'समानो मन्त्रः समितिः समानी'

UNIVERSITY OF NORTH BENGAL

B.Com. Honours 5th Semester Examination, 2022

CC12-COMMERCE

FUNDAMENTALS OF FINANCIAL MANAGEMENT

Time Allotted: 2 Hours　　　　Full Marks: 60

The figures in the margin indicate full marks.

GROUP-A

Answer any *two* questions　　　　12×2 = 24

1. (a) State the objectives of Financial Management. 6+6

(b) Explain the Modigliani-Miller's hypothesis of dividend irrelevance theory.

2. (a) Following is the capital structure of XYZ Ltd. (4+4)+4

As on 31st March, 2022

Sources of fund	Book value	Market value
Equity Share of Rs. 10 each	Rs. 50,00,000	Rs. 1,05,00,000
Retained earnings	Rs. 13,00,000	NIL
11% Pref. Share of Rs. 100 each	Rs. 7,00,000	Rs. 9,00,000
14% Debentures of Rs. 100 each	Rs. 30,00,000	Rs. 36,00,000

Market price of equity shares is Rs. 40 per share and it is expected that a dividend of Rs. 4 per share would be declared. The dividend per share is expected to grow at the rate of 8% every year. Income tax rate applicable to the company is 40% and shareholder's personal income tax rate is 20%.
You are required to calculate:

(i) Weighted average cost of capital on the basis of book value weights.
(ii) Weighted average cost of capital on the basis of market value weights.

(b) X Ltd. has estimated that for a new product its break-even point is 20,000 units if the item is sold for Rs. 14 per unit and variable cost Rs. 9 per unit.
Calculate the degree of operating leverage for sales volume 25,000 units and 30,000 units.

3. A firm can make investment in either of the following projects. The firm anticipates its cost capital to be 10%. Pre-tax cash flows of the projects for five years are as follows: 3+3+3+3

Year	0	1	2	3	4	5
Project-A (Rs.)	(2,00,000)	35,000	80,000	90,000	75,000	20,000
Project-B (Rs.)	(2,00,000)	2,18,000	10,000	10,000	4,000	3,000

Ignore taxation.
An amount of Rs. 35,000 will be spent on account of sales promotion in year 3 in case of Project-A.
This has not been taken into account in Pre-tax cash inflows.
The discount factors are as under:

Year	0	1	2	3	4	5
PVF at 10%	1	0.91	0.83	0.75	0.68	0.62

You are required to calculate for each project:

(i) The Payback Period,
(ii) The discounted Payback Period,
(iii) Profitability Index,
(iv) Net Present Value.

4. (a) Define Gross and Net working capital. 2+10

(b) NTS Ltd. is a readymade garment manufacturing company. Its production cycle indicates that materials are introduced in the beginning of the production phase; wage and overhead accrue evenly throughout the period of cycle.
The following figures for the 12 months ending 31st December, 2021 are given:

Production of shirts	54,000 units
Selling Price per unit	Rs. 200
Duration of the production cycle	1 month
Raw materials inventory held	2 months consumption
Finished goods stock held for	1 month
Credit allowed to debtors	1.5 months
Credit allowed by creditors	1 month

Wages are paid in the next month following the month of accrual. In the work in progress 50% of wages and overheads are supposed to be conversion costs. The ratios of cost to sales price are: raw materials 60%, direct wages 10% and overheads 20%. Cash is to be held to the extent of 40% of current liabilities and safety margin of 15% will be maintained.
Calculate amount of working capital required for the company on a cash cost basis.

GROUP-B

5. Answer any ***four*** questions: 6×4 = 24

(a) Distinguish between Net Income and Net Operating Income approach of capital structure theory. 6

(b) The following information is supplied to you: 3+3

Total Earnings	Rs. 40,00,000
Number of Equity Shares (of Rs. 100 each)	4,00,000
Dividend per share	Rs. 4
Cost of capital	16%
Internal rate of return	20%
Retention Ratio	60%

Calculate the market price of a share of company by using:

(i) Walter's model

(ii) Gordon's Model.

(c) The following data relate to two companies belonging to the same risk class: 6

Particulars	**X Ltd.**	**Y Ltd.**
Expected Net Operating Income	Rs. 2,40,000	Rs. 2,40,000
10% debt.	Rs. 7,20,000	–
Equity Capitalization Rate	20%	15%

You required to determine the total value and weighted average cost of capital for each company assuming no taxes under traditional approach.

(d) Write short notes on: 3+3

(i) Capital Rationing

(ii) Average Cost of Capital.

(e) Z company's equity share is quoted in the market at Rs. 25 per share currently. The company pays a dividend of Rs. 2 per share and the investor's market expects a growth rate of 6% per year. 2+2+2

You are required to:

(i) Calculate the company's cost of equity capital.

(ii) If the anticipated growth rate is 8% per annum, calculate the indicated market price per share.

(iii) If the company issues 10% debentures of face value of Rs. 100 each and realises Rs. 96 per debenture while the debentures are redeemable after 12 years at a premium of 12%, what will be the cost of debenture?

Assume tax rate to be 50%.

(f) P Ltd. providing the following information: 3+3

Annual cost of saving	Rs. 96,000
Useful life	5 years
Salvage value	Zero
Internal rate of return	15%
Profitability index	1.05

<u>Table of discount factor</u>:

Discount factor	Years					Total
	1	2	3	4	5	
15%	0.870	0.756	0.658	0.572	0.497	3.353
14%	0.877	0.769	0.675	0.592	0.519	3.432
13%	0.886	0.783	0.693	0.614	0.544	3.52

You are required to calculate:

(i) Cost of the Project and

(ii) NPV of Cash Inflow.

GROUP-C

6. Answer any ***four*** questions: 3×4 = 12

(a) What are the factors influencing the Dividend decision of a firm? 3

(b) A company issued 40,000, 12% Redeemable Preference Shares of ₹100 each at a premium of ₹10 each. The flotation cost of each share is ₹2. 3

You are required to calculate cost of preference share capital ignoring dividend tax.

(c) State three advantages of IRR method of capital budgeting. 3

(d) Write a short note on Capital Asset Pricing Model (CAPM). 3

(e) What are the different sources of long-term working capital? 3

(f) What do you mean by Cost of Capital? What are its types? 2+1

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