Conferenza.in

Nov 26 EXAM

CA Final

AFM

CASE SCENARIOS

YOUR MCQ PRACTICE COMPANION

– CA Mayank Kothari (AIR 47)

CHAPTERS	SCENARIOS	MCQs
14	74	302

CHAPTER-WISE INDEX

CH.	CHAPTER	CASES	MCQs
1	Financial Policy & Corporate Strategy	3	14
2	Risk Management	2	8
3	Advanced Capital Budgeting Decisions	6	22
4	Security Analysis	3	13
5	Security Valuation	11	43
6	Portfolio Management	7	31
7	Securitization	1	5
8	Mutual Funds	6	25
9	Derivatives Analysis and Valuation	8	30
10	Interest Rate Risk Management	3	14
11	Foreign Exchange Exposure and Risk Management	11	45
12	International Financial Management	1	5
13	Business Valuation	2	10
14	Mergers, Acquisitions and Corporate Restructuring	10	37
	TOTAL	74	302

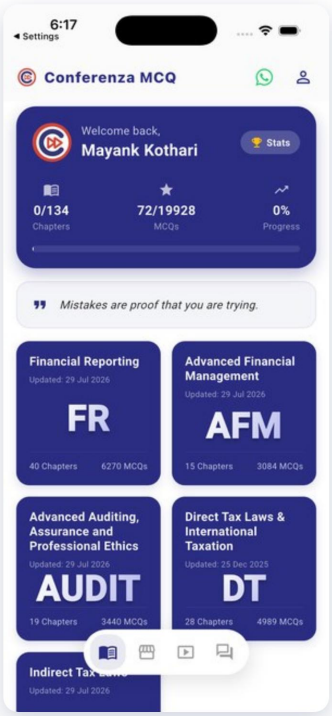
WHAT IS COVERED?

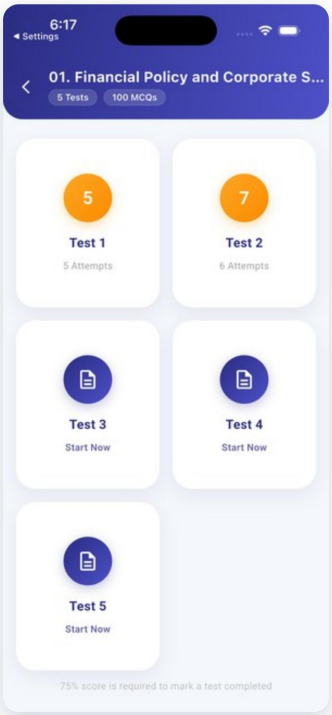
ICAI Case Scenario Booklet, RTPs — May 2024 to Nov 2026
MTPs — May 2024 to May 2026, Suggested Answers — Nov 2024 to May 2026

© Copyright with Institute of Chartered Accountants of India

1 Conferenza MCQs App

Free MCQs across **every CA Final subject** — chapter tests, instant scoring and a full answer review, on your phone.



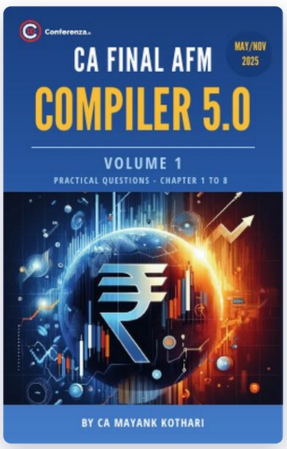


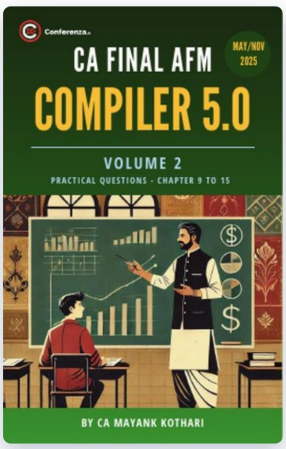
WHAT YOU GET

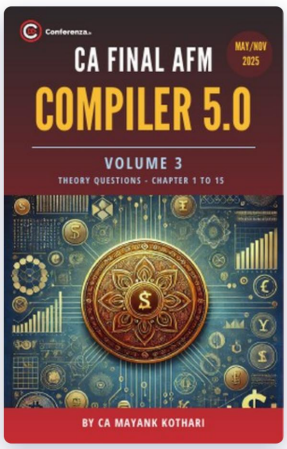
- FR, AFM, Audit, DT, IDT and more — all in one app
- Chapter-wise tests with a timer and instant result
- Every answer explained, with the option to ask a query
- Track chapters cleared and MCQs attempted as you go
- **Free to use** — no subscription

2 CA Final AFM Compiler

Three volumes to **practise every question** in the syllabus — practical and theory, chapter by chapter.







THREE VOLUMES

- **Volume 1** — practical questions, Chapters 1 to 8
- **Volume 2** — practical questions, Chapters 9 to 15
- **Volume 3** — theory questions, Chapters 1 to 15
- Past exams, RTPs and MTPs, arranged by chapter

3 CA Final AFM Regular Batch

Learn the subject end to end and **finish your AFM preparation** — taught by CA Mayank Kothari.

200 HOURS	**104** LECTURES
12 MONTHS VALIDITY	**3x** VIEWS

CHAPTER 1

Financial Policy & Corporate Strategy

Case Scenario 1

Following Financial data are available for PQR Ltd. for the financial year ending 2023:

	₹ in lakh
8% Debentures	125
10% Bonds (2022)	50
Equity Shares (₹10 each)	100
Reserves and Surplus	300
Total Assets	600
Assets Turnovers ratio	1.1
Effective interest rate	8%
Effective tax rate	40%
Operating margin	10%
Dividend payout ratio	16.67%
Current market Price of Share	₹14
Required rate of return of investors	15%

ICAI Case Scenario Booklet, CS 44 (5 × 2 = 10 Marks), MTP May 25 S1

Answer:

1. 10% Bonds must have issued in the month of…….

(A) May 2022
(B) June 2022
(C) July 2022
(D) August 2022

Answer: Option (B)

(175 × 8% – 125 × 8%) ÷ (50 × 10%) = 0.8 year,
i.e. 9.6 months prior to 31.03.2023

2. Amount of retailed earning for the financial year 2023 approximately is……..

(A) ₹52.00 lakh
(B) ₹31.20 lakh
(C) ₹26.00 lakh
(D) ₹5.20 lakh

Answer: Option (C)

(1 – 16.67%) [(600 x 1.10 x 10% - 175 x 8%)(1 – 0.40)] = 26

Conferenza.in

3. Return on Equity (ROE) of PQR Ltd. is……..

(A) 15.00%
(B) 6.50%
(C) 10.00%
(D) 7.80%

Answer: **Option (D)**
[(600 x 1.10 x 10% - 175 x 8%)(1 – 0.40)]/ 400 = 7.80%

4. Sustainable Growth Rate of PQR Ltd. shall be approximately……..

(A) 15.00%
(B) 6.50%
(C) 10.00%
(D) 7.80%

Answer: **Option (B)**
ROE(1 – d) = 7.80 x (1 – 0.1667)
= 6.50%

5. Fair price of share of PQR Ltd. using Dividend Discount Model shall be approximately…….

(A) ₹10
(B) ₹14
(C) ₹6.12
(D) ₹6.51

Answer: **Option (D)**
P_0 = 3.12 × 0.1667 × 1.065 ÷ (0.15 – 0.065)
= 0.5539 ÷ 0.085
= ₹6.51

Conferenza.in

Case Scenario 2

XYZ Ltd., a medium-sized company in the renewable energy sector, is experiencing steady sales growth. The company's management, however, is concerned about balancing rapid growth with long-term sustainability. In the past year, XYZ's growth objectives have led to aggressive expansion plans, but management now realizes that such growth might not be financially sustainable in the long run. This raises concerns about how to maintain the company's financial health while meeting its ambitious growth targets. The CFO of XYZ Ltd. highlights the importance of Sustainable Growth Rate (SGR). The company now needs to ensure that its operational and financial policies align with its growth goals. XYZ must avoid expanding too quickly, which could strain its financial resources and lead to excessive borrowing. Moreover, management must also consider the long-term implications of resource consumption, particularly in the renewable energy industry, where sustainability is key to both current and future stakeholders. XYZ Ltd. also realizes that it needs to focus on building its growth capability alongside its growth strategy. Without the necessary infrastructure and financial planning in place, the company's efforts to achieve long-term, sustainable growth could be in jeopardy. Furthermore, the company is aware of the risks of relying too much on external financing and recognizes the need for a balance between maintaining sufficient equity and minimizing debt. Given the importance of these considerations, XYZ's management team must now review their growth strategy and financial policies to ensure they are consistent with the firm's sustainable growth objectives.

ICAI Case Scenario Booklet, CS 51 (5 × 2 = 10 Marks), MTP Sep 25 S1

Answer:

1. The concept of Sustainable Growth Rate introduced by.....

(A) Harry Markowitz
(B) William Sharpe
(C) Black Scholes
(D) Robert C. Higgins

Answer: Option (D)

Names of Harry Markowitz and William Sharpe are associated with Portfolio Theory and Black Scholes with Derivative Valuation.

2. The Sustainable Growth Rate (SGR) represents.....

(A) the rate at which the company can grow by issuing more equity.
(B) the maximum rate of growth in sales that can be achieved without borrowing additional funds.
(C) the growth rate determined by market demand for XYZ's products.
(D) the rate of growth determined by inflationary pressures.

Answer: Option (B)

Refer the concept of Sustainable Growth Rate.

Faculty Notes:
SGR is the fastest sales can grow using only retained profit and the extra debt that keeps the debt-equity ratio where it already is — no fresh equity at all.
Option (A) is the opposite: issuing equity is exactly what SGR rules out. (C) and (D) describe demand and inflation, which are not financing limits.

3. According to the case scenario the risk associated with growing too quickly is that.....

(A) the company might not be able to retain competent staff.
(B) the company could face liquidity issues due to over-expansion.
(C) the company's stock price might decline.
(D) it could reduce the company's market share.

Answer: Option (B)
Refer facts from case scenario.
Faculty Notes:
Growing faster than the SGR means assets have to expand faster than the business generates cash. Stock and debtors climb, cash does not keep up, and the company runs short of working capital.
That is a liquidity squeeze — the classic "growing broke" problem. Staff, share price and market share may all suffer eventually, but the immediate risk is running out of cash.

4. Which of the following twin cornerstones are necessary for XYZ Ltd. to achieve sustainable growth?

(A) Market conditions and competition.
(B) Growth capability and growth strategy.
(C) Product innovation and marketing strategy.
(D) Cost-cutting measures and increased sales.

Answer: Option (B)
Refer the concept of Sustainable Growth Rate.
Faculty Notes:
Sustainable growth needs both halves: the capability to fund and service more sales, and a strategy that says where the growth will come from.
Capability without strategy grows nothing; strategy without capability runs the company out of money.

5. In an inflationary condition if creditors require that XYZ Ltd.'s historical cost debt-to-equity ratio stay constant, the inflation.....

(A) reduces the need for external financing.
(B) increases the sustainable growth rate by lowering costs.
(C) lowers the sustainable growth rate.
(D) It has no effect on the company's growth rate.

Answer: Option (C)

Refer the concept of Sustainable Growth Rate.

Faculty Notes:

Inflation raises the rupee value of the assets needed to carry the same real volume of sales. If creditors insist the debt-to-equity ratio measured at historical cost stays constant, the company cannot borrow proportionately more against those inflated assets. More of the growth has to come from retained earnings, so the growth it can sustain falls.

Case Scenario 3

In a recent Board Meeting of N Ltd. the following financials for the year ending 31st March 2025 were presented.

Balance Sheet as on 31.03.2025

Liabilities	(₹ '000)	Assets	(₹ '000)
Equity Capital	4,80,000	Fixed Assets	2,42,000
10% Bonds	92,000	Cash	88,000
Sundry Creditors	66,000	Sundry Debtors	1,10,000
Bills Payable	88,000	Closing Stock	3,30,000
Other Current Liabilities	44,000		
Total Liabilities	**7,70,000**	**Total Assets**	**7,70,000**

Income Statement for the year ending 31.03.2025

Particulars	(₹ '000)	(₹ '000)
Sales		11,77,000
Less: Cost of Goods Sold		
Material	4,18,000	
Wages	2,64,000	
Factory Overheads	1,29,800	8,11,800
Gross Profit		**3,65,200**
Less: Selling & Distribution Cost	1,10,000	
Administrative Cost	1,22,800	2,32,800
Earnings Before Interest and Taxes (EBIT)		**1,32,400**
Less: Interest Charges		9,200
Earnings Before Tax		1,23,200
Less: Taxes @ 50%		61,600
Net Profit (PAT)		**61,600**

During the Board Meeting:

Conferenza.in

(i) Director A said that the company can maintain a certain growth even though the net profit margin remains constant, and assets increase proportionately to sales and it distributes 30% of its net profit. To maintain this growth rate, it will not require any external funds.

(ii) Director B proposed that just by maintaining a target capital structure and without issuing additional equity, and maintaining the target dividend pay-out ratio as proposed by Director A, more growth rate can be achieved.

(iii) Director C agreed with the views of Director A and Director B, but is of the view that in the coming year sales is likely to rise by 15%, hence if required the company can go for issue of equity shares, bonds or debentures to achieve the same growth in sales.

RTP Sep 25 (4 × 2 = 8 Marks)

Answer:

1. The Director A is talking about……

(A) Internal Growth Rate
(B) Sustainable Growth Rate
(C) External Funding Requirements
(D) External Growth Rate

Answer: Option (A)

Faculty Notes:

Growth funded entirely out of retained earnings, with no external money of any kind — neither debt nor equity — is the Internal Growth Rate.

Director B's version allows debt (so the capital structure is held to target) and is therefore the Sustainable Growth Rate, which is the higher of the two.

2. The Director B is talking about……

(A) Internal Growth Rate
(B) Sustainable Growth Rate
(C) External Funding Requirements
(D) External Growth Rate

Answer: Option (B)

Faculty Notes:

Holding the capital structure at target while issuing no fresh equity means debt grows in step with retained earnings. That is exactly the Sustainable Growth Rate.

3. The Director C is talking about……

(A) Internal Growth Rate
(B) Sustainable Growth Rate
(C) External Funding Requirements

(D) External Growth Rate

Answer: Option (C)

Faculty Notes:

Once growth outruns what retention and proportionate debt can fund, the shortfall has to be raised from outside — that shortfall is the External Funding Requirement.

