38246

INTERMEDIATE EXAMINATION

December 2022

P–10(CMFM)
Syllabus 2016

Cost & Management Accounting and Financial Management

Time Allowed: 3 Hours | Full Marks: 100

The figures in the margin on the right side indicate full marks.

All workings must form part of your answer.

Wherever necessary, candidates may make appropriate assumptions and clearly state them in the answers.

Please (1) Write answers to all parts of a question paper.

(2) Open a new page for answers to a new question.

(3) Attempt the required number of questions only.

This Paper has been divided into two parts A & B, each carrying 50 Marks.
Further, each Part has been divided into two sections only.

Part – A

(COST & MANAGEMENT ACCOUNTING)

(50 Marks)

Section–I

Answer the following questions.

1. (a) **Choose the correct answer from the given four alternatives** (You may write only the Roman numeral and Alphabet chosen for your answer.): 1×6=6

(i) Management accounting is concerned with data collection from

(A) internal sources

(B) external sources

(C) internal and external sources

(D) internal or external sources

(ii) In a product mix decision, which is the most important factor to consider in order to try to maximise profit?

(A) Contribution per unit of a scarce resource used to make the product

(B) Contribution per unit of the product

(C) Variable cost per unit of the product

(D) Selling price per unit

(iii) X Ltd. provides you with the following information:

Activity Level	Total Overheads (in ₹)
60%	9,20,000
80%	11,60,000

If the production capacity of X Ltd. at a 50% Activity Level is 60,000 units, then the variable overhead per unit is

(A) ₹ 9 per unit

(B) ₹ 10 per unit

(C) ₹ 11 per unit

(D) ₹ 12 per unit

(iv) A Ltd. provides you with the following information:

Particulars	Opening Stock	Budgeted Closing Stock
Work-in-progress	500 kg [Materials fully supplied but 40% converted]	1,000 kg [Materials fully supplied but 80% converted]
Finished Goods	2,000 kg	1,000 kg

Budgeted Sales : ₹ 47,00,000 @ ₹ 500 per unit

Calculate the Budgeted Labour Hours required for Production if One Labour Hour is required per unit.

(A) 8,400 hours

(B) 9,400 hours

(C) 8,900 hours

(D) 9,000 hours

(v) Calculate the Efficiency Ratio, if Capacity and Activity Ratios are 98% and 93.10% respectively.

(A) 100%

(B) 95%

(C) 105.263%

(D) 91.238%

(vi) If the Standard Cost of the Actual Quantity of Material Consumed is deducted from the Standard Cost of the Revised Standard Quantity, then we obtain

(A) Direct Material Yield Variance

(B) Direct Material Price Variance

(C) Direct Material Usage Variance

(D) Direct Material Mix Variance

(b) **Match the Statement under Column I with the most appropriate Statement under Column II** (You may Opt to write only the numeral and the matched alphabet instead of copying the contents into the answer book.): 1×4=4

	Column I		Column II
(i)	Absorption Costing	(A)	Reduction in the Product Cost per unit due to experience gained over time.
(ii)	Learning Curve	(B)	Each component of Product Cost is specifically justified.
(iii)	Transfer Pricing	(C)	Fixed Production Overheads are included in the Product Cost per unit.
(iv)	Zero Base Budgeting	(D)	Measuring Product Cost on some rational basis during an intra-firm transaction.

(c) **State whether the following statements are True or False** (You may write only the Roman numeral and whether True or False without copying the statement into the answer book.): 1×4=4

(i) In variable costing, fixed costs are treated as period costs.

(ii) Variance due to the difference in Standard Output of Actual Material Input and Actual Output is known as Material Yield Variance.

(iii) One of the assumptions of Break-Even Analysis is that the Sales Mix will vary.

(iv) Fixed Cost based Transfer Pricing is one of the methods of Transfer Pricing method.

Section–II

Answer any *three* questions from question numbers 2, 3, 4 and 5.
Each question carries 12 marks.

