

PGDM (IB), 2020-22
Corporate Finance
IB-303
Trimester – III, End-Term Examination: April 2021

Time allowed: 2 hrs 30 min
Max Marks: 50

Roll No: _____

Instruction: Students are required to write Roll No on every page of the Answer Sheet. All other instructions on the question paper / notifications should be followed meticulously.

Instruction: Show all the steps involved in solving the problems.

Section A (30 marks)

- 1. A)** The following information is available for ABC Ltd. Compute the
(i) Net operating cycle, and
(ii) Number of operating cycles per year

Particulars	Amount (INR)
Raw material consumed per year	700000
Average stock of raw material	70000
Work-in-progress inventory	600000
Average work-in-progress inventory	40000
Finished goods inventory	900000
Average stock of finished goods	50000
Average collection period from debtors	50 days
Average credit period availed from suppliers and creditors	40 days
Number of days in a year	365 days

(5 marks x 2) (CILO 2)

OR

- 1. B)** Calculate the amount of working capital requirement for ABCD Ltd from the following information:

Particulars	Amount (INR) per unit
Raw material	320
Direct material	120
Overhead	240
Total cost	680
Profit	120
Selling price	800

Raw materials are held in stock on an average for two months. Materials are in process on an average for half-a-month. Finished goods are in stock on an average for one and half month. Credit allowed by suppliers is half month and credit allowed to debtors is two months. Time lag in payment of wages is one week. Time lag in payment of overhead expenses is two weeks. Half of the sales is made on cash basis. Cash in hand and at the bank is expected to be INR 100,000, and expected level of production amounts to 1,19,600 units for a year of 52 weeks.

Assume that production is carried on evenly throughout the year and a time period of four weeks is equivalent to a month.

(10 marks) (CILO 2)

2. A

A manufacturing company will require 1,00,000 units of a product during the next year. The cost of processing an order is Rs. 40 and the carrying cost per unit is Rs.2 per year. Lead time of an order is 5 days and the company will keep a safety stock of two days usage.

You are required to calculate the following:

1. Economic order Quantity
2. Re-order Point
3. Minimum Inventory
4. Maximum Inventory
5. Average Inventory. (2 marks x 5) (CILO 1)

OR

2. B) i) From the following information supplied to you, determine the appropriate weighted average cost

of capital, relevant for evaluating long-term investment projects of the company:

Cost of equity 12%

After-tax cost of long-term debt 7%

After-tax cost of short-term loans 4%

<i>Source of capital</i>	<i>Book value</i>	<i>Market value</i>
Equity	500000	750000
Long-term debt	400000	375000
Short-term debt	100000	100000

ii) Suppose you have an opportunity to make an investment in a real estate venture that expects to pay investors Rs. 750 at the end of each month for the next four years. You believe that a reasonable return on your investment should be 17% p.a compounded monthly.

How much should you pay for the investment?

(5 marks * 2) (CILO 1)

3. A) i) 'CAPM method can only be used for determining the cost of equity of a listed company'. Critically discuss. (CILO 2) (5 marks)

ii) 'A rise in operating leverage and financial leverage may enhance the ROE, but it has its own pitfalls'. Discuss critically. (CILO 2) (5 marks)

OR

3. B) i) X Limited is proposing to sell a 5 year bond of Rs. 5000 at 8 % rate of interest per annum. The bond amount will be amortized equally over its life. What is the bond's present value for an investor if he expects a minimum rate of return of 6%?

ii) A company has paid dividend of Rs. 1 per share (face value Rs. 10 each) last year and it is expected to grow @ 10% next year. Calculate the cost of equity if the market price of share is Rs. 55.

iii) Mr. Mehra has purchased a share of Alpha Limited for Rs. 1000. He received dividend for a period of 5 years at the rate of 10%. At the end of 5th year, he sold the share of Alpha Limited for Rs. 1128. You are required to compute the cost of equity as per the realized yield approach. (3+3+4 marks) (CILO 2)

Section B (20 marks)

Important: Please demonstrate all the steps for computation

4Barbara Simpson is a sell - side analyst with Smith Riccardi Securities. Simpson covers the pharmaceutical industry. One of the companies she follows, Bayonne Pharma, is evaluating a regional distribution center. The financial predictions for the project are as follows:

Fixed capital outlay is INR 1.50 billion.

Investment in net working capital is INR 0.40 billion.

Straight - line depreciation is over a six - year period with zero salvage value.

Project life is 12 years.

Additional annual revenues are INR 0.10 billion.

Annual cash operating expenses are reduced by INR 0.25 billion.

The capital equipment is sold for INR 0.50 billion in 12 years.

Tax rate is 40 percent.

Required rate of return is 12 percent.

Simpson is evaluating this investment to see whether it has the potential to affect Bayonne Pharma's stock price. Simpson estimates the NPV of the project to be INR 0.41 billion, which should increase the value of the company. Simpson is evaluating the effects of other changes to her capital budgeting assumptions. She wants to know the effect of a switch from straight - line to accelerated depreciation on the company's operating income and the project's NPV. She also believes that the initial outlay might be much smaller than initially assumed.

Specifically, she thinks the outlay for fixed capital might be INR 0.24 billion lower, with no change in salvage value.

When reviewing her work, Simpson's supervisor provides the following comments. "I note that you are relying heavily on the NPV approach to valuing the investment decision. I don't think you should use an IRR because of the multiple IRR problem that is likely to arise with the Bayonne Pharma project. However, the equivalent annual annuity would be a more appropriate measure to use for the project than the NPV. I suggest that you compute an EAA."

i) Estimate the after - tax operating cash flow for years 1 – 6 and 7 – 12, respectively.

ii) Estimate the initial outlay and the terminal year non - operating cash flow, respectively.

iii) Is the Simpson's estimate for project's NPV is correct? Show all the steps.

iv) How would you evaluate the comments by Simpson's supervisor about not using the IRR and about using the EAA?

(5 marks x 4) (CILO 3)