## (ALL BATCHES)

DATE: 04.09.2018
MAXIMUM MARKS:
TIMING: 3¼Hours

## FINANCIAL MANAGEMENT \& ECONOMICS FOR FINANCE <br> SECTION - A

Q. No. 1 is compulsory.

Candidates are also required to answer any four questions from the remaining five questions.
In case, any candidate answers extra question(s)/sub-question(s) over and above the required number, then only the requisite number of equestions first answered in the answer book shall be valued and subsequent extra question(s) answered shall be ignored.
Working Notes should form part of the respective answer.

## Question 1:

(a)A company had the following Balance Sheet as on 31st March, 2014:

| Liabilities | (Rs. in <br> Cores) | Assets | (Rs. in <br> cores) |
| :--- | :---: | :--- | :---: |
| Equity Share Capital (50 lakhs | 5 |  |  |
| shares of Rs. 10 each) | 1 | Fixed Assets (Net) | 12.5 |
| Reserves and Surplus | 10 | Current Assets | 7.5 |
| $15 \%$ Debentures | 4 |  |  |
| Current Liabilities | $\mathbf{2 0}$ |  | $\mathbf{2 0}$ |
|  |  |  |  |

The additional information given is as under:

| Fixed cost per annum (excluding interest) | Rs. 4 crores |
| :--- | ---: |
| Variable operating cost ratio | $65 \%$ |
| Total assets turnover ratio | 2.5 |
| Income Tax rate | $30 \%$ |

Required:
Calculate the following and comment:
(i) Earnings Per Share
(ii) Operating Leverage
(iii) Financial Leverage
(iv) Combined Leverage
(b)Using the following information, complete this balancesheet:

| Long-term debt to net worth | 0.5 to 1 |
| :--- | :---: |
| Total asset turnover | 2.5 x |
| Average collection period* | 18 days |
| Inventory turnover | $9 \times$ |
| Gross profit margin | $10 \%$ |
| Acid-test ratio | 1 to 1 |

*Assume a 360-day year and all sales on credit.

|  | Rs. |  | Rs. |
| :--- | :---: | :--- | :---: |
| Cash | - | Notesandpayables | $1,00,000$ |
| Accounts receivable | - | Long-term debt | - |


| Inventory | - | Common stock | $1,00,000$ |
| :--- | :---: | :--- | :---: |
|  | - | Retained earnings | $1,00,000$ |
|  | - | Total liabilities and equity | - |
|  |  |  |  |

(5 Mark)
(c) AmitaLtd's operating income is Rs. 5,00,000. The firm's cost of debt is $10 \%$ and currently the firm employs Rs. 15,00,000 of debt. The overall cost of capital of the firm is $15 \%$.
You are required to determine:
(i) Total value of thefirm.
(ii) Cost ofequity.
(5 Mark)
(d)Ganapati Limited is considering three financing plans. The key information is as follows:
(a) Total investment to be raised Rs.2,00,000
(b) Plans of FinancingProportion:

| Plans | Equity | Debt | Preference Shares |
| :---: | :---: | :---: | :---: |
| A | $100 \%$ | - | - |
| B | $50 \%$ | $50 \%$ | - |
| C | $50 \%$ | - | $50 \%$ |
| Cost of debt |  |  |  |

(c) Cost of debt 8\%

Cost of preference shares 8\%
(d) Tax Rate 50\%
(e) EquitysharesofthefacevalueofRs.10eachwillbeissuedatapremiumof Rs. 10 per share.
(f) Expected EBIT is Rs.80,000.

You are required to determine for each plan: -
(i) Earnings per share(EPS)
(ii) The financial break-even point.
(iii) Indicate if any of the plans dominate and compute the EBIT range among the plans forindifference.

## Question 2:

(a) $A B C$ is in the manufacturing aluminum component. It wants to expand for which it needs additional machine. The firm can either buy or take the machine on lease. The machine can be purchased for Rs. 30 lacs. It will have a useful life of 5 years with residual value of Rs. 2,00,000 after the expiry of 5 years. The purchase can be financed by $15 \%$ loan payable in equal instalments (principal +interest) payable at the end of each year for 5 years. Else the machine can be taken on lease at a lease rental of Rs. 9,00,000 per annum payable at the end of each year for 5 years. The depreciation for tax purpose is to be charged as per reducing balance method. The rate of depreciation is $25 \%$ per annum. Tax rate is $40 \%$. Maintenance expenses of the machine isRs. 50,000 per annum and the expenditure is to be born by the lessee. Show which option is better - lease or buy? Clearly demonstrate cash flow analysis and other workings.
(b)Explain Linter Model?

## Question 3:

Aneja Limited, a newly formed company, has applied to the commercial bank for the first time for financing its working capital requirements. The following information is available about the projections for the current year: Estimated level of activity: $1,04,000$ completed units of production plus 4,000 units of work-in-progress. Based on the above activity, estimated cost per unit is:

| Raw material | Rs. 80 per units |
| :--- | :--- |
| Direct wages | Rs. 30 per units |
| Overheads (exclusive of depreciation) | Rs. 60 per units |
| Total Cost | Rs. 170 per units |
| Selling Price | Rs. 200 per units |

Raw materials in stock: Average 4 weeks consumption, work-in-progress (assume $50 \%$ completion stage in respect of conversion cost) (materials issued at the start of the processing).
Finished goods in stock 8,000 units
Credit allowed by suppliers Average 4 weeks
Credit allowed to debtors/receivablesAverage 8 weeks
Lag in payment of wages Average 1.5 weeks
Cash at banks (for smooth operation) is expected to be Rs. 25,000.
Assume that production is carried on evenly throughout the year (52 weeks) and wages and overheads accrue similarly. All sales are on credit basis only.
You are required to calculate the net working capital required.
(10 Mark)

