Semester 6 (FM 2023) General

Y(6th Sm.)-Financial Management-G/(DSE-6.2AG)/CBCS

# 2023

# FINANCIAL MANAGEMENT — GENERAL

Paper : DSE-6.2AG Full Marks : 80

Candidates are required to give their answers in their own words as far as practicable.

প্রান্তলিখিত সংখ্যাণ্ডলি পূর্ণমান নির্দেশক।

### বিভাগ - ক

81 A Company is planning to purchase a machine and thus provides you the following information:

Cost of the machine	₹ 8,00,000
Estimated life	3 years
Estimated Earnings before Tax (EBT) :	
Year I	₹ 1,80,000
Year 2	₹ 3,00,000
Year 3	₹ 2,40,000
Tax rate	40%
Estimated salvage value	Nil

Compute the Accounting Rate of Return.

¢

## Y(6th Sm.)-Financial Management-G/(DSE-6.2AG)/CBCS

(2)

### বিভাগ - খ

@1 The following is the capital structure of Z Ltd:

	Amount (₹)
Equity Share Capital (₹ 10 each)	5,00,000
Reserve and Surplus	3,00,000
11% Preference Share Capital (₹ 100 each)	1,00,000
13% Debentures (₹ 100 each)	3,00,000
Total	12,00,000

The current market price per equity share is  $\ge$  18. The expected dividend per equity share is  $\ge$  2.7 and dividend growth rate is 5%.

Preference shares are redeemable after 5 years at par. At present, they are selling at ₹ 90 each. The present market value of 13% Debentures are ₹ 2,91,000. Debentures are redeemable after 7 years at par. Assume tax rate at 50%.

You are required to compute the weighted average cost of capital using market value as weight.

#### অথবা

মূলধনের উৎস হিসাবে (ক) অবণ্টিত আয় ও (খ) মেয়াদি ঋণ সম্পর্কে টীকা লেখো।

4+4

30

30

▶1 From the following information, prepare Income Statement of P, Q and R Ltd.

	P Ltd.	Q Ltd.	R Ltd.
Operating leverage	4	5	3
Combined leverage	12	20	6
10% Debentures	₹ 20,000	₹ 30,000	₹ 50,000
Variable Cost to Sales Ratio (%)	50%	60%	75%

Assume 40% tax rate in each case.

### অথবা.

- (ক) কাম্য/সর্বোত্তম মূলধন কাঠামো কী?
- (খ) কাম্য/সর্বোত্তম মূলধন কাঠামোর যে-কোনো পাঁচটি বৈশিষ্ট্য উল্লেখ করো।

2+0

- 91 From the following details, determine working capital requirement of a manufacturing business: 30
  - (i) Level of activity per annum: 52000 units
  - (ii) Cost structure (as a % of selling price):

Raw material = 40%, Wages = 10%, Overheads = 30%, Profit = 20%

(iii) Raw materials are expected to be in store for 8 weeks in production process for 6 weeks.

- (iv) After completion, the finished products are expected to be in store for one and half months.
- (v) Credit to Debtors: 2 months
- (vi) Credit from suppliers: 8 weeks
- (vii) Lag in payment of wages and overheads: Half month
- (viii) Final products are to be sold at ₹10 per unit
- (ix) The firm wants to keep ₹15,000 as Cash in hand
- (x) Consider 4 weeks in a month and 52 weeks per annum
- (xi) Assume that production is carried on evenly during the year and wages and overheads accrue similarly.
- ৮। চলতি সম্পত্তি সংস্থানে আগ্রাসী ও রক্ষণশীল নীতি সম্বন্ধে লেখো।

4+6

Beta Ltd. wants to start a project which requires a plant. From the following information, calculate the Net Present Value (NPV) and suggest whether the project should be accepted or not.

Initial cost of the plant: ₹4,80,000. The effective life is 5 years. The estimated earnings before depreciation and tax of the project are as below:

Year-1	Year-2	Year-3	Year-4	Year-5
₹ 1,44,000	₹ 1,68,000	₹ 1,92,000	₹ 2,40,000	₹ 2,64,000

The project also needs ₹ 80,000 working capital at the beginning of the project which is expected to be realised after five years. The tax rate is 50% and cost of capital is 15%. Consider the Scrap Value of the plant as zero and straight line method of depreciation.

The present value of Re. 1 at 15% is as follows:

$$Y-1 = 0.870$$
,  $Y-2 = 0.756$ ,  $Y-3 = 0.658$ ,  $Y-4 = 0.572$ ,  $Y-5 = 0.497$ 

20

From the following information of HBC Ltd. compute the price of an equity share under Walter's model and Gordon's model:

Book value per equity share	₹ 300
Return on Equity	12%
Capitalisation Rate	15%
Retention Ratio	40%

অথবা.

