

[This question paper contains 16 printed pages.]

Your Roll No.....

आपका अनुक्रमांक.....

Sr. No. of Question Paper : 7357

K

Unique Paper Code : 2412082302

Name of the Paper : Financial Management

Name of the Course : B.Com. (H) 2nd Year – DSC 3.2

Semester : III

Duration : 3 Hours

Maximum Marks : 90

समय : 3 घण्टे

पूर्णांक : 90

Instructions for Candidates

1. Write your Roll No. on the top immediately on receipt of this question paper.
2. Attempt all questions.
3. Parts of a question should be attempted together.
4. All questions carry equal marks.
5. Use of Simple Calculator is allowed.
6. Use of Mathematical Tables is allowed.
7. Answers may be written either in English or Hindi; but the same medium should be used throughout the paper.

छात्रों के लिए निर्देश

1. इस प्रश्न-पत्र के मिलते ही ऊपर दिए गए निर्धारित स्थान पर अपना अनुक्रमांक लिखिए।
2. सभी प्रश्नों के उत्तर दें।
3. किसी प्रश्न के सभी भाग एक साथ हल करें।
4. सभी प्रश्न समान अंक के हैं।
5. साधारण कैलकुलेटर के प्रयोग की अनुमति है।
6. गणितीय सारणियों द्द्विज्जीमउंजपबंस जंड्समेन्त्र के प्रयोग की अनुमति है।
7. इस प्रश्न-पत्र का उत्तर अंग्रेजी या हिंदी किसी एक भाषा में दीजिए, लेकिन सभी उत्तरों का माध्यम एक ही होना चाहिए।

P.T.O.

1. (a) Modern finance functions are aimed at maximizing the net worth of shareholders and not the profits of the business. Elucidate. (6)
- (b) Bestie takes a loan of ₹10,00,000 repayable in 5 equal instalments at the end of each year. The rate of interest is 10%. Compute the amount of each instalment. (3)
- (c) Firms X and Y are identical in every aspect except for their leverage levels. Firm X has 9% debentures totalling ₹20,00,000, an operating profit of ₹6,00,000, and a tax rate of 30%. Firm Y's overall cost of capital is 10%. Calculate the value of each firm using the Modigliani-Miller (MM) approach. Additionally, determine the equity capitalization rate and the overall cost of capital for Firm X. (3+3+3)

OR

- (a) If you start investing a sum of ₹10,000 in mutual funds starting today expecting that you will earn a return of 12% p.a., how much will you accumulate in 10 years? (3)
- (b) You plan to go abroad for higher studies after working for the next five years and understand that an amount of ₹20,00,000 will be needed for this purpose at that time. You have decided to accumulate this amount by investing a fixed amount at the end of each year in a safe scheme offering a rate of interest at 10%. What amount should you invest every year to achieve the target amount? (3)
- (c) The Honorable Vice-Chancellor of University of Delhi wants to start a scholarship that pays ₹25,000 p.a. to the student for an outstanding performance at the Center of IKS Studies. The amount of scholarship is expected to grow at 5% p.a. to commensurate with the inflation. He wants to know how much money he can invest at 12.5% p.a. to pay the scholarship till perpetuity? (3)
- (d) A firm has 10,000 equity shares, an EBIT of ₹3,00,000, Interest liability of ₹40,000 and Preference Dividend of ₹20,000 and the tax rate is 40%. Compute Earnings Per Share (EPS) and Degree of Financial Leverage (DFL). What will be the EPS if operating profit increases by 30%. (2+2+2)

(e) The following data pertains to Jonas Ltd.

Sales	₹8,00,000
Operating Expenses	
Variable (30%)	₹2,40,000
Fixed	₹4,00,000
Interest on borrowing	₹20,000

Using the concept of Operating Leverage, by what percentage will operating profit increase if there is a 10% increase in sales? (3)

2. (a) Van Gogh Ventures is considering the installation of a machine that costs ₹2,00,000, with additional installation charges of ₹40,000. The machine has a lifespan of 5 years and is expected to have a scrap value of ₹20,000 at the end of its useful life.

For the first two years, the machine is projected to produce 2,000 units annually. From year three to year five, production is expected to increase to 3,000 units per year. The selling price of the product is anticipated to be ₹30 per unit during the first three years and ₹36 per unit during the last two years.

The operating costs are estimated to be ₹10,000 per year for the first three years and ₹16,000 per year for the last two years. The company follows the straight-line method of depreciation, and the applicable tax rate is 40%.

To determine whether the machine should be installed, we need to calculate the cash flows and evaluate the investment using the Net Present Value (NPV) method with a discount rate of 8%. (15)

(b) Explain the limitations of Pay-Back Period (PBP). (3)

OR

(a) Murakami Company is evaluating the replacement of its current machine with a new model, costing ₹1,60,000. The proposed machine has a useful life of 5 years and is projected to generate annual cash revenues of ₹2,50,000 while incurring cash expenses of ₹1,30,000 per year, with an anticipated salvage value of zero. The existing machine, with a current book value of ₹40,000, could be sold immediately for ₹20,000. It remains operational for the next 5 years, during which it is expected to produce annual cash revenues of ₹2,00,000 and incur annual cash expenses of ₹1,40,000, with a salvage value of zero at the end of its life. The corporate tax rate is set at 40%, with depreciation calculated at a rate of 25% on the written-down value (WDV) basis. Taxes on capital gains or losses are to be disregarded in this analysis. (15)

