

CS/MMA/SEM-3/MMA(FNE)-301/2011-12

## 2011

## INVESTMENT ANALYSIS

Time Allotted: 3 Hours
Full Marks : 70

The figures in the margin indicate full marks.
Candidates are required to give their answers in their own words as far as practicable.

## GROUP - A

## ( Multiple Choice Type Questions )

1. Choose the correct alternatives for any ten of the following :
i) The IRR of a project is the rate where NPV tends to be
a) 1
b) 0
c) 2
d) 3 .
ii) The NPV method of capital budgeting assumes that cash flows are reinvested at
a) risk free rate
b) discount rate used in the analysis
c) internal rate of return
d) cost of debt.
iii) All effect capital budgeting except
a) salvage value
b) accelerated depreciation
c) tax rate change
d) method of project financing used.
iv) The estimated benefits from a project are expressed as cash flows instead of income flows because
a) it is simpler to calculate cash flows than income flows
b) it is cash, not accounting income, that is central to the firm's capital budgeting decision
c) this is required by the Government
d) this is required by the SEBI.
v) Which of the following must be satisfied to support a classification as a finance lease ?
a) Ownership is transferred by the end of the lease term
b) The lease contains a bargain purchase option
c) The lease term is for the major part of an asset's useful life
d) The present value of the minimum lease payments are substantially more or equal to the asset's fair value.
vi) Safety stock are the
a) minimum additional inventory
b) maximum additional inventory
c) average additional inventory
d) none of these.
vii) The receivable management involves
a) credit policies
b) credit terms
c) collection policies
d) all of these.
viii) Valuation is the process that links
a) past return and present risk
b) actual risk and return
c) expected risk and return
d) none of these.

ix) Chicago method is a process of valuation of
a) lease financing
b) VC finaneing
c) bond
d) stock.
x) The credit terms of receivable management includes
a) credit period
b) cash discount
c) cash discount period
d) all of these.
xi) Smart Ltd. negotiated a lease on the following terms : The lease had a 3 year term; the purchase price of the new equipment was Rs. 41,250; there were 3 annual payments of Rs. 15,000 payable in advance; and Smart Ltd. was able to borrow at $10 \%$ per annum. The balance sheet liability figure at the end of the second year would be
a) Rs. 15,000
b) Rs. 16,250
c) Rs.10,000
d) Rs. 5,000.
xii) Which of the following would be consistent with a more aggressive approach to financing working capital ?
a) Financing short-term needs with short-term funds
b) Financing permanent inventory buildup with long-term debt
c) Financing seasonal needs with short-term funds
d) Financing some long-term needs with short-term funds.
xiii) Which asset-liability combination would most likely result in the firms having the greatest risk of technical insolvency?
a) Increasing current assets while lowering current liabilities
b) Increasing current assets while incurring more current liabilities
c) Reducing current assets, increasing current liabilities and reducing long-term debt
d) Replacing short-term debt with equity.

2. What are the purposes of Baumol model ?
3. Assuming a discount rate of $10 \%$ and the associated cash flows details below, compute the values of the Assets $x$ and $y$.

| Year | Cash flow ( $x$ ) Rs. | Cash flow ( $y$ ) Rs. |
| :---: | :---: | :---: |
| 1 | 10,000 | 5,000 |
| 2 | 10,000 | 10,000 |
| 3 | 10,000 | 15,000 |

4. How can we distinguish the VC as against other capital investment?
5. What do you mean by yield curve ?
6. Differentiate between operating and financial leasing.

GROUP - C
( Long Answer Type Questions)
Answer any three of the following. $\quad 3 \times 15=45$
7. What do you understand by debtors management ? How to select debtors?

| Particulars | Policy <br> existing | Policy $\boldsymbol{A}$ | Policy $\boldsymbol{B}$ | Policy C | Policy D |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Period (days) | 30 | 40 | 50 | 60 | 75 |
| Sales (Rs.) | $6,00,000$ | $6,30,000$ | $6,48,000$ | $6,75,000$ | $6,90,000$ |
| Bad Debt | $1 \%$ | $1 \cdot 5 \%$ | $2 \%$ | $3 \%$ | $4 \%$ |
| Investment | $20 \%$ | $20 \%$ | $20 \%$ | $20 \%$ | $20 \%$ |
| Cost(\%) |  |  |  |  |  |

On the above information of a company, evaluate the following credit proposals.