## Question 4:

A company has to make a choice between two projects namely $A$ and $B$. The initial capital
outlay of two Projects are Rs. $1,35,000$ and Rs. $2,40,000$ respectively for A and B. There will be no scrap value at the end of the life of both the projects. The opportunity Cost of Capital of the company is $16 \%$. The annual incomes are as under:

| Year | Project A (Rs.) | Project B (Rs.) | Discounting factors @ 16\% |
| :--- | ---: | ---: | ---: |
| 1 | -- | 60,000 | 0.862 |
| 2 | 30,000 | 84,000 | 0.743 |
| 3 | $1,32,000$ | 96,000 | 0.641 |
| 4 | 84,000 | $1,02,000$ | 0.552 |
| 5 | 84,000 | 90,000 | 0.476 |

## Required:

CALCULATE for each project:
(i) Discounted payback period
(ii) Profitability index
(iii) Net present value

DECIDE which of these projects should be accepted?

## Question 5:

M/s. Navya Corporation has a capital structure of $40 \%$ debt and $60 \%$ equity. The company is presently considering several alternative investment proposals costing less than Rs. 20 lakhs. The corporation always raises the required funds without disturbing its present debt equity ratio.

The cost of raising the debt and equity are as under:

| Project Cost | Cost of Debit | Cost of equity |
| :--- | :--- | :--- |
| UptoRs. 2 lakhs | $10 \%$ | $12 \%$ |
| AboveRs. 2 lakhs to upto to Rs. 5 lakhs | $11 \%$ | $13 \%$ |
| Above Rs. 5 lakhs to upto to Rs. 10 lakhs | $12 \%$ | $14 \%$ |
| Above Rs. 10 lakhs to upto to Rs. 20 <br> lakhs | $13 \%$ | $14.5 \%$ |

Assuming the tax rate at 50\%, CALCULATE:
(i) Cost of capital of two projects X and Y whose fund requirements are Rs.6.5 lakhs and Rs. 14 lakhs respectively.
(ii) If a project is expected to give after tax return of $10 \%$, DETERMINE under what conditions it would be acceptable?

## Question 6:

(a)Discuss the role of a chief financial officer?
(b)Difference between factoring and bill discounting?
(c) EXPLAIN the term 'Payback reciprocal'.

## SECTION - B

Q. No. 7 is compulsory.

Answer any three from the rest.
In case, any candidate answers extra question(s)/sub-question(s) over and above the required number, then only the requisite number of equestions first answered in the answer book shall be valued and subsequent extra question(s) answered shall be ignored.
Working Notes should form part of the respective answer.

## Question 7:

(a) What are the major merits of floating exchange rate?
(3 Mark)
(b)Why do we say that money demand is derived demand?
(2 Mark)
(c) Distinguish between foreign direct investment and foreign institutional investment? (any four differences)
(2 Mark)
(d)In a two sector economy, the business sector produces 7000 units at an average price of Rs. 5.
(a) What is the money value of output?
(b) What is the money income of households?
(c) If households spend 80 percent of their income, what is the total consumer expenditure?
(d) What is the total money revenues received by the business sector?
(e) What should happen to the level of output?
(3 Mark)

## Question 8:

(a)(i)Explain the free rider problem. Give examples
(3 Mark)
(ii)Explain how higher the interest rate affect the demand for money.
(2 Mark)
(b)(i)From, the following data calculate the Gross National Product at Market Price using Value Added method

|  | Rs. in Crores |
| :--- | :---: |
| Value of output in primary sector | 500 |
| Net factor income from abroad | -20 |
| Value of output in tertiary sector | 700 |
| Intermediate consumption in secondary sector | 400 |
| Value of output in secondary sector | 900 |
| Government Transfer Payments | 600 |
|  | 700 |
| Intermediate consumption in tertiary sector | 300 |
| Intermediate consumption in primary sector | 250 |
| Value of output in secondary sector | 900 |
| Intermediate consumption in secondary sector | 300 |

(3 Marks)
(ii) Using Ricardian model, explain how two countries can gain from trade? Whatdoes the Ricardian model suggest regarding the effect of trade?
(2 Mark)

## Question 9:

(a)(i) What are the types of externalities?
(2 Mark)
(ii)The price index for exports of Country A in year 2012 (2000 base-year), was 116.1 and the price index for Country A's imports was 120.2 (2000 base-year)
(i) What do these figures mean?
(ii) Calculate the index of terms of trade for Country A
(iii) How do you interpret the index of terms of trade for Country A?
(3 Mark)
(b)(i) Which types of Government interventions are applied in case of public goods?
(ii)For the linear consumption function is $\mathrm{C}=700+0.8 \mathrm{Y}$; I is Rs. 1200 and Netexports $\mathrm{X}-\mathrm{M}=100$. Find equilibrium output?

## Question 10:

(a)(i)Which are the sectors in India where FDI is prohibited? Why?
(ii)Explain the concept of marginal propensity to consume?
(4 Mark)
(2 Mark)
(b)(i)Critically examine the post Keynesian theories of demand for money.
(2 Mark)
(ii) List the components of M1

## Question 11:

(a)(i)What are the major functions of the WTO?
(2 Mark)
(ii)What is meant by 'free trade area'?
(2 Mark)
(b)(i)Define trade policy. What are the main types of trade policy instruments?
(3 Mark)
(ii)Explain how the exchange value of Indian Rupee will be affected in each of thefollowing cases. What are the possible consequences on exports and imports?
(a) The spot exchange rate changes from Rs $61 / 1 \$$ to Rs $64 / 1 \$$
(b) The spot exchange rate changes from Rs $66 / 1 \$$ to Rs $63 / 1 \$$
(3 Mark)
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