4. If we go by the proposal of Director C, then approximately…… funds shall be raised in the form of equity or debt, assuming that dividend as proposed by Director A is paid out and assets and current liabilities increase in the same proportion as the increase in sales.

(A) ₹1,15,500 thousand
(B) ₹85,800 thousand
(C) ₹79,332 thousand
(D) ₹36,212 thousand

Answer: Option (D)

Faculty Notes:

EFR	= (Increase in assets) – (Increase in spontaneous liabilities) – (Retained earnings)
Increase in assets	= ₹7,70,000 × 15%
	= ₹1,15,500 thousand
Spontaneous liabilities	= 66,000 + 88,000 + 44,000
	= ₹1,98,000; × 15%
	= ₹29,700 thousand
Retained earnings	= PAT ₹61,600 × 1.15 × 70%
	= ₹49,588 thousand
EFR	= 1,15,500 – 29,700 – 49,588
	= ₹36,212 thousand

Equity capital and the 10% bonds are not spontaneous — they do not rise with sales on their own, which is why only creditors, bills payable and other current liabilities are deducted.

Conferenza.in

CHAPTER 2

Risk Management

Case Scenario 1

Mr. X a portfolio Manager invests ₹25,00,000 in stock Alpha and Beta in ratio of 60 : 40. The daily standard deviation of stock Alpha is 1.20% and stock Beta is 0.90%. The correlation between Alpha and Beta is 0.6. Mr. X wanted to measure VaR for confidence level 99% and 90% level.

Z score: 99% confidence level 2.33 and 90% confidence level 1.28. Assume 252 trading days in a year and mean return is zero.

From the information given above, choose the correct answer to the questions below:

May 26 (3 × 2 = 6 Marks)

Answer:

Working Note — daily portfolio standard deviation

σ^2_p $= (0.60 \times 1.20)^2 + (0.40 \times 0.90)^2 + 2\ (0.60)(0.40)(1.20)(0.90)(0.60)$

$= 0.5184 + 0.1296 + 0.31104$

$= 0.95904$

σ_p $= \sqrt{0.95904}$

$= 0.9793\%$ per day

1. What is the approximate annual Value at Risk (VaR) of the portfolio in rupee terms at the given 99% confidence level?

(A) ₹57,027
(B) ₹5,43,162
(C) ₹9,05,271
(D) ₹7,94,080

Answer: Option (C)

Annual σ $= 0.9793\% \times \sqrt{252}$

$= 0.9793\% \times 15.8745$

$= 15.5457\%$

VaR = ₹25,00,000 × 15.5457% × 2.33

= ₹9,05,271 (approx.)

2. What is the approximate diversification benefit (per day) of the portfolio while you calculate amount of VaR at 90% confidence level?

(A) ₹11,540
(B) ₹23,060

Conferenza.in

(C) ₹34,580
(D) ₹3,252

Answer: Option (D)
Undiversified σ (if correlation were 1) = (0.60 × 1.20) + (0.40 × 0.90) = 1.08%
Diversified σ = 0.9793%; saving
= 0.1007% per day
Benefit = ₹25,00,000 × 0.1007% × 1.28 ≈ ₹3,252

3. If the correlation between Stock Alpha and Stock Beta increases from 0.60 to 0.80, what will be the impact on the portfolio's annual VaR at the 99% confidence level?
(A) VaR increase by ₹48,085
(B) VaR decrease by ₹48,085
(C) VaR increase by ₹3,029
(D) VaR decrease ₹3,029

Answer: Option (A)
With ρ = 0.80: σ^2_p
= 0.5184 + 0.1296 + 0.41472
= 1.06272, σ_p
= 1.0309% per day
Annual VaR = ₹25,00,000 × (1.0309% × 15.8745) × 2.33
= ₹9,53,000 (approx.)
Increase over the ₹9,05,271 computed earlier ≈ ₹48,085
Correlation is the only input that moves here — the weights and individual volatilities are unchanged, yet VaR rises by roughly ₹48,000 purely because the two stocks now move together more.

Case Scenario 2

Mr. B is a rational risk taker. He takes his position in a single stock for 4 days in a week. He does not take a position on Friday to avoid weekend effect and takes position only for four days in a week i.e. Monday to Thursday. He transfers the amount on Monday morning and withdraws the balance on Friday morning. He desires to take a maximum exposure in the single stock (not the portfolio) where Value at Risk (VAR) should not exceed the balance lying in his bank account. The position by his manager, as per standing instructions, is taken on the free balance lying in the bank account in the morning on each Monday. On Monday morning (before opening of the capital market) he has transferred an amount of ₹11 Crore to his bank account. A fixed deposit also matured on this Monday. The maturity amount of ₹63,42,560 was also credited to his account by the bank in the morning of the Monday. However, Mr. B received the intimation of the same in the evening. The bank needs a minimum balance of ₹1,000 all the time.

The other information with respect to stocks X and Y, which are under consideration for this week, is as under:

Return (X)	Probability (X)	Return (Y)	Probability (Y)
6	0.10	4	0.10
7	0.25	6	0.20
8	0.30	8	0.40
9	0.25	10	0.20
10	0.10	12	0.10

ICAI Case Scenario Booklet, CS 46 (5 × 2 = 10 Marks), RTP May 25

Answer:

1. Available amount which can be used by Mr. B for potential exposure for 4 days on Monday morning shall be……

(A) ₹11,00,00,000
(B) ₹11,63,41,560
(C) ₹11,00,01,000
(D) ₹11,63,42,560

Answer: Option (B)
₹11,00,00,000 + ₹63,42,560 - ₹1,000 = ₹11,63,41,560

2. The Z-score at a 99% confidence level for Mr. B's Value at Risk (VaR) is……

(A) 1.64
(B) 1.96
(C) 2.33
(D) 2.58

Answer: Option (C)
1.64 = 95%, 1.96
= 98% and 2.58
= 99.50%

3. The expected return for the stocks X is…….

(A) 7%
(B) 8%
(C) 9%
(D) 10%

Answer: Option (B)
6 x 0.10 +7 x 0.25 +8 x 0.30 + 9 x 0.25 + 10 x 0.10 = 8%

4. The expected return for the stocks Y is…….

(A) 7%
(B) 8%
(C) 9%

Conferenza.in

(D) 10%

Answer: Option (B)

4 x 0.10 + 6 x 0.20 + 8 x 0.40 + 10 x 0.20 + 12 x 0.10 = 8%

5. In which stock should Mr. B invest in to maximize his returns while maintaining his Value at Risk (VaR) within acceptable limits?

(A) Stock X
(B) Stock Y
(C) Both stocks are equally good
(D) Neither stock is suitable

Answer: Option (A)

CV_x = 1.14 ÷ 8
= 0.1425
CVy = 2.19 ÷ 8
= 0.274

Stock X carries the lower coefficient of variation, so it gives more return per unit of risk.

Conferenza.in

CHAPTER 3

Advanced Capital Budgeting Decisions

Case Scenario 1

P Ltd. is considering a new project with the following details:

Particulars	Amount
Initial project cost	₹4,80,000
Annual projected sales	₹4,00,000
Annual projected variable cost	₹1,60,000
Annual projected fixed cost	₹60,000
Project life	4 years
Cost of capital	10% p.a.

Consider Cumm. PVF for 4 years @ 10% = 3.169 and @ 11% = 3.103.

Note: (a) Ignore depreciation on initial project cost and taxation. (b) Calculation up to 2 decimal places.

From the information given above, choose the correct answer to the following question No. 1 to 3:

Sep 25 (3 × 2 = 6 Marks), Booklet CS 5

***Answer*:**

Base case — before any adverse variation

Annual cash inflow = ₹4,00,000 – ₹1,60,000 – ₹60,000
= ₹1,80,000

NPV = (₹1,80,000 × 3.169) – ₹4,80,000
= ₹5,70,420 – ₹4,80,000
= ₹90,420

1. If initial project cost is varied adversely by 10%, what is the percentage change in NPV?

(A) 42.42%
(B) 52.80%
(C) 53.09%
(D) 63.09%

Answer: Option (C)

Revised cost = ₹4,80,000 × 1.10
= ₹5,28,000

Conferenza.in

Revised NPV = ₹5,70,420 – ₹5,28,000
= ₹42,420
Change = (90,420 – 42,420) / 90,420
= 48,000 / 90,420
= 53.09%

2. If annual cash inflow is varied adversely by 10%, what is the percentage change in NPV?

(A) 33.38%
(B) 53.09%
(C) 63.09%
(D) 52.80%

Answer: Option (C)

Revised inflow = ₹1,80,000 × 0.90
= ₹1,62,000
Revised NPV = (₹1,62,000 × 3.169) – ₹4,80,000
= ₹5,13,378 – ₹4,80,000
= ₹33,378
Change = (90,420 – 33,378) / 90,420
= 57,042 / 90,420
= 63.09%

3. If cost of capital is varied adversely by 10%, what is the percentage change in NPV?

(A) 11.00%
(B) 12.10%
(C) 13.14%
(D) 14.45%

Answer: Option (C)

Revised rate = 10% × 1.10
= 11%, so PVF becomes 3.103
Revised NPV = (₹1,80,000 × 3.103) – ₹4,80,000
= ₹5,58,540 – ₹4,80,000
= ₹78,540
Change = (90,420 – 78,540) / 90,420
= 11,880 / 90,420
= 13.14%

The project is most sensitive to the annual cash inflow (63.09%) and least to the cost of capital (13.14%) — that ranking is the point of the exercise.

Case Scenario 2

PQR Ltd. is considering two new products A and B, only one of which can be added to its production line. Product A is a sure seller — 2,00,000 units can be manufactured and sold each year at the firm's maximum capacity, with a contribution margin of ₹5 per unit.

Product B, with a contribution margin of ₹10 per unit, is potentially more profitable. However, there is uncertainty about its marketability and the following sales forecast has been prepared. Fixed cost per year is ₹6,00,000.

Sales units of B (per annum)	Probability
50,000	0.25
1,00,000	0.50
1,50,000	0.25

From the information given above, choose the correct answer to the questions below:

Jan 26 (3 × 2 = 6 Marks)

Answer:

1. If Company select product A, the profit of the company is -

(A) ₹2,00,000
(B) ₹4,00,000
(C) ₹6,00,000
(D) ₹10,00,000

Answer: Option (B)

Contribution = 2,00,000 units × ₹5
= ₹10,00,000
Less fixed cost ₹6,00,000 → Profit ₹4,00,000

2. If company select product B and sale 1,40,000 units, the profit of the company is -

(A) ₹4,00,000
(B) ₹8,00,000
(C) ₹10,00,000
(D) ₹12,00,000

Answer: Option (B)

Contribution = 1,40,000 units × ₹10
= ₹14,00,000
Less fixed cost ₹6,00,000 → Profit ₹8,00,000

3. If company select product B, the expected value of profit of the company is -

(A) ₹2,00,000
(B) ₹4,00,000
(C) ₹8,00,000
(D) ₹10,00,000

Answer: Option (B)

Conferenza.in

Expected units = 50,000(0.25) + 1,00,000(0.50) + 1,50,000(0.25)
= 12,500 + 50,000 + 37,500
= 1,00,000 units
Contribution = 1,00,000 × ₹10
= ₹10,00,000, less fixed ₹6,00,000
= ₹4,00,000

Both products yield an expected ₹4,00,000 — but A is certain and B is not. That is the whole point of the comparison.

Case Scenario 3

NewChem Ltd., a chemical manufacturing firm based in Telangana, is evaluating the installation of a new-generation solar power plant. The total cost of installing the solar plant is ₹3.20 crore. Based on current state electricity tariffs, the plant is projected to generate savings in electricity expenses of ₹25 lakh per year in perpetuity.

However, there is regulatory uncertainty. A new state government is expected to take office in one year and electricity tariffs will be revised. Scenario 1 (Low Savings): savings could decrease to ₹15 lakh per year in perpetuity. Scenario 2 (High Savings): savings could increase to ₹40 lakh per year in perpetuity.

The company's WACC is 9.5% and the current risk-free rate of return, based on 10-year government bonds, is 6.5%.

From the information given above, choose the correct answer to the questions below:

May 26 (3 × 2 = 6 Marks)

Answer:

1. Calculate NPV if invested today and NPV after one year in both scenarios (in ₹ crore).

(A) Today: – 0.45; High: 1.01; Low: – 1.62
(B) Today: – 0.57; High: 1.21; Low: – 1.42
(C) Today: – 0.57; High: 1.01; Low: – 1.62
(D) Today: – 0.63; High: 0.95; Low: – 1.58

Answer: Option (C)

Today: PV = ₹25 lakh ÷ 0.095
= ₹263.16 lakh; NPV
= 2.6316 – 3.20
= – ₹0.57 crore
High: PV = ₹40 lakh ÷ 0.095
= ₹421.05 lakh; NPV
= 4.2105 – 3.20
= + ₹1.01 crore
Low: PV = ₹15 lakh ÷ 0.095

Conferenza.in

= ₹157.89 lakh; NPV
= 1.5789 – 3.20
= – ₹1.62 crore

2. Using risk-neutral valuation, compute returns in both scenarios and the risk-neutral probability of the high savings scenario (%).

(A) High: 31.56%; Low: – 50.63%; Prob: 69.5%
(B) High: 28.45%; Low: – 48.25%; Prob: 65.2%
(C) High: 31.56%; Low: – 50.63%; Prob: 73.8%
(D) High: 35.20%; Low: – 52.15%; Prob: 69.5%

Answer: Option (A)

High return	= (₹421.05 – ₹320) ÷ ₹320
	= 31.56%
Low return	= (₹157.89 – ₹320) ÷ ₹320
	= – 50.63%
Risk-neutral p: 6.5%	= p (31.56%) + (1 – p)(– 50.63%)
p	= 57.13 ÷ 82.19
	= 0.695, i.e. 69.5%

3. Using risk-neutral probability (69.5% high), compute the PV of the option to wait one year, discounted at the risk-free rate and at WACC (in ₹ lakh).