(b) Explain Discounted Pay-Back Period as a capital budgeting technique. (3)

3. (a) Cost of existing share capital and fresh issue of capital is always the same. Do you agree? Why? (3)

(b) Metamorphosis Ltd. requires ₹60,00,000 to establish a new factory, projected to generate an annual EBIT of ₹10,00,000. With a goal of maximizing earnings per share, the company is exploring various financing options: issuing equity combined with debt financing of ₹10,00,000, ₹30,00,000, or ₹50,00,000. Currently, the market price per share stands at ₹40, but it is expected to decrease to ₹25 if borrowings exceed ₹37,50,000. The costs of borrowing for different debt levels are as follows :

Up to ₹12,50,000 9%

₹12,50,000-31,25,000 13%

₹31,25,000-50,00,000 15%

Assuming the tax rate to be 30%, find out the Earnings Per Share (EPS) under different options. (15)

OR

(a) The following information is supplied to you.

Cost of Debt (%)	Cost of Equity	Proportion of Debt
11	13	0
11.6	14	0.2
12	15	0.3
13	16	0.4
15	18	0.5
18	20	0.6

Determine the optimum capital structure using the Traditional Approach assuming 30% corporate tax rate. (6)

(b) The following is the capital structure of Kafka Ltd:

Equity share capital (₹10 each)	₹1,40,000
Reserves	₹60,000
10% preference share capital (₹100 each)	₹40,000
14% Debentures (₹100 each)	₹80,000

Additional information :

- The cost of equity capital is 15% and the cost of reserves is 14% the cost of Equity capital.
- The applicable tax rate is 33.5%
- The average market prices are as under:

Equity shares ₹16

Preference shares is ₹70

Debentures ₹80

Calculate Weighted Average Cost of Capital (WACC) under the Book value weights and market value weights. (6)

- (c) You are considering purchasing a Sovereign Gold Bond (SGB), currently priced at the market rate of ₹8,100 per gram of gold. This bond has a lock-in period of 8 years, after which it will be redeemed at the prevailing market price of gold. Based on your analysis, gold has historically provided an average annual return of 8%, which you expect to continue in the future. In addition to potential capital gains, the bond offers an annual coupon interest of 2.5% on its current value. What is the expected rate of return for this bond? (6)

4. (a) Using the data given below shows that under Modigliani and Miller hypothesis, the payment or non-payment of dividend does not affect the value of the firm :

Earnings Per Share (EPS)	₹28
P/E Ratio	8.33 times
Number of outstanding equity shares	1,50,000
Expected dividend per share	₹10
Expected total net income	₹20,00,000
New investment	₹30,00,000
	(12)

- (b) How does Gordon's model differ from Walter's model of dividends? Explain any six points of difference. (6)

OR

- (a) A company has a total equity capital of ₹25,00,000 (₹10 per share). Considering the return on investment (ROI) to be 10%, 12%, and 15% and the cost of equity to be 12%, compute the price of the share using Gordon model if dividend payout ratio is 0%, 50%, 75%, and 100%. (12)

(b) Elucidate any six factors influencing the dividend policy of a firm. (6)

5. (a) Swiftie Ltd. provides you with the following facts. Estimate the net working capital required for the project of PGL provided the estimated cost per unit of production is as follows :

Raw material	₹160
Direct labor	₹60
Overheads (Including depreciation of ₹20 per unit)	₹140
Total	₹360

Additional information :

- (i) Selling price: ₹400 per unit
- (ii) Level of activity: 78,000 units of production per annum
- (iii) Raw material in stock: Average 4 weeks
- (iv) Work-in-progress (Assume 50% completion state in respect of conversion cost and 100% completion in respect of material): Average 2 weeks
- (v) Finished goods in stock: Average 4 weeks
- (vi) Credit allowed by suppliers: Average 4 weeks
- (vii) Credit allowed to debtors: Average 8 weeks
- (viii) Lag in payment of wages: Average 1.5 weeks
- (ix) Cash at the bank is expected to be: ₹50,000

You may assume that production is carried out evenly during the year. All sales are on a credit basis. Add 10% to your computed figure to allow for contingencies. (12)

- (b) Explain the Operating Cycle Method of working capital estimation. (6)

OR

- (a) Panchayat Limited believes that increasing sales is possible by relaxing its credit terms. The profit plan, based on the existing credit terms, projects sales of ₹20,00,000, with a profit-volume ratio of 30%, fixed costs of ₹1,00,000, bad debts at 1%, and an accounts receivable turnover ratio of 10 times.

Under the relaxed credit policy, sales are expected to rise to ₹24,00,000. However, the bad debts are projected to increase to 2% of sales, and the accounts receivable turnover ratio is expected to decrease to 6 times.

The company needs to determine whether it should adopt the new (relaxed) credit policy, given that its target rate of return is 20%. Assume 360 days in a year. (12)

- (b) What is credit policy? Explain the role of "credit policy terms" in credit policy. (6)

1. (क) आधुनिक वित्तीय कार्य व्यवसाय के लाभ को अधिकतम करने के बजाय शेयरधारकों की शुद्ध संपत्ति (Net Worth) को अधिकतम करने के उद्देश्य से किए जाते हैं। स्पष्ट कीजिए। (6)
- (ख) बेस्टि ₹10,00,000 का ऋण लेता है, जो प्रत्येक वर्ष के अंत में 5 समान किश्तों में चुकाया जाना है। ब्याज दर 10% है। प्रत्येक किश्त की राशि ज्ञात कीजिए। (3)