Systematic Studies for Professionals
(Where your quest for quality education ends)
Max Marks: 60
Financial Management
Max. Time: 2 Hours
Ques.1 A Company is considering whether it should spend `40 lacs on a machine to manufacture and sell a new product. The unit variable cost of the product is` 60 . It is expected that the new product can be sold at ' 110 per unit. The fixed costs (only cash) will be ` 2,00,000 p.a. in year 1 and expected to increase by 20,000 annually. The project will have a life of six years with a scrap value of \({ }^{`} 2,50,000\). Machine is to be depreciated as per WDV method. A private bank offers an interest rate of $15 \%$ p.a. on 3 month deposits. To start with the company expects to sell at least 40,000 units during the first year.
You are required to find out Net Present Value of the project based on the sales expected during the first year and on the assumption that it will continue at the same level during the remaining years.

Ques. 2 ABC firm is considering to make certain relaxation in its credit policy. The $A B C$ management has evaluated two new policies. From the following details advice the ABC management which policy has to be adopted.
(i) Annual Sales at present

90 lakhs
(ii) Proposed Sales:

' 115 lakhs ' 128 lakhs
(iii) Accounts receivable turnover ratio and bad debts losses:

| EXISTING | I | II |
| :---: | :---: | :---: |
| 7 Times | 5.25 times | 4 times |
| $3 \%$ | $5 \%$ | $7 \%$ |

(iv) The ABC is required to give a pre tax return of $21 \%$ on the investment.
(v) Incremental Investment in Stock Alt. I: 5 Lacs; Alt. II: 8 Lacs.
(vi) $20 \%$ of Sales is on cash basis.
(vii) Its Profit Volume Ratio is $25 \%$.
(viii) Applicable Tax Rate is $30 \%$.

Ques.3 A Ltd. has a total sale of ` 6.5 crores and its average collection period is 90 days. The past experience indicates that bad-debts losses are1.5\% on sales. The expenditure incurred by the firm in administering its receivables collection efforts are \({ }^{`} 7,00,000\). A factor will pay advance on receivables to the firm at an interest rate of $18 \%$ p.a. after withholding $15 \%$ as reserve. Commission is charged @ $2 \%$.

Calculate the effective cost of factoring to the Firm.
Ques. 4 ICICI , in its issue of Flexi bonds 3. offered Growing Interest Bond. The interest will be paid to the investors every year at the rates given below and the minimum deposit is ` 25,000 .

|  | Interest (p.a.) |
| :--- | ---: |
| Year 1 | $9.50 \%$ |
| Year 2 | $11.00 \%$ |
| Year 3 | $12.50 \%$ |
| Year 4 |  |
| Year 5 | $15.00 \%$ |

Calculate the yield to maturity (YTM).
Ques. 5 D Ltd. is foreseeing a growth rate of $13 \%$ per annum in the next two years. The growth rate is likely to be $10 \%$ for the third and fourth year. After that the growth rate is expected to stabilize at $8 \%$ per annum. If the last dividend was ' 1.50 per share and the investor's required rate of return is $15 \%$, determine the current value of equity share of the company.

## Ques. 6

Balance Sheet of Beta Ltd
on 31/3/14 and 31/3/15

|  | $\mathbf{3 1 / 3 / 1 4}$ | $\mathbf{3 1 / 3 / 1 5}$ |  | $\mathbf{3 1 / 3 / 1 0}$ | $\mathbf{3 1 / 3 / 1 5}$ |
| :--- | ---: | ---: | :--- | ---: | ---: |
| Equity share Cap. | $15,00,000$ | $23,00,000$ | F. Assets |  |  |
| 12\% pref. sh. Cap. | $5,00,000$ | $3,00,000$ | Cost | $25,00,000$ | $38,00,000$ |
| Res. \& Surplus |  |  | $(-)$ Prov. for dep. | $7,40,000$ | $8,90,000$ |
| P \& L a/c | $2,50,000$ | $4,10,000$ | Net Block | $17,60,000$ | $29,10,000$ |
| Sec. premium | $1,50,000$ | $1,66,000$ | Investments | $5,30,000$ | $6,70,000$ |
| General Reserve | $1,80,000$ | $2,50,000$ | C. Assets |  |  |
| $10 \%$ Debentures | $5,00,000$ | $8,00,000$ | Stock | $3,50,000$ | $4,00,000$ |
| Creditors | $1,70,000$ | $3,04,000$ | Debtors | $4,80,000$ | $4,10,000$ |
| Prop Dividend | $1,00,000$ | $1,40,000$ | Cash \& Bank | $2,30,000$ | $2,80,000$ |
|  | $33,50,000$ | $46,70,000$ |  | $33,50,000$ | $46,70,000$ |