(A) PV at RF rate: ₹70.23 Lakh; WACC: ₹68.50 Lakh
(B) PV at RF rate: ₹65.94 Lakh; WACC: ₹64.14 Lakh
(C) PV at RF rate: ₹44.15 Lakh; WACC: ₹42.30 Lakh
(D) PV at RF rate: ₹19.53 Lakh; WACC: ₹18.98 Lakh

Answer: Option (B)

Waiting one year means the project is taken up only in the high scenario, so the payoff is the high-scenario NPV of ₹101.05 lakh, weighted by the risk-neutral probability:

Expected payoff at end of Year 1	= 0.695 × ₹101.05 lakh
	= ₹70.23 lakh
Discounted at the risk-free rate 6.5%	= ₹70.23 ÷ 1.065
	= ₹65.94 lakh
Discounted at the WACC 9.5%	= ₹70.23 ÷ 1.095
	= ₹64.14 lakh

Note — variance from the ICAI paper

Option (B) has been corrected in this compiler. In the ICAI question paper option (B) read "₹68.50 Lakh and ₹70.23 Lakh" and ICAI declared the question as having NO CORRECT OPTION. The original (B) was in any case impossible — it showed the WACC discounting producing a higher value than the risk-free discounting, whereas a higher discount rate must give a lower present value.

Option (A) is the trap: ₹70.23 lakh is the correct expected payoff, but it sits at the end of Year 1 and has not been brought back to today.

Case Scenario 4

ABC Ltd. plans to invest ₹16,00,000 in a new unit. The project is expected to have a useful life of 4 years, with no salvage value at the end of its life. The annual depreciation charge for the project is ₹4,00,000. Projected revenues and costs for the project, ignoring inflation, are provided as follows:

Year	Revenues (₹)	Costs (₹)
1	12,00,000	6,00,000
2	14,00,000	8,00,000
3	16,00,000	8,00,000
4	16,00,000	8,00,000

ABC Ltd. is subject to a corporate tax rate of 60%, and the cost of capital for the project, including inflation premium, is 10%.

Depreciation provides a tax benefit, and inflation rates for revenues and costs over the project's lifespan are as follows:

Year	Revenue Inflation	Cost Inflation
1	10%	12%
2	9%	10%
3	8%	9%
4	7%	8%

ICAI Case Scenario Booklet, CS 21 (3 × 2 = 6 Marks)

Answer:

1. Inflation adjustment of revenues and costs is required mainly because.....

(A) Cost of capital includes inflation
(B) Tax rate is high
(C) Depreciation is constant
(D) Project life is short

Answer: Option (A)
Cash flows and discount rate must be consistent.

2. If inflation were ignored in cash flows but included in discount rate, the project NPV would be.....

(A) Overstated
(B) Understated
(C) Correct

Conferenza.in

(D) Zero

Answer: Option (B)
Ignoring inflation understates future cash flows.

3. Which of the following cash flows is not affected by inflation directly?

(A) Revenue
(B) Operating cost
(C) Depreciation
(D) Tax payment

Answer: Option (C)
Depreciation is based on historical cost.

Case Scenario 5

XYZ Ltd. is a mid-sized manufacturing company that produces industrial equipment. The company is considering a new investment project—a state-of- the-art automated production line, which is expected to improve production efficiency. The details of the same project are as follows: ₹

Initial Cost of the project	10,00,000
Sales price/unit	60
Cost/unit Sales volumes	40
Year 1	20000 units
Year 2	30000 units
Year 3	30000 units

The applicable discount rate is 10% p.a.

ICAI Case Scenario Booklet, CS 42 (5 × 2 = 10 Marks), MTP Jan 26 S1, MTP Nov 24 S2

Answer:

1. Sensitivity analysis helps to identify……..

(A) the exact profitability of the project
(B) the break-even point.
(C) the degree to which a change in each variable affects the NPV.
(D) the amount of investment required

Answer: Option (C)
Other options are related to Profitability and Investment.

Conferenza.in

2. The sale price per unit so that the project would break even with zero NPV shall be approximately……..

(A) ₹40.00
(B) ₹55.26
(C) ₹60.00.
(D) ₹44.74

Answer: **Option (B)**
Let the sale price per unit be S, so that the project breaks even at zero NPV.
10,00,000 = 20,000(S – 40)/1.1 + 30,000(S – 40)/1.21 + 30,000(S – 40)/1.331
10,00,000 = (S – 40) × (18,181.82 + 24,793.39 + 22,539.44)
10,00,000 = (S – 40) × 65,514.65
S – 40 = 15.26 → S
= ₹55.26

3. The cost per unit so that the project would break even with zero NPV shall be approximately……..

(A) ₹40.00
(B) ₹55.26
(C) ₹60.00.
(D) ₹44.74

Answer: **Option (D)**
If sales price = ₹60 the cost price required to give a margin of
₹15.26 is (₹60 – ₹15.26) or ₹44.74.

4. Overall ……in the sale volume will lead to the project to break even with zero NPV.

(A) increase of 23.68%
(B) fall of 23.68%
(C) Increase of 31.03%
(D) fall of 31.03%

Answer: **Option (B)**
The requisite percentage fall is:-3,10,293/13,10,293 × 100 = 23.68%

5. A/an ……in the initial outlay will lead to the project to break even with zero NPV.

(A) increase of 23.68%
(B) fall of 23.68%
(C) Increase of 31.03%
(D) fall of 31.03%

Answer: **Option (C)**
Since PV of inflows remains at ₹13,10,293 the initial outlay must also be the same.

Conferenza.in

Percentage rise = (3,10,293/10,00,000) x 100
= 31.03%.

Case Scenario 6

XYZ Ltd. plans to invest ₹800,000 in a new unit. The project is expected to have a useful life of 4 years, with no salvage value at the end of its life. The annual depreciation charge for the project is ₹200,000. Projected revenues and costs for the project, ignoring inflation, are provided as follows:

Year	Revenues (₹)	Costs (₹)
1	600,000	300,000
2	700,000	400,000
3	800,000	400,000
4	800,000	400,000

XYZ Ltd. is subject to a corporate tax rate of 60%, and the cost of capital for the project, including inflation premium, is 10%. Depreciation provides a tax benefit, and inflation rates for revenues and costs over the project's lifespan are as follows:

Year	Revenue Inflation	Cost Inflation
1	10%	12%
2	9%	10%
3	8%	9%
4	7%	8%

ICAI Case Scenario Booklet, CS 47 (5 × 2 = 10 Marks), MTP Sep 25 S2

Answer:

1. The depreciation tax benefit for the project per year shall be……

(A) ₹120,000
(B) ₹150,000
(C) ₹200,000
(D) ₹180,000

Answer: Option (A)
₹2,00,000 x 0.60 = ₹1,20,000

2. The inflation-adjusted revenue in Year 2 shall be……

(A) ₹700,000
(B) ₹839,300
(C) ₹492,800
(D) ₹501,760

Conferenza.in

Answer: Option (B)
₹7,00,000(1.10)(1.09) = ₹8,39,300

3. The total cash inflow in Year 1 after adjusting for inflation and tax benefit on depreciation shall be……

(A) ₹330,000
(B) ₹336,000
(C) ₹249,600
(D) ₹492,800

Answer: Option (C)
[₹6,00,000(1.10) – ₹3,00,000(1.12)]0.40 + ₹1,20,000 = ₹2,49,600

4. The inflation-adjusted cost in Year 2 shall be…….

(A) ₹700,000
(B) ₹839,300
(C) ₹492,800
(D) ₹501,760

Answer: Option (C)
₹4,00,000(1.12)(1.10) = ₹4,92,800

5. The present value of cash inflow for the year 3 shall be approximately……..

(A) ₹213,604
(B) ₹226,299
(C) ₹226,886
(D) ₹239,949

Answer: Option (D)
[{₹8,00,000(1.10)(1.09)(1.08) - ₹4,00,000(1.12)(1.10)(1.09)}0.40 + ₹1,20,000] PVF (10%, 3)

Conferenza.in

CHAPTER 4

Security Analysis

Case Scenario 1

Suppose you are a financial consultant and following 3 clients have approached to you seeking advise on the investment to be made in securities. All these clients have different background and risk appetite as well as perception to the market.

- Client A wants to invest in Fixed income avenues and therefore he is looking at the credit rating of the securities as well as financial ratios such as interest coverage, earning power etc and the general prospect of the industry.

- Client B wants to earn a fixed income over a period of time by holding the security till its maturity.
- Client C wants to earn more by taking more risk. Therefore, he is more interested to invest in stocks. He believes that Price reflects all information found in the record of past prices and volumes.

ICAI Case Scenario Booklet, CS 28 (3 × 2 = 6 Marks), MTP May 24 S1

Answer:

1. The main factor to be considered in selecting fixed income avenue for client A shall be……..

(A) Yield to maturity
(B) Risk of Default
(C) Tax Shield
(D) Liquidity

Answer: Option (B)
Client A is looking at Credit Rating.

2. The main factor that have to be evaluated in the selection of Bond for Client B shall be……..

(A) Yield to maturity
(B) Risk of Default
(C) Tax Shield
(D) Liquidity

Answer: Option (A)
Holding security till maturity.

Conferenza.in

3. If Weak form efficiency is prevailing in the market then which approach is best for selection of Equity Shares?

(A) Technical Analysis
(B) Fundamental Analysis
(C) Random selection Analysis
(D) None of the above.

Answer: Option (B)
As market will react lately.

Case Scenario 2

You are a financial analyst at a prominent investment firm and have been tasked with empirically verifying the weak form of Efficient Market Hypothesis (EMH) Theory for the XYZ Stock Index, a collection of diverse stocks. You decided to conduct three different tests to assess whether the stock market follows the principles of the weak form of EMH. Test 1 For the past five years, you collected daily price changes of the stocks in the XYZ Stock Index. You calculated correlation coefficients for different lag periods and analyzed whether past price changes exhibit any significant correlation with future price changes. You considered price changes to be serially independent. The results indicated that most auto correlation coefficients are close to zero and statistically insignificant, suggesting those past price changes do not predict future price changes. Test 2

You further investigated the randomness of price changes in the XYZ Stock Index. Analyzing the sequence of daily price changes, you count the number of runs where price changes are consistently positive or negative. Upon comparing the observed number of runs with the expected number based on randomness, you find that they align closely, supporting the idea that price changes follow a random pattern. Test 3 To examine the efficacy of trading strategies based on historical price trends, you implemented a simple trading rule for the XYZ Stock Index. The rule involves buying when the price crosses a moving average of 5% threshold and selling when it crosses another 7% threshold. Over a period of testing, you computed the returns generated by the trading strategy. The results revealed that the returns are not consistently better than random chance, implying that past price trends do not reliably predict future price movements.

Conclusion: After conducting the three tests the evidence supports the weak form of Efficient Market Theory for the XYZ Stock Index you concluded that past price trends do not reliably predict future price movements.

ICAI Case Scenario Booklet, CS 35 (5 × 2 = 10 Marks), RTP May 24

Answer:

1. Test 1 is .....

(A) Serial Correlation test

Conferenza.in

(B) Filter Rules test
(C) Run test
(D) Variance Ratio test

Answer: Option (A)
Refer topic Empirical Evidence on Weak Form of Efficient Market Theory.
Faculty Notes:
The Serial Correlation (auto-correlation) test measures whether today's price change is related to yesterday's.
A coefficient close to zero says successive changes are independent, which is what weak-form efficiency predicts.

2. Test 2 is ……
(A) Serial Correlation test
(B) Filter Rules test
(C) Run test
(D) Variance Ratio test

Answer: Option (C)
Refer topic Empirical Evidence on Weak Form of Efficient Market Theory.
Faculty Notes:
A "run" is an unbroken sequence of price moves in the same direction. The Run Test counts how many runs occur and compares that with what pure chance would produce.
Its advantage over serial correlation is that it assumes no particular distribution of returns.

3. Test 3 is ……
(A) Serial Correlation test
(B) Filter Rules test
(C) Run test
(D) Variance Ratio test.

Answer: Option (B)
Refer topic Empirical Evidence on Weak Form of Efficient Market Theory.
Faculty Notes:
A filter rule says: buy once the price rises x% off a low, sell once it falls x% off a high.
If such a rule beats simple buy-and-hold after transaction costs, then past prices carry usable information and weak-form efficiency fails.

4. The Filter Rule Test should not be applied for buy and hold strategy if……
(A) the behavior of stock price changes is predictable.
(B) the behavior of stock price changes is random.
(C) the behavior of stock price changes is correlated.
(D) the behavior of stock price changes is random.

Answer: Option (B)

Refer Filter Rules Test of Empirical Evidence on Weak Form of Efficient Market Theory.

Faculty Notes:

A filter rule only pays if prices trend. If price changes are random there is no trend to catch, so the rule racks up brokerage without an edge and buy-and-hold wins.

Note that options (B) and (D) are printed identically in the ICAI paper; either wording carries the same meaning.

5. Results of your studies support the……

(A) Semi-strong EMH Theory
(B) Strong EMH Theory
(C) Random Walk Theory
(D) Markowitz Theory

Answer: Option (C)

Refer conclusion of Case Scenario.

Faculty Notes:

All three tests point the same way — successive price changes are independent of one another. That is the Random Walk Theory.

The semi-strong and strong forms concern how fast public and private information is absorbed, which none of these three tests examines.

Case Scenario 3

An American institutional investor is exploring investment opportunities in different countries. Before proceeding, they believe a thorough analysis of the options in the securities available is needed to ensure a higher return while minimising risk.

To achieve this objective, it formed a team consisting of the following persons with respective assigned tasks:

Mr. A — entrusted with analysing various macro-economic factors, e.g. historical performance of the economies in the past and present and expectations in future, growth of different sectors of the economies in future with signs of stagnation or degradation at present. In addition he also analysed the trends in people's income and expenditure.

Ms. B — after receiving inputs from Mr. A, entrusted with assessment of all the conditions and factors relating to demand of the particular product, cost structure of the industry and other economic and Government constraints in the same country.

Mr. C — after receiving inputs from Ms. B, entrusted with careful examination of the company's quantitative and qualitative fundamentals, including a comparison of price-earnings ratios of different companies. In addition to examining the financial solvency and liquidity of the company he is also advised to evaluate its future growth prospects.

MTP May 25 S2 (5 × 2 = 10 Marks)

Answer:

1. If Mr. A wants to evaluate the impact of macroeconomic trends on their potential investment, which of the following factors is least likely to influence their decision?

(A) Growth rates of national income
(B) Inflation rates
(C) Market speculation trends
(D) Barometer indicators

Answer: Option (C)

Faculty Notes:

National income, inflation and barometer (leading, lagging and coincident) indicators are all economy-wide variables — the raw material of economy analysis.

Speculation is sentiment in a particular scrip, not a macro-economic force, so it sits outside the economy leg of the E-I-C framework.

2. The investor learns that inflation is expected to rise. Based on economic analysis, how might this affect their stock investment decision?