2. (a) AGT Ltd. manufactures a product, currently utilising 50% capacity with a turnover of ₹ 18,00,000 at ₹ 100 per unit and its P/V Ratio is 40%. The cost data is as under:

Particulars	₹
Direct Material per unit	30
Direct Wages per unit	20
Variable Overheads per unit	8
Semi-Variable Overheads (which will increase by ₹ 22,800 for every 18% increase in capacity or any part thereof)	96,000
Fixed Overheads	2,40,000

Required:

(i) Calculate the Total Fixed Cost at 50% capacity level.

(ii) Calculate the Number of units to be sold to earn a profit of ₹ 28 per unit.

(iii) Calculate the Selling Price per unit to earn a profit of 25% on capital employed at the 80% activity level. The fixed portion of capital employed is ₹ 53,85,600 and the Working Capital portion is 20% of Sales. 9

(b) Calculate Break-Even-Point for a train journey between Delhi and Jaipur where the cost of an Engine is ₹ 80,000 and of a Bogie is ₹ 16,000. The capacity of a bogie is 70 passengers and each ticket is priced at ₹ 600. The variable cost per ticket is ₹ 100. 3

3. PCT Ltd. provides you with the following information:

	Particulars	**Product A**	**Product B**
(i)	*Figures for the year 2021:*		
	Sales (₹)	₹ 2,40,000	₹ 2,00,000
	Selling Price Per Unit (₹)	₹ 24	₹ 50
	Closing Finished Stock (on FIFO basis)	₹ 20,000 @ ₹ 20	₹ 46,000 @ ₹ 20
(ii)	*Material and Labour requirements :*		
	Direct Material X @ ₹ 3 Per Unit	1.9 Units	3.8 Units
	Direct Material Y @ ₹ 1 Per Unit	1.08 Units	1.62 Units
	Direct Labour in P Deptt. @ ₹ 1 Per Hour	2 Hours	1 Hour
	Direct Labour in Q Deptt. @ ₹ 3 Per Hour	1 Hour	1 Hour
(iii)	*Targets for 2022:*		
	Sales Quantity Increase /(Decrease)	(20%)	25%
	Selling Price Increase /(Decrease)	25%	(20%)
	Closing Finished Stock (Units)	2,700	1,100
	Post Production Rejection Rate	3%	5%
(iv)	*Direct Material Stocks:*		
	Closing Stock on 31.12.2021	11,280 Units	1,640 Units
	Estimated Stock as on 31.12.2022	16,000 Units	4,000 Units
	Material Wastage Rate	5%	4%

(v) Material Prices are expected to increase by 10%.

(vi) Wage Rates are expected to increase by 30% and a 25% increase in labour productivity is expected.

(vii) The factory works for 8 hours a day, 6 days a week and the budget period is one year and during each quarter hours lost due to leave, holidays and other causes are estimated to be 124 hours.

Required: Prepare Sales Budget, Production Budget, Direct Material Usage & Purchase Budget, Man Power Budget, Direct Labour Cost Budget. 12

4. (a) Average of the Actual Fixed Overhead Rate per hour and Standard Fixed Overhead Rate per hour is ₹ 3.05. The difference between the Actual Fixed Overhead Rate per hour and Standard Actual Fixed Overhead Rate per hour is ₹ 0.10. Average of Standard Hours and Actual Hours is 28,350 hours.

Fixed Overhead Cost Variance is ₹ 11,070 (Adv), Standard Overhead Absorption Rate per hour ₹ 4.

Standard Overhead Absorption Rate per Unit ₹ 8, Variable Overhead Cost Variance is ₹ 270 (Fav).

Budgeted Production 15,000 Units, Actual Output per man-hour (in Units): $\frac{1}{2.2}$.

Actual Variable Overhead Rate per Unit ₹ 1.98.

