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# GUJARAT TECHNOLOGICAL UNIVERSITY <br> MBA (IB)- SEMESTER- II EXAMINATION - WINTER 2019 

Subject Code: 1529302
Subject Name: Financial Management
Time: 2.30 PM to $\mathbf{5 . 3 0} \mathbf{P M}$
Total Marks: 70

## Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
Q. 1 Briefly explain the following concepts -
(a) Two factors affecting Capital Structure
(b) Discounting
(c) Payback Period
(d) Gross Operating Cycle
(e) Financial Risk
(f) Carrying Cost
(g) Cost of Capital
Q. 2 (a) Empire Limited needs Rs. 10,00,000 to build a new factory which will yield EBIT of Rs. $1,50,000$ per year. The company has to choose between two alternative financing plans: $75 \%$ equity and $25 \%$ debt or $50 \%$ equity and $50 \%$ debt.

Under the first plan, shares can be sold at Rs. 50 per share, and the interest rate on debt will be $14 \%$. Under the plan B, shares can be sold for Rs. 40 per share and the interest rate on debt will be $16 \%$. Determine the EPS for each plan assuming a $35 \%$ tax rate.
(b) "Maximization of profit is regarded as the main objective of investment decision, but it is not as exclusive as maximizing shareholders' wealth". Comment.

## OR

(b) Give in brief the major sources of long term finance.
Q. 3 (a) Which alternative would you choose: (i) An annuity of Rs. 5000 at the end of each year for 30 years; (ii) An annuity of Rs. 6000 at the end of each year for 20 years; (iii) Rs. 50,000 in cash right now? In each case, the time value of money is $10 \%$.
(b) The primary purpose for which a firm exists is the payment of dividend. Therefore, irrespective of the firm's needs and the desires of shareholders, a firm should follow a policy of very high dividend payout. Do you agree? Why or why not?

## OR

Q. 3 (a) What is capital budgeting and why is it significant for a firm? Suppose that a project requires
a cash outlay of Rs. 20,000, and generates cash inflows of Rs. 8000, Rs. 7000, Rs. 4000 and Rs. 3000 during the next 4 years. What is the project's payback?
(b) Assuming that a firm pays tax at a $50 \%$ rate, compute the after-tax cost of capital in the following cases -
i. A perpetual bond sold at par, coupon rate of interest being $7 \%$.
ii. An ordinary share selling at a current market price of Rs. 120, and paying a current dividend of Rs. 9 per share, which is expected to grow at a rate of $8 \%$.
Q. 4 (a) A manufacturing company has an expected usage of 50,000 units of certain product during the next year. The cost of processing an order in Rs. 20 and the carrying cost per unit is Rs. 0.50 for one year. Lead time on an order is five days and the company will keep a reserve supply of two days' usage. You are required to calculate (a) the economic order quantity and (b) the reorder point (Assume 250 days in a year)
(b) X company has a net operating income of Rs. 2, 00,000 on an investment of Rs. 10, 00,000 in assets. It can raise debt at a $16 \%$ rate of interest. Assume that taxes do not exist.
Using the Net Income (NI) approach and an equity capitalization rate (Ke) of $18 \%$, compute the total value of the firm (V) and the weighted average cost of capital (WACC) if the firm has (i) No debt (ii) Rs. 3,00,000 debt.

## OR

Q. 4 (a) A company earns Rs. 10 per share at an internal rate of $15 \%$. The firm has a policy of paying $40 \%$ of earning as dividends. If the required rate of return is $10 \%$, determine the price of the share under (i) Walter's Model and (ii) Gorden's Model.
(b) A proforma cost sheet of a company provides the following particulars:

| Elements of Cost | Amount per unit (Rs.) |
| :--- | ---: |
| Raw Material | 80 |
| Direct Labour | 30 |
| Overheads | 60 |
| Total Cost | 170 |
| Profit | 30 |
| Selling Price | 200 |

The following further particulars are available:
(i) Raw materials are in stock on an average for one month. Materials are in process on an average for half a month. Finished goods are in stock on an average for one month.
(ii) Credit allowed by suppliers is one month. Credit allowed to customers is two months.
(iii) Lag in payment of wages is $11 / 2$ weeks. Lag in payment of overhead expenses is one month.
(iv) One-fourth of the output is sold against cash.
(v) Cash in hand and at bank is expected to be Rs.25,000.

You are required to prepare a statement showing the working capital needed to finance a level of activity of $1,04,000$ units of production. You may assume that production is carried on evenly throughout the year, wages and overheads accrue similarly and a time period of 4 weeks is equivalent to a month.

## Q. 5 Case Study:

Deepak Hand tools Private Limited (DHPL) is a small sized firm manufacturing hand tools. Its manufacturing plan is situated in Haryana. The company's sales in the year ending on 31st March 2013 were Rs. 1000 million (Rs. 100 crore) on an asset base of Rs. 650 million.

The net profit of the company was Rs. 76 million. The management of the company wants to improve profitability further. The required rate of return of the company is 14 percent.

The company is currently considering one investment proposal. One is to expand its manufacturing capacity. The estimated cost of the new equipment is Rs. 250 million. It is expected to have an economic life of 10 years. The accountant forecasts that net cash inflows would be Rs. 45 million per annum for the first three years, Rs. 68 million per annum from year four to year eight and for the remaining two years Rs. 30 million per annum. The plant can be sold for Rs. 55 million at the end of its economic life.

The company would need to raise external funds to the extent of Rs. 200 million. The company has the following options of borrowing Rs. 200 million:
a. The company can borrow funds from a nationalized bank at an interest rate of 14 percent for 10 years. It will be required to pay equal annual installment of interest and repayment of principal. The managing director of the company was wondering if it were possible to negotiate with bank to make one single payment of interest and principal at the end of 10 years (instead of annual installments).
b. A financial institution has offered to lend money to DHPL at 13.5 per annum but it needs to pay equal quarterly installments of interest and repayment of principal.
Q. 5 (a) Should the company expand its capacity? Show the computation of NPV.
(b) What is the annual installment of bank loan?

## OR

Q. 5 (a) What is the amount of the single payment of interest and principal at the end of 10 years?
(b) Should the company borrow from the bank or from the financial institution? Give reasons for your choice.