(A) Stock prices are expected to decline due to reduced consumer demand
(B) Stock prices are expected to rise as stocks act as a hedge against inflation
(C) Stock prices will remain unaffected as inflation only affects bond markets
(D) Stock prices will become highly volatile, but long-term growth remains unchanged

Answer: Option (B)

Faculty Notes:

Equity is a claim on real assets and on nominal earnings, both of which reprice with the price level, so shares have historically served as a hedge against inflation.

Bonds pay a fixed coupon and cannot reprice, which is why inflation hurts them far more than it hurts equity.

3. Which of the techniques shall be primarily used by Ms. B to carry out the required analysis at her part?

(A) Anticipatory Surveys
(B) Indicator Approach
(C) Input-Output Analysis
(D) Decision Tree Analysis

Answer: Option (C)

Faculty Notes:

Ms. B is doing industry analysis — demand, cost structure and inter-industry constraints.

Input-Output Analysis maps exactly that: what an industry draws from other industries and what it supplies to them.

Conferenza.in

Anticipatory Surveys and the Indicator Approach are economy-level tools; Decision Tree Analysis belongs to capital budgeting, not to industry analysis.

4. Mr. A, while analysing industry growth, finds that certain indicators tend to peak before the economy's overall growth. These indicators are best classified as.....

(A) Lagging indicators
(B) Leading indicators
(C) Coincidental indicators
(D) Random indicators

Answer: **Option (B)**

Faculty Notes:

An indicator that turns before the economy turns is leading — it forecasts.
Coincident indicators turn with the economy and lagging indicators turn after it, so neither peaks ahead of overall growth.

5. Specifically, the team of Mr. A, Ms. B and Mr. C is entrusted with the task of carrying out.....

(A) Fundamental Analysis
(B) Technical Analysis
(C) Market Analysis
(D) Security Analysis

Answer: **Option (A)**

Faculty Notes:

Economy, then industry, then company — the E-I-C top-down sequence is the definition of Fundamental Analysis.
Technical Analysis reads price and volume rather than fundamentals, so it would need none of these three roles.

CHAPTER 5

Security Valuation

Case Scenario 1

Short Bank Ltd. needs funds for a period of 7 days. To meet this need, on 20th September 2025 Short Bank Ltd. entered into an agreement with Long Bank Ltd. under which Short Bank Ltd. will sell 8% GOI Bonds @ 6% p.a. for ₹5 crores (Face Value) with initial margin 2%. Each Bond Face Value is ₹1,00,000.

The maturity of this 8% GOI Bond is 31st December 2029, originally issued on 1st January 2025. Interest payable annually. The clean price of the bond is ₹99,420. Assume 360 days in a year.

From the information given above, choose the correct answer to the questions below:

Jan 26 (3 × 2 = 6 Marks)

Answer:

1. The arrangement entered by Long Bank Ltd. is _____ and that by Short Bank Ltd. is _____.

(A) Repo, Reverse Repo
(B) Lending, Repo
(C) Reverse Repo, Borrowing
(D) Reverse Repo, Repo

Answer: Option (D)

Short Bank sells securities to raise funds — from its side the deal is a Repo.
Long Bank buys the securities and lends the funds — from its side it is a Reverse Repo.

2. Accrued Interest and dirty price of the bond as on 20th September 2025 will approximately be ₹_____ and ₹_____ respectively.

(A) ₹5,822 and ₹1,05,242
(B) ₹5,788 and ₹93,632
(C) ₹7,954 and ₹1,07,374
(D) ₹7,954 and ₹91,466

Answer: Option (A)

Days from 1 January 2025 to 20 September 2025 = 262 days

Accrued interest = ₹1,00,000 × 8% × 262/360
= ₹5,822

Dirty price = Clean price + Accrued interest
= ₹99,420 + ₹5,822
= ₹1,05,242

Conferenza.in

3. The proceeds of the 1st Leg of the transaction shall be approximately ₹_____ and the 2nd Leg proceeds shall be ₹_____.

(A) ₹5,15,52,000 and ₹5,16,12,150
(B) ₹5,15,68,580 and ₹5,16,28,743
(C) ₹5,15,52,000 and ₹5,61,12,150
(D) ₹5,51,52,000 and ₹5,61,12,150

Answer: Option (B)

Number of bonds = ₹5 crore ÷ ₹1,00,000
= 500 bonds
1st Leg = 500 × ₹1,05,242 × 98% (after 2% margin)
= ₹5,15,68,580
2nd Leg = ₹5,15,68,580 × [1 + 6% × 7/360]
= ₹5,16,28,743

The haircut protects the lender: Long Bank parts with only 98% of the security's dirty value, and is repaid that sum plus 7 days' interest at the repo rate.

Case Scenario 2

The Government of India issues a 5-year Sovereign Gold Bond (SGB) at an issue price of ₹5,000 per gram. An investor, Mr. JK, has purchased 200 grams SGB under this scheme. The bond carries a coupon rate of 2.5% per annum, calculated as simple interest on the initial investment amount, with interest payable annually.

At the end of five years, the bond will be redeemed at the prevailing market price of gold. The annual interest received is taxable at the investor's applicable marginal income tax rate. Any capital gain arising on redemption is taxable at 20% after considering the benefit of indexation. The inflation rate during the holding period is assumed to be 4% per annum.

From the information given above, choose the correct answer to the questions below:

May 26 (3 × 2 = 6 Marks)

Answer:

1. Mr. JK falls in the 30% tax bracket. What are the post-tax annual interest income and the approximate real post-tax return (%) on initial investment?

(A) ₹25,000 and 2.25%
(B) ₹17,500, and –2.25%
(C) ₹17,500 and 1.75%
(D) ₹17,500 and –1.75%

Answer: Option (B)

Initial investment = 200 grams × ₹5,000
= ₹10,00,000

Conferenza.in

Annual interest	= ₹10,00,000 × 2.5%
	= ₹25,000; post-tax
	= ₹25,000 × 0.70
	= ₹17,500
Nominal post-tax return	= 17,500 ÷ 10,00,000
	= 1.75%
Real return	= 1.75% – 4% inflation
	= – 2.25%

2. After 5 years, gold price becomes ₹6,800 per gram. Inflation is constant at 4% annually. What is the indexed cost of acquisition and taxable capital gain?

(A) Indexed cost ₹12,00,000; Taxable gain ₹1,60,000
(B) Indexed cost ₹11,69,860; Taxable gain ₹1,90,140
(C) Indexed cost ₹12,16,653; Taxable gain ₹1,00,343
(D) Indexed cost ₹12,16,653; Taxable gain ₹1,43,347

Answer: Option (D)

Indexed cost	= ₹10,00,000 × $(1.04)^5$
	= ₹10,00,000 × 1.216653
	= ₹12,16,653
Sale value	= 200 grams × ₹6,800
	= ₹13,60,000
Taxable capital gain	= ₹13,60,000 – ₹12,16,653
	= ₹1,43,347

3. Assume SGB redeems at ₹6,800 per gram and Mr. JK is in the 30% tax bracket. What is the net amount received after capital gains tax (20% with indexation)?

(A) 13,56,331
(B) 13,16,996
(C) 13,31,331
(D) 13,28,000

Answer: Option (C)

Capital gains tax	= ₹1,43,347 × 20%
	= ₹28,669
Net amount	= ₹13,60,000 – ₹28,669
	= ₹13,31,331

The coupon looks safe but loses to inflation — a real post-tax return of minus 2.25%. The return on an SGB comes from the gold price, not the 2.5% interest.

Conferenza.in

Case Scenario 3

XYZ Ltd. is planning to expand its business and therefore raising fund by issuing a Convertible Bond of ₹10 crore. An investor "Mr. A" is interested to invest in the bond of XYZ Ltd. Mr. A has following data related to the Convertible Bond. The data given below relates to a convertible bond:

Face value	₹1000
Coupon rate	12%
No. of shares per bond	20
Market price of share	₹48
Straight value of bond	₹940
Market price of convertible bond	₹1060
Maturity	5 Years

ICAI Case Scenario Booklet, CS 13 (5 × 2 = 10 Marks)

Answer:

1. The conversion value of the convertible bond is……..

(A) ₹960
(B) ₹1000
(C) ₹1060
(D) ₹940

Answer: Option (A)

Conversion value per bond = Market price of share × No. of shares
= ₹48 × 20
= ₹960

2. The conversion premium of the bond in absolute terms is……..

(A) ₹60
(B) ₹100
(C) ₹120
(D) ₹80

Answer: Option (B)

Conversion premium = Market price of convertible bond – Conversion value
= ₹1060 – ₹960
= ₹100

3. The floor value of the convertible bond is represented by……

(A) Market price of share
(B) Conversion value

Conferenza.in

(C) Straight value of bond
(D) Face value of bond

Answer: Option (C)
Straight value represents the downside protection or investment value for the investor.

4. The upside potential of the convertible bond primarily depends on……..
(A) Coupon rate of the bond
(B) Face value of the bond
(C) Market price movement of the equity shares
(D) Remaining maturity of the bond

Answer: Option (C)
The upside potential arises from the appreciation in the underlying equity share price.

5. By approximately what percentage the market price of the share should rise so that the investor is indifferent between buying the share from the market and taking conversion route.
(A) 12.77%
(B) 10.42%
(C) 5.11%
(D) 9.23%

Answer: Option (B)
[(1060 ÷ 20) – 48] ÷ 48 = (53 – 48) ÷ 48
= 10.42%

Case Scenario 4

A Ltd. paid a dividend of ₹5 for the last year. The dividend is expected to grow at 25% for the next 6 years and at 10% per annum thereafter. The standard deviation of market return and A Ltd.'s share is 12% and 18% respectively. The correlation between market return and A Ltd. share return is 0.3733. The return of government bond is 13% per annum and market return is expected to be around 20%.

ICAI Case Scenario Booklet, CS 14 (4 × 2 = 8 Marks), MTP May 26 S2

Answer:

1. The beta (β) of A Ltd.'s share is closest to……
(A) 0.42
(B) 0.56
(C) 0.67
(D) 0.84

Answer: Option (B)
β = Correlation × (σ share / σ market)

Conferenza.in

= 0.3733 × (18% / 12%)
= 0.3733 × 1.5 ≈ 0.56

2. The equity risk premium as per the given data is……

(A) 5%
(B) 6%
(C) 7%
(D) 8%

Answer: Option (C)

Equity risk premium = Market return – Risk-free rate
= 20% – 13%
= 7%

3. The valuation approach can be used to compute the intrinsic value of A Ltd. shares is……

(A) Single-stage Dividend Discount Model
(B) CAPM valuation model
(C) Two-stage Dividend Discount Model
(D) Price–Earnings valuation model

Answer: Option (C)

Different growth rates are applicable for two different phases.

4. If the market price of A Ltd. share is higher than its intrinsic value, the share is said to be……..

(A) Under-valued
(B) Over-valued
(C) Fairly valued
(D) Speculative

Answer: Option (B)

Very often the price of over-valued share is driven by hype, speculation, or temporary optimism rather than solid fundamentals.

Case Scenario 5

The following information is available in respect of Bond X and Bond Y.

Bond X Bond Y

Face value, redeemable at par	₹1000	₹1000
Coupon rate, payable annually (%)	6%	10%
Time to maturity (years)	5	3

Conferenza.in

Mr. A, an investor has the portfolio consisting of 75% of Bond X and 25% of Bond Y. The current YTMs prevailing in the market is 10%.

Year (n) : 1 2 3 4	5
PVIF (10%, n) : 0.9091 0.8264 0.7513 0.6830 0.6209	

ICAI Case Scenario Booklet, CS 15 (4 × 2 = 8 Marks)

Answer:

1. At the prevailing YTM the Bond X will trade at……..

(A) Premium
(B) Discount
(C) Par
(D) Variable prices

Answer: Option (B)
Since Coupon rate (6%) < YTM (10%), hence bond trades at a discount.

2. The Macaulay duration of a bond is best described as……

(A) time to maturity of the bond.
(B) weighted average time to receive cash flows.
(C) time until bond is redeemed.
(D) average coupon period.

Answer: Option (B)
It can be understood as the average time taken to receive the cash flows on a given bond.

3. ……. carries higher interest rate risk.

(A) Bond X
(B) Bond Y
(C) Both Bonds
(D) Cannot be determined

Answer: Option (A)
Bond X has a longer maturity and higher duration, hence higher interest rate risk.

4. If the investor wants to reduce interest rate risk of the portfolio, he should…….

(A) increase weight of Bond X.
(B) increase weight of Bond Y.
(C) increase maturity of bonds.
(D) increase coupon rate of Bond X.

Answer: Option (B)

Conferenza.in

Bond Y has shorter duration hence lower interest rate risk.

