

Roll No.....

Time allowed : 3 hours

Maximum marks : 100

Total number of questions : 6

Total number of printed pages : 7

NOTE : 1. Answer **ALL** Questions.

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 :

- (a) Financial distress is different from insolvency.
- (b) Treasury management has both macro and micro aspects.
- (c) As there is no explicit cost of retained earnings, these funds are free of cost.
- (d) Banks should lend prudently and with care.

(5 marks each)

Attempt all parts of either Q.No. 2 or Q.No. 2A

2. (a) Distinguish between 'explicit cost' and 'implicit cost'.

(4 marks)

(b) Write a note on domestic resource cost.

(4 marks)

(c) Distinguish between 'ask price' and 'bid price' in foreign exchange.

(4 marks)

(d) Explain the concept of sensitivity analysis.

(4 marks)

OR (Alternate question to Q.No. 2)

2A. (i) Discuss the mark-to-market settlement of index futures.

(4 marks)

(ii) High return on investment (ROI) indicates efficient use of assets. Comment.

(4 marks)

(iii) Describe functions of treasury management.

(4 marks)

(iv) Write a note on credit default swaps.

(4 marks)

Attempt all parts of either Q.No. 3 or Q.No. 3A

3. (a) Apoorva Ltd. has assets of ₹32,00,000 that have been financed as follows :

| | ₹ |
|----------------------------|-----------|
| Equity shares of ₹100 each | 18,00,000 |
| General reserve | 3,60,000 |
| Debt | 10,40,000 |

For the year ended 31st March, 2014, the company's total profits before interest and taxes were ₹6,23,000. The company pays 8% interest on borrowed capital and the tax bracket is 40%. The market value of the equity as on 31st March, 2014 was ₹150 per share.

From the above, determine the weighted average cost of capital using market values as weights.

(8 marks)

- (b) Bharati Fibre Products produces a special fibre at the rate of 5,000 metres per hour. The fibre is used in other products made by the company at the rate of 20,000 meters per day. Cost of fibre is ₹5 per metre. The inventory carrying cost is 25% and set-up costs are ₹4,050. Compute the optimum number of cycles required in a year for the manufacture of this special fibre. Working hours per day are 8 hours. Assume 365 days in a year.

(8 marks)

OR (Alternate question to Q.No. 3)

- 3A. (i) Verona Enterprises Ltd. purchases 2,000 units of a particular item per year at a unit cost of ₹20. The ordering cost is ₹50 per order and the inventory carrying cost is 25%.
- Determine the optimal order quantity and minimum total cost including purchase cost.
 - If a 3% discount is offered by the supplier for purchases in a lot of 1,000 or more, should the firm accept the offer ?
- (ii) Anurag has invested in a share whose dividend is expected to grow @ 15% for 5 years and thereafter @ 5% till life of the company. Find out the value of the share, if current dividend is ₹4 per share and investors' required rate of return is 6%.

: 3 :

(iii) An Indian importer company has to settle an import bill of \$1,30,000. The exporter has given the Indian importer two options :

- (a) Pay immediately without any interest charges; or
 (b) 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 : ₹48.35 / ₹48.36

3-month forward rate for \$1 : ₹48.81 / ₹48.83

The importer company seeks your advice. Give your advice with reason.

(iv) Snowman Enterprises is considering the possibility of manufacturing a particular component which at present is being bought from outside.

The manufacture of the component would call for an investment of ₹7,50,000 in a new machine besides an additional investment of ₹50,000 in working capital. The life of the machine would be 10 years with a salvage value of ₹50,000. The estimated savings (before tax) would be ₹1,80,000 per annum. The income-tax rate is 50%. The company's required rate of return is 10%. Depreciation is provided on straight line basis.

Suggest the firm whether this investment be made or not. Show your workings.

(4 marks each)

4. (a) A company, whose current sales are ₹15,00,000 per annum and average collection period is 30 days, wants to pursue a more liberal credit policy to improve the sales. The following data are available :

| <i>Credit (period) policy</i> | <i>Increase in collection period (Days)</i> | <i>Increase in Sales (₹)</i> |
|-----------------------------------|---|----------------------------------|
| A | 15 | 60,000 |
| B | 30 | 90,000 |
| C | 45 | 1,50,000 |
| D | 60 | 1,80,000 |
| E | 90 | 2,00,000 |

The selling price per unit is ₹5. Average cost per unit is ₹4 and variable cost per unit is ₹2.75. The required rate of return on additional investment is 20%. Assume 360 days in a year and nil bad debts loss.

Which of the above policies would you recommend and why ?

(8 marks)

(b) The following data is available for Balram Industries :

| | ₹ |
|---------------------|----------|
| Sales | 2,00,000 |
| Variable cost @ ₹30 | 60,000 |
| Contribution | 1,40,000 |
| Fixed cost | 1,00,000 |
| EBIT | 40,000 |
| Interest | 5,000 |
| Profit before tax | 35,000 |

Find out —

- (i) Using the concept of financial leverage, by what percentage will the taxable income increase if EBIT increases by 6%.
- (ii) Using the concept of operating leverage, by what percentage will EBIT increase if there is 10% increase in sales.

(8 marks)

5. (a) Discuss the assumptions of capital asset pricing model (CAPM) along with limitations.

(4 marks)

(b) Describe the steps involved in project planning process.

(4 marks)

(c) How do firms manage economic risk due to fluctuations in forex market ?

(4 marks)

(d) "A firm's stock price is not related to its mix of debt and equity financing." Do you agree with this statement ? Explain.

(4 marks)

: 5 :

6. Saswat Dairy Ltd. (SDL) is planning to buy dairy plant costing ₹400 lakh. Milk Board provides 10% subsidy on the capital cost. It can process milk to produce cheese with the capacity of 1,800 tonnes per annum. The selling price of cheese is taken as ₹50 per Kg. The management expects the life of the plant at 8 years and the depreciation shall be computed using straight line method. However, the plant can be sold at ₹50 lakh at the end of its useful life. The utilisation of plant is expected as below :

| | | | | |
|-----------------------------|-----|-----|-----|--------|
| <i>Years</i> | 1 | 2 | 3 | 4 to 8 |
| <i>Capacity Utilisation</i> | 60% | 70% | 80% | 90% |

The variable cost constituting primarily of the raw material (milk) is placed at 40% while the fixed expenses are ₹300 lakh per annum. The company pays tax @35%. The additional working capital required is ₹100 lakh.

Find the following —

- Cash flows of the project from Year 0 to Year 8
- NPV of the project
- IRR of the project
- Payback period; and
- Should the project be accepted based on NPV and IRR.

(16 marks)

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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 | YEAR | YEAR | YEAR | YEAR | YEAR | YEAR | YEAR | YEAR | YEAR | YEAR | YEAR | YEAR | YEAR | YEAR | YEAR | YEAR | YEAR | YEAR |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|------|------|------|------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 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 | | | | |