Calculate all the Overhead Variances. 8

(b) BTC Ltd. manufactures two products X and Y. Product X requires 5 hours to produce while 5 units of product Y can be produced in one hour. In July 3,000 units of X and 15,000 units of Y were produced. Activity Ratio is 93.75% of the Capacity Ratio and the Capacity Ratio is 102.4% of the Efficiency Ratio. Calculate the Idle Capacity Ratio. 4

5. Write short notes on *any three* out of the following: 4×3=12

(a) Strategic Management Accounting

(b) Forecast vs. Budget

(c) Limitations of Learning Curve Theory

(d) Pricing based on Opportunity Cost

Part – B

(FINANCIAL MANAGEMENT)

(50 Marks)

Section–III

Answer the following questions.

6. (a) **Choose the correct answer from the given four alternatives** (You may write only the Roman numeral and Alphabet chosen for your answer.): 1×6=6

(i) If the Fixed Cost is 50% of EBIT, then Operating Leverage would be

(A) 2

(B) 2.5

(C) 3

(D) 3.5

(ii) If Annual Growth Rate is 50% of the Cost of Equity and the Dividend Yield is $9\frac{1}{11}$%, then the Cost of Equity would be

(A) 18%

(B) 20%

(C) 22%

(D) 25%

(iii) Which among the following is not an assumption of the Net Operating Income Approach?

(A) Value of the Firm remains the same.

(B) Cost of Debt remains the same.

(C) Cost of Capital remains the same.

(D) Cost of Equity remains the same.

(iv) Calculate the Risk-Free rate of return if the value of beta (β) is 1.5, Market return = 13% and Cost of Equity = 16%.

(A) 5.5%

(B) 6.25%

(C) 6.75%

(D) 7%

(v) In Cash Budget, Interest on Fixed Deposits made in a Bank with a maturity period of 3 years is

(A) Cash Flows from Operating Activity

(B) Cash Flows from Financing Activity

(C) Cash Flows from Investing Activity

(D) None of the above

(vi) If A = Annual Consumption of Input (in Units), O = Ordering Cost per order and C = Carrying Cost per unit per annum, calculate the Ordering Cost per Annum at the Order Size of $\sqrt{\frac{2AO}{C}}$

(A) $\sqrt{AOC}$

(B) $2\sqrt{AOC}$

(C) $\sqrt{\frac{AOC}{2}}$

(D) $\sqrt{2AOC}$

(b) **Match the Statement under Column I with the most appropriate Statement under Column II** (You may Opt to write only the numeral and the matched alphabet instead of copying the contents into the answer book.): 1×4=4

	Column I		**Column II**
(i)	Constant Growth Model	(A)	Modigliani and Miller
(ii)	Net Income Approach	(B)	Ezra Solomon
(iii)	Dividend Irrelevancy Model	(C)	Myron J Gordon
(iv)	Traditional view of Capital Structure	(D)	David Durand

(c) **State whether the following Statements are True or False** (You may write only the Roman numeral and whether True or False without copying the statement into the answer book.): 1×4=4

(i) Agency Costs do not include indirect costs.

(ii) Equity Ratio does not help in assessing the solvency of the company.

(iii) GDRs do not have voting rights.

(iv) When $\beta = 0$ then security under consideration is not risky.

Section–IV

Answer any *three* questions from question numbers 7, 8, 9 and 10.
Each question carries 12 marks.

7. (a) TCP Ltd. needs to raise ₹10,00,000 for the construction of a new plant and provides you with the following information:

(i) Financing Plan: A – 40% Equity and Balance through 10% Debt
Financing Plan: B – 30% Equity, 60% through 10% Debt and Balance through 15% Preference Shares.

(ii) Equity Shares of the face value of ₹10 each will be issued at a premium of 110%. Flotation cost ₹ 1 per share. 15% Preference Shares of the face value of ₹100 each will be issued at a premium of 110%. Flotation costs ₹10 per share.

(iii) Expected Capital Turnover Ratio 1, Expected Sales to Variable Cost Ratio 156.25%, Fixed Costs ₹ 60,000. Tax Rate: 25%.