Case Scenario 6

The data given below relates to a convertible bond:

Face value	₹450
Coupon rate	15%
No. of shares per bond	25
Market price of share	₹20
Straight value of bond	₹400
Market price of convertible bond	₹550

ICAI Case Scenario Booklet, CS 23 (4 × 2 = 8 Marks), MTP Jan 26 S2, RTP May 26, MTP May 26 S2

Answer:

1. The stock value of bond would be ……

(A) ₹500
(B) ₹400
(C) ₹550
(D) ₹450

Answer: Option (A)

₹20 x 25 = ₹500

2. The percentage of downside risk based on market price of convertible bond is……

(A) 10%
(B) 27.27%
(C) 18.18%
(D) 11.11%

Answer: Option (B)

Downside risk = (550 – 400) ÷ 550 × 100
= 27.27%

3. The conversion premium is ……

(A) 10%
(B) 27.27%
(C) 18.18%
(D) 11.11%

Answer: Option (A)

550-500 ×100 500

Conferenza.in

4. The conversion parity price of the stock is ……..

(A) ₹25
(B) ₹20
(C) ₹22
(D) ₹24

Answer: Option (C)

Conversion parity price = Market price of the bond ÷ Shares on conversion
= ₹550 ÷ 25
= ₹22

Case Scenario 7

ABC Ltd. is planning to expand its business and therefore raising fund by issuing a convertible bond of ₹10 crore. An investor "Mr. X" is interested to invest in the bond of ABC Ltd. Mr. X has following data related to the convertible bond. The data given below relates to a convertible bond:

Face value	₹250
Coupon rate	12%
No. of shares per bond	20
Market price of share	₹12
Straight value of bond	₹235
Market price of convertible bond	₹265
Maturity	5 Years

ICAI Case Scenario Booklet, CS 27 (4 × 2 = 8 Marks), MTP May 24 S1

Answer:

1. The percentage of downside risk of the bond is approximately……..

(A) 10.42%
(B) 6.38%
(C) 2.13%
(D) 12.77%

Answer: Option (D)

Downside risk = (Market price – Straight value) ÷ Straight value × 100
= (₹265 – ₹235) ÷ ₹235 × 100
= 12.77%

2. The conversion premium in percentage term of the bond is……..

(A) 12.77%
(B) 10.42%

Conferenza.in

(C) 2.18%
(D) 13.45%

Answer: Option (B)
Conversion value = 20 shares × ₹12
= ₹240
Conversion premium = (₹265 – ₹240) ÷ ₹240 × 100
= 10.42%

3. The conversion parity price of the stock is…….
(A) ₹11.75
(B) ₹12.00
(C) ₹13.25
(D) ₹12.50

Answer: Option (C)
₹265/20 = ₹13.25

4. If he wants approximately a yield of 15% the maximum price, he should be ready to pay for is…….
(A) 217.41
(B) 224.81
(C) 240.00
(D) 232.32

Answer: Option (B)
₹30(3.352) + ₹250(0.497) = ₹224.81

Case Scenario 8

XYZ Ltd. needs funds for a short tenure. Some functional level manager suggested about the bank credit/ overdraft option. On conforming from Finance Department, it was found that company exhausted its credit limits due to meeting recent contingency fund requirements. Then CA X, CFO suggested the idea of floating Commercial papers by XYZ Ltd. Accordingly, XYZ Ltd. is planning to issue Commercial Paper (CP), the details of which is given below:

Issue Price of CP	₹97,550
Face Value	₹1,00,000
Maturity Period	3 Months
Issue Expense	
Brokerage	0.15% for 3 months
Rating charges	0.50% p.a.
Stamp Duty	0.175% for 3 months

Conferenza.in

ICAI Case Scenario Booklet, CS 33 (5 × 2 = 10 Marks)

Answer:

1. The Bond Equivalent yield for an investor of the same Commercial Paper shall be approximately……..

(A) 2.51%
(B) 10.05%
(C) 7.53%
(D) 11.05%

Answer: Option (B)

Bond Equivalent Yield = (10,00,000 – 9,75,500) ÷ 9,75,500 × 12/3
= 0.025115 × 4
= 10.05%

2. The Effective Interest Rate per annum of same CP shall approximately be……

(A) 10.44%
(B) 10.05%
(C) 2.51%
(D) 11.05%

Answer: Option (A)

$(1 + 0.1005 \div 4)^4 - 1$ = 10.44%

3. Based on effective interest rate the total annual cost of funds to the company shall approximately be……

(A) 11.27%
(B) 11.85%
(C) 12.24%
(D) 10.88%

Answer: Option (C)

10.44% + 0.15 x 4 + 0.50 + 0.175 x 4 = 12.24%

4. Which of the following instruments cannot be used by a bank to meet its short-term funding requirements?

(A) Call/Notice Money
(B) Commercial Paper
(C) Certificate of Deposit
(D) Repurchase Agreement (Repo)

Answer: Option (B)

Issued by highly rated corporate entities to meet the short-term fund requirements.

Conferenza.in

5. The period of Commercial Paper ranges from……

(A) 14 days to 364 days
(B) 3 months to 6 months
(C) 7 days to 1 year
(D) 1 year to 3 years

Answer: Option (C)
Refer the basic features of Commercial Papers.
Faculty Notes:
Under the RBI's directions Commercial Paper is issued for a minimum of 7 days and a maximum of one year from the date of issue.
14 to 364 days is the Treasury Bill range, which is why option (A) is the tempting wrong answer.

Case Scenario 9

Bank A is in need of fund for a period of 14 days. To meet this financial need on 20th September 2023 Bank A enters into an agreement with Bank B under which it will sell 10% Government of India Bonds issued on 1st January 2023 @ 5.65% for ₹8 crore (Face value is ₹10,000 per Bond).

The clean price of same Bond is ₹9,942 and the Initial Margin be 2% and the maturity date of Bond is 31st December 2028. Consider 360 days in a year and interest is payable annually.

ICAI Case Scenario Booklet, CS 36 (5 × 2 = 10 Marks), MTP Nov 24 S1

Answer:

1. The arrangement entered between Bank A and Bank B will be called ……

(A) Call Money Arrangement
(B) Commercial Bill Arrangement
(C) Commercial Paper
(D) Repurchase Agreement

Answer: Option (D)
Refer the concept of Repo and Reverse Repo.
Faculty Notes:
One bank sells securities to the other and agrees to buy them back at a fixed price on a fixed date. That is a Repurchase Agreement — in substance a loan secured against the securities. Call money is unsecured and overnight; commercial bills and commercial paper are instruments, not arrangements between two banks.

2. Dirty Price of the Bond will approximately be……

(A) ₹10,353
(B) ₹10,670

(C) ₹10,499
(D) ₹10,816

Answer: Option (B)
Dirty Price = Clean Price + Accrued Interest
= ₹9,942 + ₹10,000 × 10/100 × 262/360
= ₹9,942 + ₹728
= ₹10,670

3. The start proceeds of the transaction shall be approximately ……
(A) ₹8,38,36,604
(B) ₹8,36,52,800
(C) ₹8,58,36,804
(D) ₹8,48,52,585

Answer: Option (B)
Start proceeds = ₹8,00,00,000 × 10,670/10,000 × (100 – 2)/100
= ₹8,00,00,000 × 1.067 × 0.98
= ₹8,36,52,800

4. The second leg of the transaction shall be approximately……
(A) ₹8,38,36,604
(B) ₹8,36,52,800
(C) ₹8,58,36,804
(D) ₹8,48,52,585

Answer: Option (A)
₹8,36,52,800 × [1 + (5.65 ÷ 100) × (14 ÷ 360)] = ₹8,38,36,604

5. The amount of Accrued Interest per Bond shall be approximately ……
(A) ₹728
(B) ₹720
(C) ₹734
(D) ₹714

Answer: Option (A)
Accrued Interest = ₹10,000 × 10/100 × 262/360
= ₹728

Case Scenario 10

The following information is available in respect of Bond A and Bond B.

Bond A Bond B

Conferenza.in

Face value, redeemable at par	₹1000	₹1000
Coupon rate, payable annually (%)	6%	10%
Time to maturity (years)	5	3

An investor has the portfolio consisting of 75% of Bond A and 25% of Bond B. The current YTMs prevailing in the market is 10%.

Year (n) : 1 2 3 4	5
PVIF (10%, n) : 0.9091 0.8264 0.7513 0.6830 0.6209	

ICAI Case Scenario Booklet, CS 54 (3 × 2 = 6 Marks), MTP Jan 26 S1, Nov 24

Answer:

1. The price and duration of the Bond B shall be approximately ……..respectively.

(A) ₹826.43 and 2.49
(B) ₹1,000 and 2.74
(C) ₹924.85 and 2.74
(D) ₹1,000 and 2.49

Answer: Option (B)

Price of Bond B = ₹100(0.9091) + ₹100(0.8264) + ₹1,100(0.7513)
= ₹90.91 + ₹82.64 + ₹826.43
= ₹1,000

Duration of Bond B = [(90.91 × 1) + (82.64 × 2) + (826.43 × 3)] ÷ 1,000
= 2,735.48 ÷ 1,000
= 2.74 years

2. The price and duration of the Bond A shall be approximately ……respectively.

(A) ₹848.34 and 4.41
(B) ₹811.09 and 4.38
(C) ₹1,227.44 and 4.41
(D) ₹658.15 and 3.90

Answer: Option (A)

Price of Bond A = ₹60(0.9091) + ₹60(0.8264) + ₹60(0.7513) + ₹60(0.6830) + ₹1,060(0.6209)
= ₹54.55 + ₹49.58 + ₹45.08 + ₹40.98 + ₹658.15
= ₹848.34

Duration of Bond A = [(54.55 × 1) + (49.58 × 2) + (45.08 × 3) + (40.98 × 4) + (658.15 × 5)] ÷ 848.34
= 3,743.62 ÷ 848.34
= 4.41 years

Conferenza.in

3. The price sensitivity of the portfolio approximately is……..

(A) -4.03
(B) -2.49
(C) -3.63
(D) -3.98

Answer: Option (C)

Weighted average of duration Bond-A 4.41 75% 3.308 Bond-B 2.74 25% 0.685 Average Duration 3.993

Price Sensitivity = 3.993/1.10
= 3.63

Case Scenario 11

Z Ltd. paid a dividend of ₹5 for the current year. The dividend is expected to grow at 25% for the next 6 years and at 10% per annum thereafter. The return of government bond is 13% per annum and market return is expected to be around 20%. The correlation between market return and Z Ltd. share return is 0.3733. The standard deviation of market return and Z Ltd. shares is 12% and 18% respectively. Round off calculations to two decimal places.

ICAI Case Scenario Booklet, CS 55 (3 × 2 = 6 Marks), Nov 24

Answer:

1. What is the expected return of Z Ltd shares?

(A) 15%
(B) 23.92%
(C) 16.92%
(D) 16.5%

Answer: Option (C)

ß = 0.3733 × (18/12)
= 0.560
Expected Return = 13% + 0.560 (20%-13%)
= 16.92%

2. The intrinsic value of Z Ltd. shares approximately is……

(A) ₹156.75
(B) ₹303.14
(C) ₹349.62
(D) ₹341.30

Answer: Option (A)

PV of dividend = 6.25 × 0.855 + 7.81 × 0.732 + 9.77 × 0.626 + 12.21 × 0.535 + 15.26 × 0.458 + 19.075 × 0.391

Conferenza.in

= ₹38.16

PV of Terminal Value = [(19.075(1.10)/(0.1692-0.10)] × 0.391 = ₹118.53

3. If current market price of the shares is ₹315 than stock is.....

(A) Over valued

(B) Under valued

(C) Fairley valued

(D) Cannot be determined

Answer: Option (A)

Since current Market Price per share of the share is ₹315 higher than Intrinsic Value of the share, the stock is overvalued.

Conferenza.in

CHAPTER 6

Portfolio Management

Case Scenario 1

Equity Researchers have estimated the rate of returns for Stock A, Stock B and Market Portfolio under each state of the economy is as under:

Economy	Probability	Return on Stock A (%)	Return on Stock B (%)	Market Portfolio (%)
Boom	0.3	16	19	18
Normal	0.4	14	16	15
Recession	0.3	-9	-7	-8

The risk-free rate of return is expected to be 8%. The covariance between Stock A and the Market Portfolio is 122.70, while the covariance between Stock B and the Market Portfolio is 125.40. Assume that the CAPM framework is valid in this market.

From the information given above, choose the correct answer to the question No. 1 to 5.

May 25 (5 × 2 = 10 Marks), Booklet CS 1

Answer:

1. What is the expected rate of return (percentage) for Stocks A and B?

(A) 7.70% and 9.00%
(B) 10% and 9.00%
(C) 7.70% and 10%
(D) 13.1% and 14.20%

Answer: Option (C)

$E(R_a)$ = 0.3(16) + 0.4(14) + 0.3(–9)
= 4.8 + 5.6 – 2.7
= 7.70%

$E(R_B)$ = 0.3(19) + 0.4(16) + 0.3(–7)
= 5.7 + 6.4 – 2.1
= 10.00%

2. What will be the variance of market portfolio?

(A) 38.4
(B) - 4.8
(C) 126.8
(D) 125.4

Conferenza.in

Answer: Option (D)

$E(R_m)$ = 0.3(18) + 0.4(15) + 0.3(–8)
= 5.4 + 6.0 – 2.4
= 9%

σ^2_m = 0.3(18–9)² + 0.4(15–9)² + 0.3(–8–9)²
= 0.3(81) + 0.4(36) + 0.3(289)
= 24.3 + 14.4 + 86.7
= 125.4

Note: the recession deviation is (–8 – 9) = –17, not –8.

3. What will be the beta of Stock A and Stock B respectively?

(A) 0.9542 and 1.00
(B) 0.9862 and 1.24
(C) 0.9785 and 1.00
(D) 0.9785 and 1.24

Answer: Option (C)

β = Cov(i, m) ÷ σ^2_m
β_a = 122.70 ÷ 125.40
= 0.9785
β_B = 125.40 ÷ 125.40
= 1.00

4. Required rate of return of Stock A is _____ and Stock B is _____.

(A) 8.9785 % and 9%
(B) 9% and 8.978%
(C) 8.9875% and 9%
(D) 8.9785% and 10.4%

Answer: Option (A)

Required return = $R_F + \beta (R_m - R_F)$
Stock A = 8 + 0.9785 (9 – 8)
= 8.9785%
Stock B = 8 + 1.00 (9 – 8)
= 9.00%

5. Based on calculated Alpha of Stock A and Stock B in the above case scenario, which of the following statements is correct for purchase or sale of Stock A and Stock B?

(A) Stock A has a positive alpha, and Stock B has a negative alpha. Therefore, purchase Stock A and sell Stock B.
(B) Both Stock A and Stock B have positive alpha values. Therefore, purchase both stocks.
(C) Stock A has a negative alpha, while Stock B has a positive alpha. Therefore, sell Stock A and purchase Stock B.

Conferenza.in

(D) Both Stock A and Stock B have negative alpha values. Therefore, sell both stocks.

Answer: Option (C)

Alpha = Expected return – Required return

α_a = 7.70 – 8.9785

= –1.2785 (negative → overpriced → sell)

α_B = 10.00 – 9.00

= + 1.00 (positive → underpriced → buy)

Case Scenario 2

You are submitted the following information in respect of Mr. Z's portfolio. Average Return of the portfolio is 15.70% per annum. Calculate upto two decimal points.