360 days is considered as 1 year, then which proposal is the best if unit selling price is Rs. 300, the variable cost Rs. 2 and Total cost is Rs. $2 \cdot 25$ based on present policy.

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2+4+9
$$


8. Leasing and buying cannot be considered as two mutually exclusive investment proposals for the purpose of financial evaluation. Explain it.

List the criteria for classifying lease as finance lease. What are the features around which it is structured ? $7+8$
9. Gama Co. wants to replace its old machine with a new automatic machine. Two models Zee and Chee are available at the same cost of Rs. $5,00,000$ each. Salvage value of the old machine is Rs. 1,00,000. The utilities of the existing machine can be used if the company selects Zee. Additional costs of utilities to be purchased in that case are Rs. $1,00,000$. If the company purchases Chee, then all the existing utilities will have to be replaced with new utilities costing Rs. 2,00,000. The salvage value of the old utilities will be Rs. 20,000. The cash flows are expected to be as follows :

| Year | Zee | Chee |
| :---: | ---: | ---: |
| 1 | $1,00,000$ | $2,00,000$ |
| 2 | $1,50,000$ | $2,10,000$ |
| 3 | $1,80,000$ | $1,80,000$ |
| 4 | $2,00,000$ | $1,70,000$ |
| 5 | $1,70,000$ | 40,000 |
| Salvage value at the end of year 5 | 50,000 | 60,000 |

The targeted return on capital is $15 \%$. You are required to compute for the two machines separately NPV, Discounted payback period and desirability factor.

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10. a) Explain the different risks associated with bond.
b) What is yield to maturity ?

c) A Rs. 1,000 par value bond carrying a coupon of $9 \%$ maturing after 8 years is currently selling for Rs. 800. Calculate the YTM.
11. The FFM Ltd. has a tax rate of $35 \%$ and discounts its cash flows at $16 \%$. In the acquisition of an asset worth Rs. $10,00,000$ it is given two offers - either to acquire the asset by taking a bank loan @ $15 \%$ p.a. repayable in five yearly instalments of Rs. 2,00,000 each plus interest or to lease in the asset at yearly rentals of Rs. 3,24,000 for five years. In both the cases the instalment is payable at the end of the year. Applicable rate of depreciation is $15 \%$ using written down value method. You are required to suggest the better alternative.

| Year | 1 | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| P.V. factor @ $16 \%$ | 0.862 | 0.743 | 0.641 | 0.552 | 0.476 |

12. a) With pertinent examples elucidate the different factors affecting working capital management.
b) The Calgary Company is attempting to establish a current asset policy. Fixed assets are Rs. 6,00,000 and the firm plans to maintain a $50 \%$ debt to asset ratio. The interest rate is $10 \%$ on all debts. Three alternative current assets policies are under consideration - 40\%, $50 \%$ and $60 \%$ of projected sales. The company expects to earn $15 \%$ before interest and taxes on sales of Rs. $30,00,000$. The tax rate is $40 \%$. What is the expected return on equity under each alternative ?

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6+9
$$


13. a) $A B C$ Ltd. buys in lot of 125 boxes which ispa threemonth supply. The cost per box is RS. 125 and the ordering cost is Rs. 250 per order. The inventory carrying cost is estimated at $20 \%$ of the unit value per annum. You are required to calculate the following :
i) What is the total annual cost of the existing policy?
ii) How much money would be saved by employing the economic order quantity ?
b) Explain "Ageing schedule" in the context of monitoring of Receivables.
c) "Liquidity and profitability are competing goals in cash management." Comment.

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7+4+4
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