

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 Re.1 and the present value of an annuity of Re.1 for 15 years are annexed.

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

- (i) A specific part of working capital should be financed by fixed capital.
- (ii) Treasury function is a part of total managerial function.
- (iii) The capital asset pricing model (CAPM) is an alternative method of computing the cost of equity capital but is based on many assumptions.
- (iv) Higher the risk associated with portfolio, higher will be the rate of return.
- (v) For sound results, project implementation has to be divided into phases.

(5 marks each)

2. (a) Ajanta Ltd. has option to choose from among three projects X, Y and Z. The information collected through market research regarding their capability to earn profit is given below :

(Profit in Thousand Rupees)

Project	Probability-I = 0.6	Probability-II = 0.2	Probability-III = 0.2
	Profit	Profit	Profit
X	190	50	15
Y	110	200	160
Z	150	140	110

Required —

- (i) Which project should be selected by the company, if the decision is to be made on the basis of expected value approach ?
- (ii) Calculate the expected value of the perfect information.

(10 marks)

- (b) From the given information for Alpha Ltd., you are required to find out whether the company's dividend pay-out ratio is optimal according to Walter's formula. The company was started one year before with equity capital of Rs.40 lakh.

Earnings of the company	Rs.4,00,000
Dividend paid	Rs.3,20,000
Price-earnings (P/E) ratio	12.5
Number of shares outstanding	40,000 @ Rs.100 each

Should the company change its dividend policy if P/E ratio is 8 ?

(10 marks)

3. (a) Upper India Ltd. is to decide between debt funding and equity funding for its expansion programme. Its current position is as under :

	<i>Rs.</i>
5% Debt	4,00,000
Equity capital (Rs.10 per share)	10,00,000
Surplus	6,00,000
Total capitalisation	<u>20,00,000</u>
Sales	60,00,000
Less : Cost	<u>53,80,000</u>
Profit before interest and tax (PBIT)	6,20,000
Less : Interest	<u>20,000</u>
Profit before tax (PBT)	6,00,000
Less : Income-tax @ 33.99%	<u>2,03,940</u>
Profit after tax (PAT)	<u><u>3,96,060</u></u>

The expansion programme is estimated to cost Rs.10,00,000. If it is financed through debt, the rate of interest on new debt will be 7% and the price earnings (P/E) ratio will be 6 times. If the expansion programme is financed through fresh equity shares, the new shares can be sold netting Rs.25 per share and the P/E ratio will be 7 times. The expansion will generate additional sales of Rs.20,00,000 with after tax return of 5%. If the company is to follow a policy of maximising the market value of its shares, which form of financing should it choose and why?

(15 marks)

- (b) Weldone Co. is a Dutch company which has the following expected transactions :

One month : Expected receipts of £2,40,000
 One month : Expected payment of £1,40,000
 Three months : Expected receipts of £3,00,000

The finance manager has collected the following information :

Spot rate (£ per ₤)	1.7820 ± 0.0002
One month forward rate (£ per ₤)	1.7829 ± 0.0003
Three months forward rate (£ per ₤)	1.7846 ± 0.0004
Money market rates for Weldone Co. :	

	<i>Borrowing</i>	<i>Deposit</i>
One year Euro interest rate	4.9%	4.6
One year Sterling interest rate	5.4%	5.1

Calculate the expected Euro receipts in three months using a money-market hedge and recommend whether a forward market hedge or a money-market hedge should be used.

(5 marks)

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

- (i) 'Project NPV' and 'equity NPV'.
- (ii) 'Financial lease' and 'operating lease'.
- (iii) 'Money market' and 'capital market'.
- (iv) 'Internal finance' and 'total finance'.
- (v) 'Dematerialisation' and 'immobilisation'.

(5 marks each)

5. (a) Zenith Ltd. sells goods on a gross profit of 25%. It takes depreciation as a part of cost of production. Further information available is as under :

<i>Particulars</i>	<i>(Rs. in '000)</i> <i>Annual Figures</i>
Sales (2 months credit)	1,800
Material consumption (one month credit)	450
Wages (lag in payment – one month)	360
Cash manufacturing expenses (lag in payment – one month)	480
Administrative expenses (lag in payment – one month)	120
Sales promotion expenses (quarterly paid in advance)	60
Tax payable in four instalments of which one lies in next year	150

The company maintains a month's stock each of raw material and finished goods. It also keeps Rs.1,00,000 in cash.

You are required to assess the working capital requirement of Zenith Ltd. from the above data.

(10 marks)

- (b) Super Star Ltd., an Indian company, has a subsidiary company in USA. The latter company earns \$100 million after charging \$10 million as depreciation. The exchange rate between the two countries is likely to change from Rs.40/\$ to Rs.39/\$. Work out the effect of this change on the parent company.

(4 marks)

- (c) The capital of Moon Ltd. is as follows :

9% Preference shares of Rs.10 each	Rs.3,00,000
Equity shares of Rs.10 each	Rs.8,00,000

Following further information is available :

— Profit after tax	Rs.2,70,000
— Tax rate	30%
— Equity dividend paid	20%
— Market price of equity share	Rs.40/share

You are required to calculate —

- (i) Dividend yield on equity shares;
- (ii) Cover for preference shares;
- (iii) Cover for equity dividend;
- (iv) Earnings per equity share;
- (v) Price earnings ratio; and
- (vi) Profit before tax.

(6 marks)

6. You are presented with following information concerning return on the shares of Celina Ltd. and on the market portfolio, according to various conditions of the economy :

<i>Condition of Economy</i>	<i>Probability of Condition Occurring</i>	<i>Return on Celina Ltd.</i>	<i>Return on the Market</i>
1	0.2	15%	10%
2	0.4	14%	16%
3	0.4	26%	24%

The current risk-free interest rate is 9%. You are required to calculate —

- (i) The coefficient of correlation between the return on the shares of Celina Ltd. and on the market portfolio.
- (ii) The total risk (*i.e.*, standard deviation) of Celina Ltd. and discuss why this is not the most appropriate measure of risk to be used in making investment decisions.
- (iii) The beta factor for Celina Ltd. and briefly discuss its significance. Is Celina Ltd. efficiently priced according to the CAPM and the information given above ?

(20 marks)

: 5 :

7. Write notes on **any four** of the following :
- (i) Capital rationing
 - (ii) Pegging
 - (iii) Just-in-time inventory management
 - (iv) Credit rating
 - (v) Balance of payment.

(5 marks each)

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TABLE - I : 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