Required: Calculate the Indifference Point between A and B plans and suggest which plan has more financial risk. 6

(b) VRP provides you with the following information:

Operating Profit (before tax) Ratio	50%
Capital Turnover Ratio	2 times
15% Debt-Shareholders' Funds Ratio	2:1
Capital Gearing Ratio	3:1
18% Preference Share Capital	?
Tax Rate	30%

Calculate Return on Equity Shareholders' Funds. 6

8. (a) HDR Ltd. requires additional finance of ₹ 20 lakhs for meeting its investment plans. The following information is given:

(i) Company has ₹ 4,00,000 in the form of retained earnings available for investment purposes.

(ii) Target Debt-Equity Ratio: 25:75.

(iii) Cost of debt is 10% (before tax) for the first ₹ 2,00,000 and 13% (before tax) beyond that.

(iv) Earning per share ₹ 12.

(v) Dividend Payout Ratio 50%.

(vi) P/E Ratio 5.

(vii) The company wants to offer the issue of Equity Shares at a premium of 20% of the market price. The flotation cost is expected to be ₹ 6 per share.

(viii) Company's tax rate is 30% and the shareholder's personal tax rate is 20%.

Calculate the overall weighted average (after tax) cost of additional finance. 6

(b) Given below are the data on a capital project 'M':

Annual Cost Saving	₹ 60,000	Profitability index	1.064
Useful Life	4 years	Salvage value	0
Internal Rate of Return	15%		

You are required to calculate for this project M : 6

(i) Cost of Project

(ii) Payback Period

(iii) Cost of Capital

(iv) Net Present Value

Given the following table of discount factors:

DISCOUNT FACTOR	15%	14%	13%	12%
1 year	0.869	0.877	0.885	0.893
2 years	0.756	0.769	0.783	0.797
3 years	0.658	0.675	0.693	0.712
4 years	0.572	0.592	0.613	0.636
	2.855	2.913	2.974	3.038

9. (a) Tulsian Ltd., is considering changing its credit terms from 1/35, net 60 to 2/10, net 60. As a result, the credit sales will increase from ₹150 crores to 105%, the Average collection period will decline by 25 days and the Default Percentage will increase from 0.5% to 1%. Collection Expenses will increase from ₹ 35,000 to ₹ 40,500. At present, Selling Price is ₹ 300 per unit, Contribution to Sales Ratio 20%, Average Cost is ₹ 270 per unit and 60% of the credit customers avail cash discount. Should the credit terms be changed if the required rate of return is 24% (pre-tax) and the Tax rate is 25%? (Take 360 days in a year.) 6

(b) BHT provides you with the following information:

Equity Share Capital (₹ 50 each)	₹ 100 lakhs
12% Preference Share Capital	₹ 50 lakhs
10% Debentures	₹ 50 lakhs
Return on Capital Employed	18.75%
Dividend paid	₹ 12 lakhs
Theoretical Market Price of an equity share under Gordon's Model	₹ 300
Tax Rate	20%

Required: Determine the theoretical market price of an equity share under Walter's Model. Are you satisfied with the current dividend policy of the company? If not, what should be the optimum payout ratio? 6

10. Write short notes on *any three* out of the following: 4×3=12

(a) Factoring vs. Bill Discounting

(b) Systematic and Unsystematic Risk

(c) Operating and Finance Lease

(d) GDR and ADR

SUGGESTED ANSWERS TO QUESTIONS

Part – A
Section–I

1. (a) **1x6= 6 Marks**

(i) - (C)
(ii) - (A)
(iii) - (B)
(iv) - (D)
(v) - (B)
(vi) - (D)

1. (b) **1x 4 = 4 Marks**

(i) (C)
(ii) (A)
(iii) (D)
(iv) (B)

1. (c) **1x 4 = 4 Marks**

(i) True
(ii) True
(iii) False
(iv) False

Section–II

Answer any three questions from question number 2, 3, 4 and 5

2. (a) **9 Marks**

(i) Total Fixed Cost = ₹ 3,00,000.
(ii) Number of Units to be sold 28,800 units..
(iii) The Selling Price per unit = ₹ 125 per unit.