Share / Bond	Cost (₹)	Dividend / Interest (₹)	Market Price (₹)	Beta
A Ltd.	40,000	4,000	41,000	0.60
B Ltd.	50,000	5,000	52,500	0.80
C Ltd.	80,000	3,000	1,10,000	0.60
GOI Bonds	1,70,000	17,000	1,61,500	0.01

From the information given above, choose the correct answer to the questions below:

Jan 26 (3 × 2 = 6 Marks)

Answer:

1. Expected return on market portfolio (R_m) is -

(A) 14.38%

(B) 15.34%

(C) 15.88%

(D) 16.32%

Answer: Option (C)

Return of each holding = (Dividend/Interest + Capital gain) ÷ Cost

A: (4,000 + 1,000) = 5,000; B: (5,000 + 2,500)

= 7,500

C: (3,000 + 30,000) = 33,000; GOI: (17,000 – 8,500)

= 8,500

Total return ₹54,000 on total cost ₹3,40,000 = 15.88%

2. Risk-free rate of return (as per simple average) is -

(A) 15.42%

(B) 15.52%

(C) 15.62%

Conferenza.in

(D) 15.72%

Answer: Option (B)

Simple average beta	= (0.60 + 0.80 + 0.60 + 0.01) ÷ 4
	= 0.5025
Using CAPM on the portfolio: 15.70	= R_F + 0.5025 (15.88 – R_F)
15.70	= 0.4975 R_F + 7.979 → R_F
	= 15.52%

3. Expected rate of return on shares of C Ltd. is -

(A) 12.38%
(B) 13.54%
(C) 14.12%
(D) 15.74%

Answer: Option (D)

$R_F + \beta (R_m - R_F)$	= 15.52 + 0.60 (15.88 – 15.52)
	= 15.52 + 0.216
	= 15.74%

Case Scenario 3

An investor is evaluating two companies, X Ltd. and Y Ltd., to determine which company is a better investment. Both companies have different expected returns, standard deviations, and betas.

- X Ltd. has an expected return of 22% and a standard deviation (risk) of 40%. Its Beta is 0.86.
- Y Ltd. has an expected return of 24%, a standard deviation of 38%, and a Beta of 1.24.

The correlation coefficient between the returns of X Ltd. and Y Ltd.is 0.72, and the standard deviation of the market return is 20%.

ICAI Case Scenario Booklet, CS 20 (5 × 2 = 10 Marks)

Answer:

1. Which company is expected to be more volatile in absolute terms?

(A) X Ltd.
(B) Y Ltd.
(C) Both have equal volatility
(D) Depends on correlation

Answer: Option (A)

Volatility is measured by standard deviation; X Ltd. has higher SD (40%).

Conferenza.in

2. The correlation coefficient of 0.72 between X Ltd. and Y Ltd. implies that……

(A) the stocks move in opposite directions.
(B) the stocks are perfectly correlated.
(C) there is strong positive co-movement.
(D) there is no diversification benefit.

Answer: Option (C)
A correlation of 0.72 indicates strong positive relationship.

3. If the correlation between X Ltd. and Y Ltd. were zero, the portfolio risk would……..

(A) increase
(B) decrease
(C) remain unchanged
(D) become zero

Answer: Option (B)
Lower correlation improves diversification benefits.

4. Which type of risk can be reduced by forming a portfolio of X Ltd. and Y Ltd.?

(A) Political risk
(B) Market risk
(C) Unsystematic risk
(D) Interest rate risk

Answer: Option (C)
Other types of risks are systematic risks which cannot be reduced or eliminated through diversification.

5. If market volatility increases but betas remain unchanged, the expected return as per CAPM will……

(A) Increase
(B) Decrease
(C) Remain unchanged
(D) Become zero

Answer: Option (C)
CAPM depends on beta, not total volatility.

Case Scenario 4

Mr. A is interested in investing ₹1,00,000 for which he is considering following three alternatives:

(i) Invest ₹1,00,000 in Mutual Fund X (MFX)

Conferenza.in

(ii) Invest ₹1,00,000 in Mutual Fund Y (MFY)
(iii) Portfolio - Invest ₹60,000 in Mutual Fund X (MFX) and ₹40,000 in Mutual Fund Y (MFY)

Average annual return earned by MFX and MFY is 12% and 11% respectively. Risk free rate of return is 8% and market rate of return is 10%. Covariance of returns of MFX, MFY and market portfolio Mix are as follow:

	MFX	MFY	Portfolio
MFX	4.400	4.300	3.370
MFY	4.300	4.200	2.800
Portfolio	3.370	2.800	4.200

ICAI Case Scenario Booklet, CS 24 (3 × 2 = 6 Marks)

Answer:

1. Standard Deviation of MFX is ……
(A) 2.0736
(B) 2.0976
(C) 1.8358
(D) 2.0494

Answer: Option (B)
Standard deviation of MFX = √(Variance of MFX)
= √4.400
= 2.0976

2. Portfolio return would be ……..
(A) 11.00%
(B) 12.00%
(C) 11.50%
(D) 11.60%

Answer: Option (D)
Portfolio return = (12.00% × 0.60) + (11.00% × 0.40)
= 7.20% + 4.40%
= 11.60%

3. Based on Standard Deviation, the optimum investment for Mr. A would be ……
(A) Portfolio
(B) All investment in MFX
(C) All investment in MFY
(D) Both MFY and mix are indifferent

Conferenza.in

Answer: Option (B)

Based on Coefficient of Variation

Faculty Notes:

Coefficient of variation is risk per unit of return — standard deviation divided by the expected return. The lower it is, the more return the investor is getting for each unit of risk carried, so the smallest CV wins.

MFX = 2.0976 ÷ 12.00%
= 0.1748

MFY = 2.0494 ÷ 11.00%
= 0.1863

Portfolio = 2.0494 ÷ 11.60%
= 0.1767

MFX carries the least risk for every unit of return, so the whole ₹1,00,000 goes into MFX. Note that the portfolio is not the answer here: diversifying does cut the standard deviation, but it cuts the return by more, so the ratio gets worse, not better.

Case Scenario 5

Two friends Mr. A and Mr. N were discussing about the risks of market. While Mr. A is sort of risk averse, Mr. N is an aggressive investor and believes in taking risk. Mr. N said we cannot diversify the market risk at all and he quoted the Modern Portfolio Approach. Both of these friends analyse the market data for the few month and came out with expected returns on two stocks for a particular market.

Market Return	Aggressive	Defensive
7%	4%	9%
25%	40%	18%

ICAI Case Scenario Booklet, CS 37 (5 × 2 = 10 Marks), RTP Nov 24

Answer:

1. The Beta of Defensive stock is……

(A) 2
(B) 0.50
(C) 4
(D) 1

Answer: Option (B)

Beta = Change in stock return ÷ Change in market return
= (18% – 9%) ÷ (25% – 7%)
= 9 ÷ 18
= 0.50

Conferenza.in

2. Expected return of Aggressive stock if the market return is equally likely to be 7% or 25% shall be……..

(A) 18%
(B) 13.5%
(C) 22%
(D) 11%

Answer: Option (C)
First compute Risk Free Rate of Return using simultaneous equations. Then use CAPM and compute the Expected Return under given scenario and multiply each return with 0.50 and add them.

3. The Alpha of the Defensive stocks is…….

(A) -10%
(B) 22%
(C) 5.5%
(D) 12%

Answer: Option (C)
18%= α + 0.50% 25% or 9%
= α + 0.50% 7%

4. The Modern Portfolio Theory is propounded by ……

(A) William Sharpe
(B) Black Scholes
(C) Stephen Ross
(D) Harry Markowitz

Answer: Option (D)
Refer the concept of Modern Portfolio Theory
Faculty Notes:
Harry Markowitz set out mean-variance portfolio selection and the efficient frontier in 1952, and won the Nobel for it.
Sharpe built CAPM on that foundation, Ross gave the Arbitrage Pricing Theory, and Black and Scholes priced options.

5. As per Capital Market Line (CML) Theory the Portfolios lying on the CML over the market portfolio are called …….

(A) Lending Portfolio
(B) Borrowing Portfolio
(C) Diversified Portfolio
(D) Risk- Free Portfolio

Answer: Option (B)

Refer the concept of Capital Market Theory.

Faculty Notes:

On the Capital Market Line an investor holds only two things: the risk-free asset and the market portfolio.

Below the market portfolio some money is lent at the risk-free rate — a lending portfolio. Above it, the investor borrows at the risk-free rate and puts more than 100% of their own funds into the market portfolio. That is a borrowing portfolio, and that is the segment this question asks about.

Option (C) is true of the whole line — every CML portfolio is diversified — so it cannot be what distinguishes the part above the market portfolio. (D) would sit at the risk-free rate itself, where the line begins.

Note — variance from the ICAI paper

The ICAI key marks Option (C), Diversified Portfolio. The segment of the CML above the market portfolio is the borrowing segment, so the answer is shown as Option (B) here. "Diversified" describes every portfolio on the line, including the lending ones below the market portfolio, so it cannot be the answer to a question that asks which segment lies above it.

Case Scenario 6

An investor is evaluating two companies, A Ltd. and B Ltd., to determine which company is a better investment. Both companies have different expected returns, standard deviations, and betas.

- A Ltd. has an expected return of 22% and a standard deviation (risk) of 40%. Its Beta is 0.86.
- B Ltd. has an expected return of 24%, a standard deviation of 38%, and a Beta of 1.24.

The correlation coefficient between the returns of A Ltd. and B Ltd. is 0.72, and the standard deviation of the market return is 20%.

ICAI Case Scenario Booklet, CS 48 (5 × 2 = 10 Marks)

Answer:

1. The portfolio's expected rate of return, if the investor invests 30% in B Ltd. and 70% in A Ltd. shall be.....

(A) 22.00%
(B) 22.60%
(C) 23.40%
(D) 24.00%

Answer: Option (B)

22% X 0.70 + 24% X 0.30 = 22.60%

Conferenza.in

2. The standard deviation of the investor's portfolio if 30% is invested in B Ltd. and 70% in A Ltd. shall be approximately……..

(A) 40%
(B) 39%
(C) 37%
(D) 35%

Answer: Option (C)

Variance = (40)2(0.70)2 + (38)2(0.30)2 + 2(0.70)(0.30)(40)(38)(0.72)
= 1373.61, SD
= √1375.61
= 37.08

3. The covariance between returns of Stock of A Ltd. and B Ltd. shall be approximately…….

(A) 0.0230
(B) 0.1094
(C) 0.7200
(D) 0.2189

Answer: Option (B)

(0.72)(0.40)(0.38) = 0.1094

4. Based on the data given the Risk Free Rate of Return shall be approximately …….

(A) 17.48%
(B) 18.00%
(C) 20.00%
(D) 22.74%

Answer: Option (A)

Solve simultaneous equations 22 = Rf + 0.86(Rm - Rf) and 24
= Rf + 1.24(Rm - Rf)

5. Based on the data given the Market Rate of Return shall be approximately……

(A) 17.48%
(B) 18.00%
(C) 20.00%
(D) 22.74%

Answer: Option (D)

Solve simultaneous equations 22 = Rf + 0.86(Rm - Rf) and 24
= Rf + 1.24(Rm - Rf)

Conferenza.in

Case Scenario 7

Zenith Capital, a boutique investment firm, manages portfolios for high-net-worth individuals (HNIs). Their lead portfolio manager, Mr. R, has been closely analysing market trends to optimise returns for their fixed-income portfolio. Over the past few months he has observed fluctuations in interest rates and anticipates a significant shift in the near future.

To optimise returns, Mr. R is considering three different investment strategies for clients having ₹10 crore of funds who are interested in a Fixed Income Portfolio. Each strategy is designed to align with the client's risk appetite and future liquidity needs.

Strategy A: Investing the entire ₹10 crore in a single bond with a 7-year maturity to match a specific financial obligation in the future.

Strategy B: Allocating ₹5 crore in short-term bonds (1-year maturity) and ₹5 crore in long-term bonds (7-year maturity) to balance risk and return.

Strategy C: Spreading the ₹10 crore investment equally across bonds with maturities of 1 to 5 years to ensure periodic liquidity.

Mr. R suggested Strategy B for Mr. H (an HNI) having a sum of ₹10 crore. As per the strategy half of the fund is proposed to be invested in 7-year bonds yielding 8% per annum and the balance in 1-year short-term bonds yielding 6% per annum. Interest on these bonds is compounded annually.

MTP May 25 S2 (5 × 2 = 10 Marks)

***Answer*:**

1. What is the primary objective of an active bond portfolio strategy?

(A) To maintain a fixed return irrespective of market conditions
(B) To outperform the market by making informed investment decisions
(C) To minimize volatility and ensure steady returns
(D) To invest in government bonds only

Answer: Option (B)

Faculty Notes:

An active manager takes a view — on rates, on spreads, on the shape of the curve — and trades on it, aiming to beat the benchmark.

Locking in a fixed return and simply damping volatility are passive objectives; restricting the universe to government paper is a constraint, not a strategy.

2. If any HNI follows Strategy A, then ..... of fixed-income portfolio strategy is being followed.

(A) Barbell Strategy

(B) Ladder Strategy
(C) Bullet Strategy
(D) Duration Matching

Answer: Option (C)
Faculty Notes:
The whole ₹10 crore matures at one point on the curve — the seven-year mark.
Concentrating maturities at a single point is the Bullet Strategy.
A Barbell splits between the two ends of the curve and a Ladder spreads evenly across it; neither concentrates at one maturity.

3. In the Barbell Strategy, the funds are typically allocated……..
(A) by making entire investment in bonds with the same maturity period.
(B) by dividing investment equally between short-term and long-term bonds.
(C) by dividing equal amount in bonds with different maturity periods.
(D) by investing only in short-term bonds.

Answer: Option (B)
Faculty Notes:
A barbell carries weight at both ends and nothing in the middle — short maturities for liquidity, long maturities for yield, with the intermediate range skipped.
That is Strategy B in this scenario: ₹5 crore at 1 year and ₹5 crore at 7 years.

4. In the Ladder Strategy, the funds are typically allocated…….
(A) by making entire investment in bonds with the same maturity period.
(B) by dividing investment equally between short-term and long-term bonds.
(C) by dividing equal amount in bonds with different maturity periods.
(D) by investing only in short-term bonds.

Answer: Option (C)
Faculty Notes:
Equal amounts across a series of maturities — 1, 2, 3, 4 and 5 years here — form the rungs of a ladder, so something matures every year and can be rolled out to the far end.
That is Strategy C in this scenario.

5. It is expected that interest rates in the coming 8 years will fall by 25 bps each year, and if Mr. H does not withdraw any amount from the Fund during these 7 years the total value of the investment at the end of the 7th year shall be approximately……
(A) ₹15.036 crore
(B) ₹15.721 crore
(C) ₹15.739 crore
(D) ₹15.829 crore

Answer: Option (B)

Faculty Notes:

The 7-year leg is locked at 8%, so it is untouched by the fall in rates:

₹5 crore × $(1.08)^7$ = ₹8.5691 crore

The 1-year leg matures at ₹5 × 1.06 = ₹5.30 crore and must then be rolled six more times, each roll 25 bps lower — 5.75%, 5.50%, 5.25%, 5.00%, 4.75%, 4.50%:

₹5.30 × 1.0575 × 1.0550 × 1.0525 × 1.0500 × 1.0475 × 1.0450 = ₹7.1530 crore

Total = 8.5691 + 7.1530

= ₹15.722 crore, i.e. approximately ₹15.721 crore.