i) Pref. shares redeemed on $31 / 3 / 15$ at $10 \%$ premium.
ii) `\(5,00,000\) eq. shares issued to brothers against acquisition of fixed assets of` $2,50,000$, stock `\(2,20,000\) and creditors of`40,000.
iii) Balance Eq. shares issued at premium of $12 \%$.
iv)Investment of `\(80,000 \mathrm{w} / \mathrm{o}\) through General Reserve. v) Machine costing of` $3,00,000$ with book value of ` \(1,70,000\) sold for \({ }^{`} 1,45,000\).
vi) Dividend of `80,000 declared for \(13-14\) and discharged simultaneously with CDT @17\%. vii) Income Tax paid during the year of`1,20,000.

Prepare Cash Flow Statement
Ques. 7 SSP is contemplating a change in inventory policy. Currently, the firm has an inventory turnover of 24 times a year. Sales have been holding steady at $\$ 3,00,000$ per year. Variable costs are $60 \%$ of the total sales dollar. Productive fixed costs of $\$ 40,000$ and will increase to $\$ 60,000$ if sales exceeds $25 \%$ of current sales. The company feels that if it were to increase inventories, it could also increase return before taxes which is $25 \%$. The company estimates the following relationship between inventory turnover and sales:

| Inventory Turnover <br> Sales | 24 | 12 | 10 | 6 | 4 |
| :--- | :---: | :---: | :---: | :---: | :---: |

Using the marginal analysis technique, determine the optimal inventory policy.
Ques. 8 The following figures of GS Ltd. are presented to you:

|  | Details | Amount |
| :---: | :---: | :---: |
| Earnings before interest and tax |  | 25,00,000 |
| Less: Debenture interest @ 8\% | 80,000 |  |
| Long term loan interest @ 11\% | 2,20,000 | 3,00,000 |
| = PBT |  | 22,00,000 |
| Less: Income tax |  | 11,00,000 |
| Earnings after tax |  | 11,00,000 |
| No. of equity shares of ` 10 each |  | 5,00,000 |
| EPS |  | 2.2 |
| Market price per share |  | 22 |
| P/E ratio |  | 10 |

The company has undistributed reserves and surplus of ` 20 lakhs. It is in need of \({ }^{\text {` }} 30\) lakhs to pay off debentures and modernize its plants. It seeks your advise on the following alternative modes of raising finance:
Alternative 1: - Raising entire amount as term loan from bank @ 13\%.
Alternative 2: - Raising part of the funds by issue of $1,00,000$ shares of ` 20 each and rest by term loan at $12 \%$.
The company expects to improve its rate of return by $3 \%$ as a result of modernization, but P/E ratio is likely to go down to 8 if the entire amount is raised as term loan.
(i) Advise the company on the financial plan to be selected.
(ii) If it is assumed that there will be no change in the $\mathrm{P} / \mathrm{E}$ ratio if either of the two alternatives are adopted, would your advice still hold good?

Ques. 9 The following figures and ratios are related to a company:

| (i) Credit Sales for the year (60\% of Total Sales) | ' $30,00,000$ |
| :--- | ---: |
| (ii) Gross Profit (on cost) | 25 Percent |
| (iii) Fixed assets turnover (basis on cost of goods sold) | 1.5 |
| (iv) Stock turnover | 2 months |
| (v) Liquid Ratio | $1: 1$ |
| (vi) Current Ratio | $1.6: 1$ |
| (vii) Debtors Velocity | 2 months |
| (viii) Reserve and surplus to Share capital | $0.6: 1$ |
| (ix) Capital gearing ratio | 0.5 |
| (x) Fixed assets to net worth | $1.20: 1$ |
| (xi) Bank overdraft |  |

## You are required to prepare:

(a) Balance Sheet of the company on the basis of above details.
(b) The statement showing working capital requirement, if the company wants to make a provision for contingencies @ 20 percent of net working capital including such provision.

