RO7l No. $\qquad$

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) Financial sector acts as conduit for the transfer of financial resources from net savers to net borrowers.
(ii) Under capital rationing, the standard net present value (NPV) decision rule no longer holds true.
(iii) Most businesses need cash funds to meet contingencies.
(iv) Apart from the retention of profits and capitalising the accumulated earnings, the bonus shares serve several other objectives.
(v) Foreign exchange risk can be managed both internally and externally.
(5 marks each)
2. (a) Mona Machines Ltd. has provided you the following information for the year 2008 :

| Production for the year | ... | 69,000 units |
| :---: | :---: | :---: |
| Finished goods in store | ... | Average 3 months |
| Raw materials in store | ... | Average 2 months' consumption |
| ```Work-in-progress (assume 50% completion stage with full material consumption)``` | ... | Average 1 month |
| Credit allowed by creditors | ... | Average 2 months |
| Credit given to debtors (assume at selling price) | ... | Average 3 months |
| Selling price per unit | ... | Rs. 50 |
| Raw material cost | ... | 50\% of selling price |
| Direct wages | ... | 10\% of selling price |
| Overheads | ... | 20\% of selling price |

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Company keeps Rs.1,00,000 in cash. There is regular production and sale cycle, and wages and overheads accrue evenly. Wages are paid in the next month of accrual. Material is introduced in the beginning of production cycle. You are required to calculate working capital requirement of Mona Machines Ltd.
(10 marks)
(b) Silver Oak Ltd., an Indian company, is mainly engaged in international trade with US and UK. It is currently $1^{\text {st }}$ January. It will have to make a payment of $\$ 7,29,794$ in the coming six months time. The company is presently considering the various alternatives in order to hedge its transactional exposure through its London office. The following information is available :
Exchange Rates :
\$/£ Spot rate : 1.5617 - 1.5773
6-month \$ forward rate : 1.5455-1.5609
Money Market Rates
Borrow Deposit
(으)
US Dollar
6
(\%)

Sterling
7
4.5

Foreign currency option prices (Cents per £ for contract size $£ 12,500$ ) :
Exercise Price Call Option (June) Put Option (June)
$\$ 1.70 / £$
3.7
9.6

Suggest which of the following hedging option is the most suitable for silver Oak Ltd. :
(i) Forward exchange contract
(ii) Money market
(iii) Currency option.
(6 marks)
(d) Monark Ltd. is considering two alternative financial plans to start a new project. In Plan-I, it is likely to issue equity shares of Rs. 16 lakh and 13\% preference capital of Rs. 4 lakh. In Plan-II, the company will issue equity shares of Rs. 8 lakh, $13 \%$ preference capital of Rs. 4 lakh, and $15 \%$ debentures of Rs. 8 lakh. The face value of equity shares in both plans is Rs.10. Tax rate is $30 \%$.
You are required to determine level of EBIT at which the EPS would be same under both the plans.

Contd. . .
3. (a) Vaibhav Ltd. is engaged in manufacturing of machines used in construction. It is considering the possibility of purchasing from a supplier a component it now makes. A supplier has agreed to supply the component in the required quantities at a unit price of Rs.18. The transportation and insurance charges are Re.1 per unit.

Presently, the company produces the component from a single raw material in economic lots of 3,000 units at a cost of Rs. 4 per unit. The average annual demand is 40,000 units. The annual holding cost for company is Re. 0.50 per unit and it has set a minimum stock level of 800 units. The direct labour costs of the component are Rs. 12 per unit. The company also hires a machine at a rate of Rs. 400 per month on which the components are produced. Suggest whether the company should produce or procure the component.
(14 marks)
(b) Two companies Rita Ltd. and Gita Ltd. are considering to enter into a swap agreement with each other. Their corresponding borrowing rates are as follows:

| Name of Company | Floating Rate | Fixed Rate |
| :---: | :---: | :---: |
| Rita Ltd. | LIBOR | $11 \%$ |
| Gita Ltd. | LIBOR $+0.3 \%$ | $12.5 \%$ |

Rita Ltd. requires a floating rate loan of $£ 8$ million while Gita Ltd. requires a fixed rate loan of $£ 8$ million.
(i) Show which company had advantage in floating rate loans and which company has a comparative advantage in fixed loans.
(ii) If Rita Ltd. and Gita Ltd. engage in a swap agreement and the benefits of the swap are equally split, at what rate will Rita Ltd. be able to obtain floating finance and Gita Ltd. be able to obtain fixed rate finance ?

Ignore bank charges.
(6 marks)
4. Distinguish between any four of the following :
(i) 'Factoring' and 'bill discounting'.
(ii) 'Operating lease' and 'finance lease'.
(iii) 'Business risk' and 'financial risk'.
(iv) 'Efficient portfolio' and 'optimal portfolio'.
(v) 'Translation risk' and 'transaction risk'.

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5. Alfa Ltd. is in the business of manufacturing bearings. Some more product lines are being planned to be added to the existing system. To manufacture the planned product lines, the firm needs a machine which if purchased outright will cost Rs. $10,00,000$. Modern Hire-Purchase and Leasing Co. has offered two proposals as below :
Proposal - I (Hire-Purchase)
Rs.2,50,000 will be payable on signing of the agreement. Three annual installments of Rs.4,00,000 will be payable at the end of each year starting from year first. The ownership of the machine will be transferred automatically at the end of third year. The company will be able to claim depreciation on straight line basis with zero salvage value.

Proposal - II (Lease)
Rs. 20,000 will be payable towards initial service fee upon signing of the agreement which is tax-deductible expense. Annual lease rental of Rs.4,32,000 is payable at the end of each year starting from the first year for a period of three years.
Evaluate the above two proposals and advise the company as to which proposal implies lesser cost given that tax-rate is $35 \%$ and discount rate is $20 \%$. (Calculations may be rounded off to Rupee.)
(20 marks)
6. (a) The following data is related to Raman Ltd. :

|  | Raman Ltd. | Nifty <br> Average <br> Year | Average <br> Share Price | Dividend <br> Per Share | Nifty <br> Index <br> Yideld |
| :--- | :---: | :---: | :---: | :---: | :---: | | Return on |
| :---: |
| Government |
| Stock |

(14 marks)
(b) Following facts are available for Astro Ltd. :
(i) Cash turnover rate is 5;
(ii) Annual cash outflow is Rs.1,75,000; and
(iii) Accounts payable can be stretched by 12 days.

What would be the effect of stretching accounts payable on the minimum operating cash requirements ? If the firm can earn $10 \%$ on its investments, what would be the savings on cost ? (Assume 360 days in a year.)

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7. Write notes on any four of the following :
(i) Financial instruments used for venture financing
(ii) Factors affecting dividend policy of a firm
(iii) Optimal capital structure
(iv) Financing cost escalation
(v) Domestic resource cost.

| RATE | YEAR | YEAR | YEAR | YEAR | YEAR | YEAR | YEAR | YEAR | YEAR | YEAR | YEAR | YEAR | YEAR | YEAR | YEAR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | $\mathbf{6}$ | $\mathbf{7}$ | $\mathbf{8}$ | $\mathbf{9}$ | $\mathbf{1 0}$ | $\mathbf{1 1}$ | $\mathbf{1 2}$ | $\mathbf{1 3}$ | $\mathbf{1 4}$ | $\mathbf{1 5}$ |

## $T A B L E-2:$ PRESENT VALUE OF AN ANNUITY OF RUPEE ONE

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