This is the reinvestment risk the barbell carries: only the long leg is immune to the falling curve.

Conferenza.in

CHAPTER 7

Securitization

Case Scenario 1

Grow More Ltd. an NBFC is in the need of funds and hence it sold its receivables to MAC Financial Corporation (MFC) for ₹100 million. MFC created a trust for this purpose called General Investment Trust (GIT) through which it issued securities carrying a different level of risk and return to the investors. Further, this structure also permits the GIT to reinvest surplus funds for short term as per their requirement.

MFC also appointed a third party, Safeguard Pvt. Ltd. (SPL) to collect the payment due from obligor(s) and passes it to GIT. It will also follow up with defaulting obligor and if required initiate appropriate legal action against them.

ICAI Case Scenario Booklet, CS 34 (5 × 2 = 10 Marks), RTP Jan 26, MTP Jan 26 S2, RTP May 24

***Answer*:**

1. The securitized instrument issued for ₹100 million by the GIT falls under category of …….

(A) Pass Through certificate (PTCs)
(B) Pay Through Security (PTS)
(C) Stripped Security
(D) Debt Fund.

Answer: Option (B)

Refer the concept of Pay Through Security.

Faculty Notes:

A Pass Through Certificate hands the collections straight to holders in a single class. A Pay Through Security draws on the same pool but repackages the cash flows into more than one class with different maturities — which is what GIT has issued here.

2. In the above scenario, the Originator is…….

(A) Grow More Ltd.
(B) MAC Financial Corporation (MFC)
(C) General Investment Trust (GIT)
(D) Safeguard Pvt. Ltd.

Answer: Option (B)

MAC bought receivables.

3. In the above scenario, the General Investment Trust (GIT) is a/an…….

(A) Obligor
(B) Originator

Conferenza.in

(C) Special Purpose Vehicle (SPV)
(D) Receiving and Paying Agent (RPA)

Answer: **Option (C)**
Only for the purpose of issuing securities.

4. In the above scenario, the Safeguard Pvt. Ltd. (SPL) is a/an……
(A) Obligor
(B) Originator
(C) Special Purpose Vehicle (SPV)
(D) Receiving and Paying Agent (RPA)

Answer: **Option (D)**
Collects the payments from the receivables and pass to the SPV.

5. Which of the following statement holds true?
(A) When Yield to Maturity in market rises, prices of Principle Only (PO) Securities tend to rise.
(B) When Yield to Maturity in market rises, prices of Principle Only (PO) Securities tend to fall.
(C) When Yield to Maturity in market falls, prices of Principle Only (PO) Securities tend to fall.
(D) When Yield to Maturity in market falls, prices of Principle Only (PO) Securities remain the same.

Answer: **Option (B)**
Refer the concept of Stripped Securities.
Faculty Notes:
A Principal Only strip pays no interest at all: the holder receives only principal repayments, so it behaves like a deep-discount bond.
When market yields rise, those distant principal receipts are discounted harder, and borrowers also prepay more slowly, pushing the receipts further out. Both effects pull the PO price down.

CHAPTER 8

Mutual Funds

Case Scenario 1

Steady Mutual Fund has the following assets in Scheme – Star Gold at the close of business as on 31st March, 2025:

Company	No. of Shares (units)	Market Price per share (₹)
A Ltd.	20,000	25
B Ltd.	30,000	350
C Ltd.	38,000	290
D Ltd.	50,000	400

The total numbers of units of Scheme – Star Gold are 20 lakhs. The Scheme – Star Gold has accrued expenses of ₹2,00,000 and other liabilities of ₹2,50,000.

From the information given above, choose the correct answer to the question No. 6 to 8:

May 25 (3 × 2 = 6 Marks), Booklet CS 2

Answer:

Working Note — Gross value of the portfolio

Company	Shares	Price (₹)	Value (₹)
A Ltd.	20,000	25	5,00,000
B Ltd.	30,000	350	1,05,00,000
C Ltd.	38,000	290	1,10,20,000
D Ltd.	50,000	400	2,00,00,000
Total			**4,20,20,000**

6. Total gross value of the Scheme – Star Gold is -

(A) ₹325.00 lakhs
(B) ₹420.20 lakhs
(C) ₹480.40 lakhs
(D) ₹520.30 lakhs

Answer: Option (B)

Gross value = ₹4,20,20,000
= ₹420.20 lakhs

Conferenza.in

7. Total net value of the Scheme – Star Gold is -

(A) ₹422.70 lakhs
(B) ₹420.70 lakhs
(C) ₹415.70 lakhs
(D) ₹424.70 lakhs

Answer: Option (C)
Net value = 420.20 – 2.00 (accrued expenses) – 2.50 (other liabilities)
= ₹415.70 lakhs
Note: both liabilities are deducted, not one.

8. NAV per unit of the Scheme - Star Gold is-

(A) ₹21.135
(B) ₹21.035
(C) ₹20.785
(D) ₹21.235

Answer: Option (C)
NAV = ₹415.70 lakhs ÷ 20 lakhs units
= ₹20.785

Case Scenario 2

Fair Return Mutual Fund made an issue of 5,00,000 units @ ₹10 each on 1st April 2024. No entry load was charged. The fund made the following investments:

Particulars	(₹)
25,000 Equity Shares of ₹100 each @ ₹160	40,00,000
7% Government Securities (At Par)	4,00,000
9% Debentures (Unlisted) (At Par)	2,50,000
10% Debentures (Listed) (At Par)	2,50,000
Total	**49,00,000**

During the year dividend of ₹6,00,000 were received on equity shares. Interest on all types of debt securities was received as and when due. Operating expenses paid during the year amounted to ₹2,50,000.

At the end of the year equity shares and 10% debentures are quoted at 175% and 90% respectively of the face value. Other investments are valued at par.

From the information given above, choose the correct answer to the following question No. 4 to 6:

Sep 25 (3 × 2 = 6 Marks), Booklet CS 6

Answer:

4. What is net cash balance of the Mutual Fund at the end of the year?

(A) ₹1,00,000
(B) ₹7,00,000
(C) ₹7,75,500
(D) ₹5,25,500

Answer: Option (D)

Opening cash	= ₹50,00,000 – ₹49,00,000 invested
	= ₹1,00,000
Add: dividend received ₹6,00,000	
Add: interest — 7% of 4,00,000	= 28,000; 9% of 2,50,000
	= 22,500; 10% of 2,50,000
	= 25,000 → ₹75,500
Less: operating expenses ₹2,50,000	
Net cash	= 1,00,000 + 6,00,000 + 75,500 – 2,50,000
	= ₹5,25,500

5. What is Total Net Assets Value (NAV) of the Mutual Fund at the end of the year?

(A) ₹52,50,000
(B) ₹50,25,000
(C) ₹57,75,500
(D) ₹49,00,500

Answer: Option (C)

Equity: 25,000 × ₹100 × 175%	= ₹43,75,000
7% G-Sec at par ₹4,00,000; 9% Debentures at par ₹2,50,000	
10% Debentures: ₹2,50,000 × 90%	= ₹2,25,000
Investments	= ₹52,50,000; add net cash ₹5,25,500 → ₹57,75,500

6. If the Mutual Fund distributes a dividend of ₹0.60 per unit during the year to the unit holders, the NAV per unit at the end of the year will be

(A) ₹11.551
(B) ₹10.951
(C) ₹10.051
(D) ₹12.751

Answer: Option (B)

Dividend distributed	= 5,00,000 units × ₹0.60
	= ₹3,00,000
NAV	= (₹57,75,500 – ₹3,00,000) ÷ 5,00,000 units
	= ₹10.951

Conferenza.in

Case Scenario 3

Mr. Y has invested in the three mutual funds (MF) as per the following details:

Particulars	MF 'X'	MF 'Y'	MF 'Z'
Amount of Investment (₹)	4,00,000	8,00,000	4,00,000
Net Assets Value (NAV) at the time of purchase (₹)	10.30	10.10	10
Dividend Received up to 31.03.2023 (₹)	9,000	0	6,000
NAV as on 31.03.2023 (₹)	10.35	10	10.30
Effective Yield per annum as on 31.03.2023 (percent)	9.66	-11.66	24.15

Assume 1 Year = 365 days

ICAI Case Scenario Booklet, CS 26 (4 × 2 = 8 Marks), MTP May 24 S1

Answer:

1. Total NAV of MF 'Y' as on 31.03.2023 would be approximately ……

(A) ₹401941.73
(B) ₹412000.00
(C) ₹792079.21
(D) ₹82500.00

Answer: Option (C)

Units bought = ₹8,00,000 ÷ ₹10.10
= 79,207.92 units
Total NAV = 79,207.92 units × ₹10
= ₹7,92,079.21

2. Total Yield of MF 'X' in terms of ₹ would be approximately ……..

(A) ₹10941.75
(B) ₹7,920.80
(C) ₹18,000.00
(D) ₹12450.45

Answer: Option (A)

Units bought = ₹4,00,000 ÷ ₹10.30
= 38,834.95 units
Capital gain = 38,834.95 units × (₹10.35 – ₹10.30)
= ₹1,941.75
Total yield = ₹1,941.75 + ₹9,000 dividend
= ₹10,941.75

Conferenza.in

3. Number of days for which MF 'X' is held would be approximately……

(A) 31 Days
(B) 68 Days
(C) 103 Days
(D) 85 Days

Answer: Option (C)

(10,941.75 ÷ 4,00,000) × (365 ÷ D) = 0.0966
0.027354 × 365 ÷ D = 0.0966 → D ≈ 103 days

4. Number of days for which MF 'Y' is held would be……

(A) 31 Days
(B) 68 Days
(C) 103 Days
(D) 85 Days

Answer: Option (A)

[(10.00 – 10.10) ÷ 10.10] × (365 ÷ D) = –11.66%
–0.009901 × 365 ÷ D = –0.1166 → D ≈ 31 days

Case Scenario 4

Mr. X on 1st July 2021, during the initial offer of some Mutual Fund invested in 10,000 units having face value of ₹10 for each unit. On 31st March 2022, the dividend paid by the M.F. was 10% and Mr. X found that his annualized yield was 153.33%. On 31st December 2023, 20% dividend was given. On 31st March 2024, Mr. X redeemed all his balance of 11,296.11 units when his annualized yield was 73.52%.

ICAI Case Scenario Booklet, CS 38 (5 × 2 = 10 Marks), RTP Nov 24

Answer:

1. NAV as on 31/03/2022 shall be approximately……

(A) ₹19.50
(B) ₹20.50
(C) ₹21.50
(D) ₹22.50

Answer: Option (B)

Yield for 9 months = (153.33 x 9/12)
= 115%

Market value of Investments as on 31.03.2022 = 1,00,000/- + (1,00,000x 115%) = ₹2,15,000/-
Therefore, NAV as on 31.03.2022 = (2,15,000-10,000)/10,000 = ₹20.50

Conferenza.in

2. Total number of units as on 31/03/2022 shall be approximately…….

(A) 10487.80 units
(B) 12585.65 units
(C) 9465.35 units
(D) 11575.40 units

Answer: Option (A)

Since the dividend was reinvested by Mr. X, additional units acquired = ₹10,000 ÷ ₹20.50 = 487.80 units

Therefore units as on 31.03.2022 = 10,000 + 487.80
= 10,487.80 units

3. Dividend as on 31/03/2023 shall be …….

(A) ₹20625.50
(B) ₹20870.45
(C) ₹20975.60
(D) ₹21565.75

Answer: Option (C)

Dividend as on 31.03.2023 = 10,487.80 x ₹10 x 0.2
= ₹20,975.60

4. NAV as on 31/03/2023 shall be approximately…….

(A) 24.65
(B) 24.85
(C) 25.95
(D) 26.45

Answer: Option (C)

Let X be the NAV on 31.03.2023. The dividend of ₹20,975.60 buys ₹20,975.60 ÷ X new units, which is what takes the holding from 10,487.80 units to 11,296.11.

Closing units = Opening units + Units reinvested
11,296.11 = 10,487.80 + ₹20,975.60 ÷ X ₹20,975.60 ÷ X
= 11,296.11 – 10,487.80
= 808.31 units
X = ₹20,975.60 ÷ 808.31
= ₹25.95

5. NAV as on 31/03/2024 shall be approximately…….

(A) 20.50
(B) 25.95
(C) 26.75
(D) 27.20

Conferenza.in

Answer: Option (C)

NAV as on 31.03.2024 = ₹1,00,000 (1+0.7352x33/12)/11296.11
= ₹26.75

Case Scenario 5

The Asset Management Company of the mutual fund (MF) has declared a dividend of 9.98% on the units under the dividend reinvestment plan for the year ended 31st March 2021. The investors are issued additional units for the dividend at the rate of closing Net Asset Value (NAV) for the year as per the conditions of the scheme. The closing NAV was ₹24.95 as on 31st March 2021. An investor Mr. X who is having 20,800 units at the year-end has made an investment in the units before

the declaration of the dividend at the rate of opening NAV plus an entry load of ₹0.04. The NAV has appreciated by 25% during the year. Assume the face value of the unit as ₹10.00.

ICAI Case Scenario Booklet, CS 39 (5 × 2 = 10 Marks), MTP Nov 24 S1

Answer:

1. The Opening NAV of the Asset Management Company shall be .....

(A) ₹20.24
(B) ₹19.96
(C) ₹18.75
(D) ₹17.65

Answer: Option (B)

Let N be the opening NAV, then

N (1 + 0.25) = ₹24.95
N = ₹19.96
i.e., beginning NAV = ₹19.96

2. The Number of the units purchased shall be .....

(A) 18750
(B) 17500
(C) 20450
(D) 20000

Answer: Option (D)

Let X be the units purchased. The 9.98% dividend on the ₹10 face value is ₹0.998 a unit, reinvested at the closing NAV of ₹24.95.