2. (b) **3 Marks**

Break Even Point = 320 passengers

3. **12 Marks**

Budget Sales:

Product A - ₹ 2,40,000
Product B - ₹ 2,00,000

Budgeted Production :

Product A - 10,000

Product B - 4,000

Direct Material Usage:

Material X - 36,000

Material Y - 18,000

Budgeted Purchase:

Material X - ₹ 1,34,376

Material Y - ₹ 22,396

Budgeted Man Power Department:

Department P - 9.6

Department Q - 5.6

Budgeted Direct Labour Cost:

Department P – ₹ 24,960

Department Q – ₹ 43,680

4. (a) **8 Marks**

Let Actual Fixed Overhead Rate per hour be AFORH

Let Standard Fixed Overhead Rate per hour SFORH

Now $\frac{\text{AFORH} + \text{SFORH}}{2}$ = 3.05

Hence AFORH + SFORH = 6.10 – Eq. 1

AFORH – SFORH = 0.10 – Eq. 2

Now solving Eq.1 and Eq.2, the value of AFORH is ₹ 3.10 and the value of SFORH is ₹ 3.00

Let Standard Hours be SH

Let Actual Hours be AH

Now $\frac{\text{SH} + \text{AH}}{2}$ = 28,350

Hence SH + AH = 56,700– Eq. 3

Fixed Overhead Cost Variance = Fixed Overhead Absorbed – Fixed Overhead incurred

Fixed Overhead Absorbed = SH x SFORH = 3SH since SFORH = 3

Fixed Overhead Incurred = AHxAFORH = 3.1AH since AFORH = 3.10

Hence 3SH – 3.1AH = – 11,070 – Eq. 3

Now solving Eq. 3 and Eq. 4, the value of AH is 29,700 and the value of SH is27,000

Standard Overhead Absorption Rate per Hour ₹ 4

Standard Overhead Absorption Rate per Unit ₹ 8

ThereforeStandard Output per man-hour (in units): $\frac{1}{2}$

Budgeted Production = Budgeted Hours x Standard Output per hour (in units)

Therefore Budgeted Hours (BH) = 30,000

Actual Output = Actual Hours x Actual Output per hour (in units) = 29,700 x $\frac{1}{2.2}$ = 13,500 units

Variable Overhead Incurred (i.e. Actual Variable Overhead) = 13,500 units x ₹ 1.98 = ₹ 26,730

Variable Overhead Cost Variance = Variable Overhead Absorbed–Variable Overhead Incurred
Variable Overhead Absorbed = Standard Hours for Actual Output x Standard Variable Overhead Rate per Hour
Let Standard Variable Overhead Rate per Hour= SVORH
Now Standard Hours for Actual Output = 13,500 x 2 = 27,000
Therefore = 27,000SVORH –₹ 26,730 = 270
27,000SVORH = ₹27,000
Hence SVORH = ₹ 1 per hour

Other Fixed Overhead Variances

Fixed Overheads Efficiency Variance = 8,100 (Adv)
Fixed Overheads Capacity Variance = 900 (Adv)
Fixed Overheads Volume Variance = 9,000 (Adv)
Fixed Overheads Expenditure Variance = 2,070 (Adv)

Other Variable Overheads Variances

Variable Overheads Efficiency Variance = 2,700 (Adv)
Variable Overheads Expenditure Variance = 2,970 (Fav)

4. (b) **4 Marks**

Idle Capacity Ratio = 0.04 or 4%

5. Write short notes on <u>any three</u> out of the following: **4x3=12 Marks**

(a): **Strategic Management Accounting:**

The term strategic management accounting‘ applies to the identification, measurement andcommunication of cost data in all those situations where the organisation is being judged against the performance of competitors.

The traditional approach to management accounting has been to regard internal decision-makers as inward-looking. This has led to developing techniques for identifying, measuring and communicating costs where only internal comparisons have been thought relevant. Those techniques remain useful in some cases and are sufficiently widely used to justify studying them in an introductory course.

