :

Net sales	₹20,00,000
Debt-assets ratio	0.6
Debtors turnover ratio based on net sales	2.0
Inventory turnover ratio	1.25
Fixed assets turnover ratio	0.80
Net profit margin	5%
Gross profit margin	25%
Return on investment	2%

Balance Sheet as at 31st March, 2011

Liabilities	₹	*Assets*	₹
Equity	?	Net fixed assets	?
Long-term debts	?	Inventory	?
Short-term debts	10,00,000	Debtors	?
		Cash	?
	?		?

Calculate —

(i) The working capital available with the company on 31st March, 2011.

(ii) Its permissible bank borrowings as per second method recommended by the Tandon Committee.

(20 marks)

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

(i) Sweat equity shares

(ii) Benefits of depository system

(iii) Operating cycle

(iv) Risks in forex market

(v) Interest rate parity.

(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