## [This question paper contains 8 printed pages.]

Your Roll No.....

Sr. No. of Question Paper: 2085

Unique Paper Code : 12481303

Name of the Paper : Corporate Finance

Name of the Course : B.A. (Hons) Business

Economics, 2018 (CBÇŞ)

Semester : III

Duration : 3 Hours

Maximum Marks : 75

### **Instructions for Candidates**

1. Write your Roll No. on the top immediately on receipt of this question paper.

- 2. Attempt all questions.
- 3. Use of only simple calculators and Present value tables is allowed.
- 4. Marks for each question are mentioned against that question only.
- 5. The sub parts ('a & b') of a question must be done together.
- 1. (a) What is Time Value of Money? Explain the reasons for the time preference for money. (5)

P.T.O.

- (b) Exactly 10 years from now Krishna will start receiving a pension of Rs. 3000 per year. The payment will continue for 16 years. How much is pension worth now if Krishna's interest rate is 10%?
- 2. (a) Explain the traditional methods of evaluating long term projects. What are the problems with these techniques? Give suitable examples. (8)
  - (b) A machine purchased six years back for Rs. 1,50,000 has been depreciated to a book value of Rs. 90,000. It originally had a projected life of 15 years (salvage value nil). There is a proposal to replace this machine. A new machine will cost Rs. 2,50,000 and result in reduction of operating cost by Rs. 30,000 p.a. for next nine years. The existing machine can now be scrapped away for Rs. 50,000. The new machine will also be depreciated over 9 years period as per straight line method with salvage value of Rs. 25,000. Find out whether the existing machine should be replaced given that the tax rate applicable is 30% (on income as well as capital gain) and cost of capital is 10%?

OR

A company is considering a proposal for production of a new product. The company expects to sell Rs. 1,00,000 units of the new product each year at a selling price of Rs. 5 per unit. Variable cost will be Rs. 2 per unit. Regardless of the level of production the company will incur a cash cost of Rs. 50,000 per year if the project is undertaken. The machine for making of the product will cost Rs. 5,00,000 and can be sold for Rs. 60,000 after the end of its life of 5 years. Additional working capital required will be Rs. 50,000. Overhead cost allocated to the new product will be Rs. 24,000 per year. Tax rate is 30% and cost of capital for the company is 15%. The company charges depreciation at 25% of the written down value. Should the company buy the new machine?

(12)

# 3. ABC Ltd. has the following book value capital structure

Sources of Funds	Rs. in crore
Equity share capital (Rs. 10 each)	15
12% Preference capital (Rs. 100 each)	
Retained Earnings	20
11.5% Debentures (Rs. 100 each)	10
11% Term Loan	12.5

P.T.O.

The next expected dividend on equity shares is Rs. 3.60 per share, the dividend per share is expected to grow at 7%. The market price per share is Rs. 40. Preference stock, redeemable after 10 years is currently selling at Rs. 75 per share. Debentures redeemable after 6 years, are selling at Rs. 80 per debenture. The income tax rate for the company is 40%. Calculate the weighted average cost of capital by using (i) Book value weights; (ii) Market value weights.

- 4. (a) State true or false with reason:
  - (i) Leverage is always favourable.
  - (ii) Indifference level of EBIT is one at which EPS remains same under two different financial plans.
  - (iii) In the NI approach, the k<sub>o</sub> falls as the degree of leverage is increased.
  - (iv) MM model is a fool proof model of dividend irrelevance.
  - (v) Constant DP ratio refers to stability of dividend. (2×5)
  - (b) ABC Ltd. was started a year ago with paid -up equity capital of Rs. 40,00,000. The other details are as under:

Earnings of the company	Rs. 4,00,000
Dividend paid	Rs. 3,20,000
Price-earnings ratio	12.5
Number of shares	40,000

- (i) Find the company's dividend payout ratio. Find the market price of the company at this payout ratio, using Walter's model.
- (ii) Is the company's dividend payout ratio optimal as per the Walter's model? Why?
- (iii) What is the market price of a share of the company at the 'optimal dividend payout ratio' as per Walter's model? (8)
- (c) The capital structure of X Ltd consists of 35,000 equity shares of Rs. 100 each. The authorized capital of the company is 60,000 shares. For the financial year ended 31-3-2017, particulars of production, cost and sales are as follows:

Units produced and sold (@80% level of activity) 50,000

Selling price per unit Rs. 20

Variable cost per unit Rs. 10

Fixed Operating cost per unit Rs. 4

P.T.O.

In view of emerging opportunities arising out of globalization X Ltd decided to utilize full capacity to meet the additional demand for its product. This would, however, involve an additional capital of Rs. 15,00,000. As a result of utilization of full capacity, variable cost will be reduced by 10% but fixed cost will go up by 10%. The additional output can be sold at the existing selling price. The possible alternative sources of finance for the required additional capital would be

- (i) Entirely by equity shares of Rs. 100 each.
- (ii) Entirely by 6% bonds of Rs. 500 each, or
- (iii) 50% by equity capital and 50% by 6% bonds of Rs. 500 each,

Assuming a corporate tax rate of 40%, which alternative financing scheme do you recommend? Also calculate all the leverage and comment.

OR

PQR Ltd. provides the following details:

(7)

Installed Capacity	1,50,0	00	
Actual Production and sales	1,00,0	00	
Selling price per unit	Rs. 1		
Variable cost per unit	Rs. 0	50	
Fixed costs	Rs. 38,000		
Funds required	Rs. 1,00,000		
Capital Structure	Financial Plan		
Equity shares of Rs. 100 each,	. A	В	C
issued at 25% premium	60%	40%	35%
15% Debt	40%	60%	50%
10% Preference shares of			
Rs. 100 each			15%

### Assume income tax 40%. Calculate:

- (i) Degree of operating leverage, financial leverage and combined leverage for each financial plan.
- (ii) The indifference point between plans A and B.
- (iii) The financial break-even point for each plan and suggest which plan has more financial risk. (7)

- 5. (a) Explain the various sources of Working Capital
  Finance. (5)
  - (b) From the following information, prepare an estimate of the working capital

### Requirements:

- (i) Projected Annual Sale 52000 units
- (ii) Selling Price Rs. 60 per unit
- (iii) Raw Material Cost 40% of selling price
- (iv) Direct Labour Cost 30% of selling price
- (v) Overheads 20% of the selling price

Raw material remain in stock on an average for 3 weeks. Goods remain in production processes for 4 weeks on average. 5 weeks are allowed to debtors to pay while it gets 3 weeks credit from suppliers. Finished goods remain in stock for one month. Lag in the payment of wages and overhead expenses is 2 weeks. 50% of the sales are on cash basis. Assume that goods in process are 100% complete with respect to materials, but only 50% in conversion costs.