However, the later years of the twentieth century brought an increasing awareness that company managers must be outward-looking. They must form a strategy for their business that has regard to what competitors are achieving. This requires management accounting to identify measure and communicate data on the company relative to data for other similar companies. Managers must consider competitive forces such as the threat of new entrants, substitute products or services, rivalry within the industry and the relative bargaining strength of suppliers and customers. Managers must also consider how their organisation adds value in creating its product. There is a flow of business activity from research and development through production, marketing, distribution and after-sales support. This chain of activities creates costs which must be compared with the value added by the organisation.

Strategic management accounting uses different approaches/techniques to achieve strategy execution and to develop integrated approaches to performance measurement. Some of the strategic tools for performance measurement are Target Costing, Kaizen Costing, Life Cycle Costing, Theory of constraints (TOC), Bench Marking etc.

(b): Forecast vs. Budget:

Forecast is mainly concerned with an assessment of probable future events whereas Budget is a planned result that an enterprise aims to attain. Forecasting precedes the preparation of a budget as it is an important part of the budgeting process. It is said that the budgetary process is more a test of forecasting skill than anything else. A budget is both a mechanism for profit planning and a technique of operating cost control. To establish a budget it is essential to forecast various important variables like sales, selling prices, availability of materials, prices of materials, wage rates etc.

Both budgets and forecasts refer to the anticipated actions and events. But still, there are wide differences between budgets and forecasts as given below:

(i) Forecasts are mainly concerned with anticipated or probable events whereas a budget is related to planned events.

(ii) Forecasts may cover longer periods or years whereas a budget is planned or prepared for a shorter period.

(iii) Forecast is only a tentative estimate but a budget is a target fixed for a period.

(iv) Forecast results in planning and the result of planning is budgeting.

(v) The function of forecast ends with the forecast of likely events whereas the process of a budget starts where the forecast ends and converts it into a budget.

(vi) Forecast usually covers a specific business function but a budget is prepared for the business as awhole.

(vii) Forecasting does not act as a tool for controlling measurement but the purpose of a budget is not merelya planning device but also a controlling tool.

(c): Limitations of Learning Curve Theory are as follows:

(i) The learning curve is useful only for new operations where machines do not constitute a major part of the production process. It does not apply to all productions, e.g. new and experienced workmen.

(ii) The learning curve assumes that the production will continue without any major interruptions. If for any reason the work is interrupted, the curve may be deflected or assume a new slopes

(iii) Changes other than learning may affect the learning curve. For example, improvement in facilities, arrangements, and equipment as well as personnel morale and performance may be factors influencing the curve. On the other hand, negative developments in employee attitudes may also affect the curve and reverse or retard the progress of improvement.

(iv) The characteristic 80% learning curve as originally obtained in the air force industry in the USA has been usually accepted as the percentage applicable to all industries. Studies show that there cannot be a unique percentage which can be universally applied.

(d): Pricing based on opportunity cost:

This pricing recognizes the minimum price that the selling division is ready to accept and the maximum price that the buying division is ready to pay. The final transfer price may be based on these minimum expectations of both divisions. The most ideal situation will be when the minimum price expected by the selling division is less than the maximum price accepted by the buying division. However, in practice, it may happen very rarely and there is a possibility of conflicts over the opportunity cost.

It is very clear that the fixation of transfer prices is a very delicate decision. There might be a clash of interests between the selling and buying divisions and hence while fixing the transfer price, the overall interests of the organisation should be taken into consideration and overall ‘Goal Congruence’ should be given utmost importance rather than the interests of the selling or buying division.

