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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 $\mathrm{X}, \mathrm{Y}$ and Z . The information collected through market research regarding their capability to earn profit is given below :
(Profit in Thousand Rupees)

| Project | Probability- $=0.6$ | 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 $\mathrm{P} / \mathrm{E}$ ratio is 8 ?

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

Rs.


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 $\square$ ) $\quad 1.7820 \pm 0.0002$
One month forward rate (£ per a) $\quad 1.7829 \pm 0.0003$
Three months forward rate ( $£$ per $\propto$ ) $1.7846 \pm 0.0004$
Money market rates for Weldone Co. :

| Borrowing | Deposit |
| :---: | :---: |
| $4.9 \%$ | 4.6 |
| $5.4 \%$ | 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 :
(Rs. in '000)
Particulars
Annual Figures
Sales (2 months credit) $\quad 1,800$
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.
(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 :

| Condition of | Probability of | Return on | Return on the |
| :---: | :---: | :---: | :---: |
| Economy | Condition Occurring | Celina Ltd. | Market |
| 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 ?
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.
P. T. O.
$T A B L E-1$ : PRESENT VALUE OF RUPEE ONE
2/2010/FTFM (OS) Contd...

| RATE | YEAR 1 | YEAR <br> 2 | YEAR <br> 3 | YEAR 4 | YEAR 5 | YEAR <br> 6 | YEAR 7 | YEAR 8 | YEAR 9 | YEAR 10 | YEAR 11 | YEAR 12 | YEAR 13 | YEAR <br> 14 | $\begin{gathered} \text { YEAR } \\ 15 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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 | $\begin{gathered} \text { YEAR } \\ 1 \end{gathered}$ | $\begin{gathered} \text { YEAR } \\ 2 \end{gathered}$ | $\begin{gathered} \text { YEAR } \\ 3 \end{gathered}$ | $\begin{gathered} \text { YEAR } \\ 4 \end{gathered}$ | $\begin{gathered} \text { YEAR } \\ 5 \end{gathered}$ | $\begin{gathered} \text { YEAR } \\ 6 \end{gathered}$ | $\begin{gathered} \text { YEAR } \\ 7 \end{gathered}$ | $\begin{gathered} \text { YEAR } \\ 8 \end{gathered}$ | $\begin{gathered} \text { YEAR } \\ 9 \end{gathered}$ | YEAR <br> 10 | YEAR <br> 11 | YEAR <br> 12 | $\begin{gathered} \text { YEAR } \\ 13 \end{gathered}$ | YEAR <br> 14 | YEAR <br> 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 | $\checkmark$ |
| 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 |  |