লভ্যাংশ নীতি নির্ধারণকারী বিষয়গুলি আলোচনা করো।

50

## [ English Version ]

The figures in the margin indicate full marks.

## Group - A

Discuss the limitations of 'Profit Maximization' objective of financial management.
Or,
Discuss the different components of financial environment.
You need a car loan of ₹8,00,000 for a tenure of 5 years and rate of interest is 12%. What will be the annual equal instalment per year?
State any three advantages and any two disadvantages of Pay-back Period method.
Or,
Discuss the features of capital budgeting decision.

4. A Company is planning to purchase a machine and thus provides you the following information:

Cost of the machine	₹8,00,000
Estimated life	3 years
Estimated Earnings before Tax (EBT):	
Year 1	₹ 1,80,000
Year 2	₹ 3,00,000
Year 3	₹ 2,40,000
Tax rate	40%
Estimated salvage value	Nil

Compute the Accounting Rate of Return.

Group - B

5. The following is the capital structure of Z Ltd:

	Amount (₹)
Equity Share Capital (₹ 10 each)	5,00,000
Reserve and Surplus	3,00,000
11% Preference Share Capital (₹ 100 each)	1,00,000
13% Debentures (₹ 100 each)	3,00,000
Total	12,00,000

The current market price per equity share is ₹ 18. The expected dividend per equity share is ₹ 2.7 and dividend growth rate is 5%.

Preference shares are redeemable after 5 years at par. At present, they are selling at ₹ 90 each. The present market value of 13% Debentures are ₹ 2,91,000. Debentures are redeemable after 7 years at par. Assume tax rate at 50%.

You are required to compute the weighted average cost of capital using market value as weight. 10

Or,

Write short notes on (a) Retained earnings and (b) Term loan as a source of capital.

5+5

## 6. From the following information, prepare Income Statement of P, Q and R Ltd.

10

	P Ltd.	Q Ltd.	R Ltd.
Operating leverage	4	5	3
Combined leverage	12	20	6
10% Debentures	₹ 20,000	₹ 30,000	₹ 50,000
Variable Cost to Sales Ratio (%)	50%	60%	75%

Assume 40% tax rate in each case.

Or,

- (a) What is Optimum Capital Structure?
- (b) State any five features of Optimum Capital Structure.

5+5

- 7. From the following details, determine working capital requirement of a manufacturing business:
  - (i) Level of activity per annum: 52,000 units
  - (ii) Cost structure (as a % of selling price):Raw material = 40%, Wages = 10%, Overheads = 30%, Profit = 20%
  - (iii) Raw materials are expected to be in store for 8 weeks in production process for 6 weeks.
  - (iv) After completion, the finished products are expected to be in store for one and half months.
  - (v) Credit to Debtors: 2 months
  - (vi) Credit from suppliers: 8 weeks
  - (vii) Lag in payment of wages and overheads: Half month
  - (viii) Final products are to be sold at ₹10 per unit
  - (ix) The firm wants to keep ₹15,000 as Cash in hand
  - (x) Consider 4 weeks in a month and 52 weeks per annum
  - (xi) Assume that production is carried on evenly during the year and wages and overheads accrue similarly.
- 8. Write about the aggressive and conservative policies of financing current assets.

5+5

Beta Ltd. wants to start a project which requires a plant. From the following information, calculate the Net Present Value (NPV) and suggest whether the project should be accepted or not.

Initial cost of the plant: ₹4,80,000. The effective life is 5 years. The estimated earnings before depreciation and tax of the project are as below:

Year-1	Year-2	Year-3	Year-4	Year-5
₹ 1,44,000	₹ 1,68,000	₹ 1,92,000	₹ 2,40,000	₹ 2,64,000

The project also needs ₹ 80,000 working capital at the beginning of the project which is expected to be realised after five years. The tax rate is 50% and cost of capital is 15%. Consider the Scrap Value of the plant as zero and straight line method of depreciation.

The present value of Re. 1 at 15% is as follows:

$$Y-1 = 0.870, Y-2 = 0.756, Y-3 = 0.658, Y-4 = 0.572, Y-5 = 0.497$$

10. From the following information of HBC Ltd. compute the price of an equity share under Walter's model and Gordon's model:

Book value per equity share	₹ 300
Return on Equity	12%
Capitalisation Rate	15%
Retention Ratio	40%

Or,

Discuss the determinants of dividend policies.

10

10