Part – B
Section–III

6. (a) **1x 6 = 6 Marks**

(i) (A/B/C/D)
(ii) (B)
(iii) (D)
(iv) (D)
(v) (A)
(vi) (C)

6. (b) **1x 4 = 4 Marks**

(i) – (C)
(ii) – (D)
(iii) – (A)
(iv) – (B)

6. (c) **1x 4 = 4 Marks**

(i) False
(ii) False
(iii) True
(iv) True

Section–IV

Answer any three questions from question number 7, 8, 9 and 10

7. (a) **6 Marks**

The Indifference Point between A and B plans is the EBIT level of ₹1,00,000
Financial Break-Even Point for Financial Plan A = ₹ 60,000
Financial Break-Even Point for Financial Plan B = ₹ 70,000
As Financial Break Even point for Financial Plan B is higher therefore Financial Plan B has more financial risk

7. (b) **6 Marks**

Return on Equity Shareholders' Fund is 2.46 or 246%

8. (a) **6 Marks**

Weighted Average Cost of Capital = k_o = 0.16898 or 16.898%

8. (b) **6 Marks**

(i) Cost of Project = ₹ 1,71,300

(ii) Payback Period = 2.855 years

(iii) Cost of Capital is 12%

(iv) Net Present Value = ₹10, 963.20

9. (a) **6 Marks**

Present Collection Period = (35 days x 60%) + (60 days x 40%) = 21 days + 24 days = 45 days

Collection Period for Proposed Policy = 45 days – 25 days = 20 days

Let Proportion of Customers availing Cash discount under proposed policy is X

Hence (10 days x X) + [60 days x (1 – X)] = 20 days

10X + 60 – 60X = 20 days

– 50X= – 40 days

X = $\frac{40}{50}$ = 0.80 or 80%

Therefore Proportion of Customers availing Cash Discount under proposed policy is 80%

Evaluation of Proposed Debtor Policies

Particular	₹ in crores
A. Increase in Sales (₹ 150 crores x 5%)	7.50000
B. Less: Increase in Variable Cost (₹ 150 crores x 80% x 5%)	6.00000
C. Less: Increase in Bad Debts (₹ 157.5 crores x 1%) –(₹ 150 crores x 0.5%)	0.82500
D. Less: Increase in Cash Discount (₹ 157.5 crores x80% x2%)– (₹ 150 crores x 60% x 1%)	1.62000
E. Less: Increase in Collection Expenses (₹ 40,500–₹ 35,000)	0.00055
F. Expected Profit (A – B – C – D – E)	-0.94555
G. Less: Tax @ 25%	-0.23639
H. Profti after Tax	-0.70916
I. Add: Saving in Opportunity Cost due to reduction in Credit Period $\left(\frac{₹\ 150\ \text{crores}\ \ x\ 80\%\ x\ 45\ \text{days}\ \ x\ 18\%}{360\ \text{days}}\right) - \left(\frac{₹\ 157.5\ \text{crores}\ \ x\ 80\%\ x\ 20\ \text{days}\ \ x\ 18\%}{360}\right)$	1.44000
J. Net Benefits from Proposed Policy (H + I)	0.73084

Recommendation: The Proposed Policy should be adopted since the Net Benefits from Proposed Policy is higher than Present Policy.

9. (b) **6 Marks**

Market Price of Share as per Walter Formula = 80.892

Recommendation: Current Dividend Policy of the Company is not satisfactory because the company is a growing company (since r >k_e) and it is not in favour of the company to pay its profit to the shareholders by way of dividends. Thus the optimum payout ratio for the company should be 0%.

10. (a) **4x3=12 Marks**

Factoring vs. Bill Discounting:

Factoring differs from discounting in many respects. They are:

(i) Factoring is a broader term covering the entire trade debts of a client whereas discounting coversonly those trade debts which are backed by Account Receivables.

(ii) Under factoring, the factor purchases the trade debt and thus becomes a holder for value. But, under discounting the financier acts simply as an agent of his customer and he does not become the owner. In other words, discounting is a kind of advance against bills whereas factoring is an outright purchase of trade debts.

(iii) (iii) The factors may extend credit without any recourse to the client in the event of non-payment by customers. But, discounting is always made with recourse to the client.

(iv) Account Receivables under discount are subject to rediscounting whereas it is not possible under factoring.

(v) Factoring involves purchase and collection of debts, management of sales ledger, assumption of credit risk, provision of finance and rendering of consultancy services. But, discounting involves simply the provision of finance alone.

(vi) Bill discounting finance is a specific one in the sense that it is based on an individual bill arising out of an individual transaction only. On the other hand, factoring is based on the 'whole turnover' i.e., a bulk finance is provided against a number of unpaid invoices.

(vii) Under discounting, the drawee is always aware of the bank's charge on receivables. But, under undisclosed factoring everything is kept highly confidential.

(viii) Bill financing through discounting requires registration of charges with the Registrar of Companies. In fact, factoring does not require such registration.

(ix) Discounting is always a kind of "in-balance sheet financing". That is, both the amount of receivables and bank credit are shown in the balance sheet itself due to its 'with recourse' nature. But, factoring is always "off-balance sheet financing".

10. (b)

Systematic and Unsystematic Risk:

The risks, to which a security is exposed, can be classified into two groups:

(i) Unsystematic Risk: This is also called company-specific risk as the risk is related to the company's performance. This type of risk can be reduced or eliminated by diversification of the securities portfolio. This is also known as diversifiable risk.

(ii) Systematic Risk: It is the macroeconomic or market-specific risk under which a company operates. This type of risk cannot be eliminated by diversification hence, it is non-diversifiable. Examples are inflation, Government policy, interest rate etc.

10. (c)

Operating and Finance Lease:

An Operating Lease is usually characterized by the following features:

(i) It is a short-term lease. The lease period in such a contract is less than the useful life of an asset.

(ii) The lease is usually cancellable at short- notice by the lessee.

(iii) As the period of an operating lease is less than the useful life of the asset, it does not necessarily amortize the original cost of the asset. The lessor has to make further leases or sell the asset to recover his cost of investment and expected rate of return.

(iv) The lessee usually has the option of renewing the lease after the expiry of the lease period.

(v) The lessor is generally responsible for maintenance, insurance and taxes of the asset.

(vi) As it is a short-term cancellable lease, it implies a higher risk to the lessor but higher lease rentals to the lessee.

Finance Lease: A lease is classified as Financial Lease if it ensures the lessor for amortization of the entire cost of investment plus the expected return on capital outlay during the terms of the lease. Such a lease is usually for a longer period and is non-cancellable. Financial Leases are commonly used for leasing land, building, machinery and fixed equipments, etc.

A Financial Lease is usually characterized by the following features:

(i) The present value of the total lease rentals payable during the period of the lease exceeds or is equal substantially to the whole of the fair value of the leased asset. It implies that within the lease period, the lessor recovers his investment in the asset along with an acceptable rate of return.

(ii) As compared to Operating Lease, a Financial Lease is for a longer period of time.

(iii) It is usually non-cancellable by the lessee prior to its expiration date.

(iv) The lessee is generally responsible for the maintenance, insurance and services of the asset.

(v) A Financial Lease usually provides the lessee with an option of renewing the lease for a further period at a normal rent.

10. (d)

GDR and ADR :

A Global Depository Receipt (GDR) is a negotiable instrument, basically, a bearer instrument which is traded freely in the international market either through the stock exchange or over the counter or among Qualified International Buyers (QIB).

It is denominated in US Dollars and represents shares issued in the local currency.

Characteristics of GDR :

1) The shares underlying the GDR do not carry voting rights.
2) The instruments are freely traded in the international market.
3) The investors earn fixed income by way of dividends.
4) GDRs can be converted into underlying shares and thereby depository/custodian banks reduce the issue.

American Depository Receipt (ADR): The depository receipt in the US market is called ADR. ADRs are those which are issued and listed in any of the stock exchanges of the USA. It is an investment in the stock of non-USA corporation trading in the US stock exchange.

Characteristics of ADR :

1. The ADRs may or may not have voting rights.
2. The ADRs are issued in accordance with the provisions laid by SEC, USA.
3. The ADRs are bearer negotiable instruments and the holder can sell it in the market.
4. The ADRs once sold can be re-issued. The operation of ADR- similar to that of GDR