Closing units = X + 0.998X ÷ 24.95
20,800 = (24.95X + 0.998X) ÷ 24.95
20,800 = 25.948X ÷ 24.95
X = 20,800 × 24.95 ÷ 25.948
= 20,000 units

Conferenza.in

3. Original amount of the investment shall be ……

(A) ₹4,00,000
(B) ₹6,50,000
(C) ₹3,55,000
(D) ₹5,65,000

Answer: **Option (A)**
Initial NAV ₹19.96 Entry Load ₹0.04 ₹20.00 Number of funds purchased 20,000 Amount of investment ₹4,00,000

4. Which of the following statement about Expense ratio is/ are incorrect? (i) It is the percentage of income that is spent to run a mutual fund. (ii) It includes advisory fees, travel costs, registrar fees, custodian fees, etc. (iii) It includes Brokerage costs for trading of Portfolio. (iv) High Expense Ratio can seriously undermine the performance of a mutual fund scheme.

(A) (i), (ii), (iii)
(B) (i), (iii)
(C) only (iii)
(D) only (i)

Answer: **Option (B)**
Refer the concept of Expense Ratio in Mutual Funds.
Faculty Notes:
Statement (i) is wrong: the expense ratio is charged on the fund's assets under management, not on its income.
Statement (iii) is wrong: brokerage and other transaction costs on portfolio trades sit outside the expense ratio.
Statements (ii) and (iv) are both correct — advisory, registrar and custodian fees are included, and a high ratio does erode returns. So the incorrect statements are (i) and (iii).

5. ……considers and uses downside deviation instead of total standard deviation in denominator.

(A) Expense Ratio
(B) Sharpe Ratio
(C) Treynor Ratio
(D) Sortino Ratio

Answer: **Option (D)**
Refer the topic financial measures to evaluate Mutual Funds.
Faculty Notes:
The Sortino Ratio replaces total standard deviation with downside deviation: only returns below the target count as risk.

That matters because an investor does not mind upside volatility. Sharpe uses total standard deviation, Treynor uses beta, and the expense ratio is a cost measure rather than a risk-adjusted return at all.

Case Scenario 6

Mr. Ramesh, a 40-year-old investor, has invested ₹10,00,000 in an actively managed Equity Mutual Fund. The fund has an Expense Ratio of 2.50% and follows the Nifty 50 Index as its benchmark. On analysing the fund details he comes across the concept of Tracking Error (TE) and finds that the same fund has a Tracking Error of 3.20%.

A few months later Mr. Ramesh receives a notification that the fund has implemented Side Pocketing. The fund has an exposure of 15% of his investment in a debt instrument of XYZ Ltd., a company facing a severe financial crisis. Since XYZ Ltd. has defaulted on its payments, the Fund Manager has moved this portion into a side pocket.

Following the decision of the Fund Manager, Mr. Ramesh decides to reconsider his options.

MTP May 25 S1 (5 × 2 = 10 Marks)

Answer:

1. Is it necessary for investors to pay close attention to the Expense Ratio of a Mutual Fund because……..

(A) a high expense ratio can significantly reduce net returns over time.
(B) a higher expense ratio always guarantees better fund performance.
(C) the expense ratio only matters in the first year of investment.
(D) funds with higher expense ratios are always risk-free.

Answer: Option (A)

Faculty Notes:

The expense ratio is charged on assets every year whether the fund gains or loses. At 2.50% on ₹10,00,000 that is ₹25,000 a year, and the drag compounds.

Cost is not a promise of performance, it is not confined to the first year, and it says nothing at all about risk — which rules out the other three.

2. The Fund has been …… in replicating return on Nifty 50.

(A) Successful
(B) Unsuccessful
(C) Can't say
(D) Data is insufficient

Answer: Option (B)

Faculty Notes:

Tracking Error is the standard deviation of the fund's return around its benchmark. A fund that tracked the Nifty 50 closely would show a TE well under 1%.

Conferenza.in

At 3.20% the fund has drifted a long way from the index, so replication has been unsuccessful. The figure is given, so neither "can't say" nor "insufficient data" applies.

3. After the decision of the Fund Manager for side-pocketing, the equivalent portion of Mr. Ramesh's investment shall_____

(A) remains illiquid until the Fund Manager decides to sell it or the company recovers.
(B) be immediately written off, and Mr. Ramesh loses that portion.
(C) be returned to Mr. Ramesh in proportion to his holdings.
(D) be moved into a different Mutual Fund Scheme with no risk.

Answer: Option (C)

Faculty Notes:

On side pocketing the distressed exposure is carved into a separate portfolio and units in it are allotted to every existing unitholder in the same proportion as their holding in the main scheme.

So Mr. Ramesh's 15% comes back to him as units of the segregated portfolio — it is neither written off nor parked in some other scheme.

4. If Mr. Ramesh switches to a Passive Index Fund with an expense ratio of 0.8%, then how much will he save annually compared to his current Expense Ratio of 2.50%?

(A) ₹8,000
(B) ₹10,000
(C) ₹17,000
(D) ₹18,000

Answer: Option (C)

Faculty Notes:

Saving in the ratio	= 2.50% – 0.80%
	= 1.70%
On the corpus: ₹10,00,000 × 1.70%	= ₹17,000 a year.

5. The advantage for Mr. Ramesh to switch over to a Passive Index Fund shall be____

(A) lower expense ratio and lower tracking error.
(B) guaranteed recovery of side-pocketed assets.
(C) higher risk exposure compared to active funds.
(D) avoiding capital gains tax on redemption.

Answer: Option (A)

Faculty Notes:

A passive fund holds the index itself, so it charges far less — 0.80% against 2.50% — and by construction its tracking error is a fraction of the active fund's 3.20%.

Switching schemes recovers nothing from the side pocket, does not raise risk, and a redemption is a redemption for tax whichever fund it is in.

Conferenza.in

CHAPTER 9

Derivatives Analysis and Valuation

Case Scenario 1

Mr. X, an investor buys the stocks of WBL Limited worth ₹21,60,000 due to very strong fundamentals. Since last 3 months, the market sentiment is weak and witnessed a significant volatility and considered to remain weak for about the next three months. Keeping in the mind volatility in the market, Mr. X is planning to hedge his portfolio in the future market. The Beta of WBL stock is 1.3 and the current value of NIFTY is 2250 and 3 months future is selling at 2310. The current market price of the WBL stock is ₹240. Each Nifty future can be trade in units of 240 only.

Assume there is no transaction cost and M to M Margin.

May 25 (3 × 2 = 6 Marks), Booklet CS 3, MTP May 26 S2

Answer:

9. Number of future contract to be buy/sell to hedge WBL stock against expected fall in the market (rounded of contracts) –

(A) Buy 6 future contracts
(B) Sell 5 future contracts
(C) Buy 5 future contracts
(D) Sell 6 future contracts

Answer: Option (B)

(₹21,60,000 × 1.3) ÷ (2310 × 240) = 28,08,000 ÷ 5,54,400
= 5.06 ≈ 5 contracts

A long cash position is hedged by a short futures position — hence sell.

10. If Nifty index fall by 10% from 2250 to 2025 and WBL stock falls to ₹212, what will be Net Gain/Loss if portfolio was hedged on NIFTY future?

(A) Net Gain ₹3,42,000
(B) Net Gain ₹3,02,100
(C) Net Gain ₹50,100
(D) Net Gain ₹90,000

Answer: Option (D)

Shares held = ₹21,60,000 ÷ ₹240
= 9,000 shares
Loss on stock = 9,000 × (₹240 – ₹212)
= ₹2,52,000
Gain on futures = (2310 – 2025) × 240 × 5

Conferenza.in

= ₹3,42,000

Net gain = ₹3,42,000 – ₹2,52,000

= ₹90,000

Note: option (A) is the futures leg alone, un-netted.

11. If NIFTY index rises by 6% from 2250 to 2385 and WBL stock rises to ₹255, what will be Net Gain/Loss when portfolio was in hedged?

(A) Net Loss ₹90,000

(B) Net Gain ₹45,000

(C) Net Gain ₹1,35,000

(D) Net Gain ₹90,000

Answer: Option (B)

Gain on stock = 9,000 × (₹255 – ₹240)

= ₹1,35,000

Loss on futures = (2385 – 2310) × 240 × 5

= ₹90,000

Net gain = ₹1,35,000 – ₹90,000

= ₹45,000

Case Scenario 2

HHM & Co., is a famous consultant. It has established the following strategy on the stock of PLS Ltd:

(a) Purchased one 3-month call option with a premium of ₹25 and an exercise price of ₹750.

(b) Purchased one 3-month put option with a premium of ₹8 and an exercise price of ₹600.

The stock of PLS Ltd is currently selling at ₹680. The option size is 100 shares of PLS Ltd.

From the information given above, choose the correct answer to the following question No. 7 to 9:

Sep 25 (3 × 2 = 6 Marks), Booklet CS 7

Answer:

Total premium paid = (₹25 + ₹8) × 100 = ₹3,300. This is a strangle — a call above the market and a put below it.

7. What is the Net gain or loss, if the price of the stock remains at ₹680 after 3 months?

(A) Net loss of ₹3,300

(B) Net gain of ₹3,300

(C) Net gain of ₹6,700

Conferenza.in

(D) Net loss of ₹6,700

Answer: Option (A)
Call lapses (₹680 < ₹750) and put lapses (₹680 > ₹600).
Net loss = premium paid
= ₹3,300

8. What is the Net gain or loss, if the price of the stock falls to ₹500 after 3 months?
(A) Net loss of ₹3,300
(B) Net gain of ₹3,300
(C) Net gain of ₹6,700
(D) Net loss of ₹6,700

Answer: Option (C)
Put is exercised: (₹600 – ₹500) × 100 = ₹10,000; call lapses.
Net gain = ₹10,000 – ₹3,300
= ₹6,700

9. What is the Net gain or loss, if the price of the stock rises to ₹820?
(A) Net loss of ₹3,700
(B) Net gain of ₹3,700
(C) Net gain of ₹10,300
(D) Net loss of ₹10,300

Answer: Option (B)
Call is exercised: (₹820 – ₹750) × 100 = ₹7,000; put lapses.
Net gain = ₹7,000 – ₹3,300
= ₹3,700

Case Scenario 3

A and B are two friends. Since B has earned a lot of profit from trading in financial derivative market, A is also considering speculating on G Ltd.'s shares which is currently trading at ₹1,400 per share through taking positions in options in stocks of same company. Accordingly, A took following contract positions in the options on G Ltd.'s stock:

(i) Selling one contract of 2-month call option with a premium of ₹70 and an exercise price of ₹1,500.
(ii) Purchasing one contract of 2-month put option with a premium of ₹50 and an exercise price of ₹1,200.

ICAI Case Scenario Booklet, CS 10 (3 × 2 = 6 Marks)

Answer:

Conferenza.in

1. Assuming that the contract size of each option contract is 200 and the price of G Ltd.'s share after two months falls to ₹1,100, the net pay-off of A will be……

(A) ₹24,000 loss
(B) ₹24,000 profit
(C) ₹40,000 profit
(D) ₹40,000 loss

Answer: Option (B)
(₹1,200 - ₹1,100) x 200 + ₹70 x 200 - ₹50 x200 = ₹24,000

2. The per share price of G Ltd.'s stock after 2 months at which A shall be at Break Even is…..

(A) ₹1,180
(B) ₹1,200
(C) ₹1,250
(D) ₹1,570

Answer: Option (A)
₹1,200 – (₹70 - ₹50) = ₹1,180

3. Assuming that the contract size of each option contract is 300 and the price of G Ltd.'s share after two months raises to ₹1,600, the net pay-off of A will be……

(A) ₹24,000 loss
(B) ₹66,000 loss
(C) ₹24,000 profit
(D) ₹66,000 profit

Answer: Option (A)
(₹1,500 - ₹1,600) x 300 + ₹70 x 300 - ₹50 x 300 = - ₹24,000

Case Scenario 4

Following information is related to actions taken in different situation of financial options:

Situation	Action	Exercise Price Premium Spot Price
I	Exercised	2800 400 3200
II	Exercised	4000 300 3500
III	Lapsed	6000 1000 8000

ICAI Case Scenario Booklet, CS 16 (5 × 2 = 10 Marks)

Answer:

1. The investor incurs a loss equal to the premium paid in……..

(A) Situation I

Conferenza.in

(B) Situation II
(C) Situation III
(D) Situations I and II

Answer: Option (C)
When an option lapses, the maximum loss equals the premium paid.

2. In which situation, the option is classified as in-the-money.
(A) Situation I
(B) Situation II
(C) Situation III
(D) Situations I and II

Answer: Option (D)
Spot price (160) > Exercise price (140), hence a call option is in-the-money. Spot price (175) < Exercise price (200), hence a call option is in-the-money.

3. In Situation II, the intrinsic value of the option is……..
(A) ₹0
(B) ₹200
(C) ₹300
(D) ₹500

Answer: Option (D)
Intrinsic value of put option = Exercise price – Spot price
= ₹4000 – ₹3500
= ₹500

4. ……represents a breakeven outcome for the investor.
(A) Situation I
(B) Situation II
(C) Situation III
(D) Situations I and II

Answer: Option (A)
In Situation I, intrinsic value equals premium, resulting in zero profit/loss.

5. The relationship between spot price and exercise price in Situation II indicates……
(A) Call option in-the-money
(B) Call option out-of-the-money
(C) Put option in-the-money
(D) Put option out-of-the-money

Answer: Option (C)

Conferenza.in

Spot price is less than Exercise Price and hence Option is exercised.

Case Scenario 5

X and Y are two friends. Since Y has earned a lot of profit from trading in financial derivative market, X is also considering speculating on Gamma Corporation's shares which is currently trading at ₹700 per share through taking positions in options in stocks of same company. Accordingly, X took following contract positions in the options on Gama Corporation's stock:

(i) Purchasing one contract of 2-month call option with a premium of ₹35 and an exercise price of ₹750.

(ii) Purchasing one contract of 2-month put option with a premium of ₹25 and an exercise price of ₹600.

After some time, trading in Option Market and understanding the nitty-gritties of same, X being CEO in an organization advised his team to implement the concept of Financial Options in the Capital Budgeting decisions called 'Real Option'.

ICAI Case Scenario Booklet, CS 22 (3 × 2 = 6 Marks), MTP Jan 26 S1

Answer:

1. Assuming that the contract size of each option contract is 100 and the price of Gama Corporation's share after two months falls to ₹550, the net pay-off of X will be……

(A) ₹1,000 loss
(B) ₹1,000 profit
(C) ₹3,000 profit
(D) ₹3,000 loss

Answer: Option (A)

₹50 x 100 – [₹35 x 100 + ₹25 x100] = - ₹1,000

2. The per share price of Gama Corporation's stock after 2 months at which X shall be at Break Even is…..

(A) ₹540
(B) ₹600
(C) ₹625
(D) ₹785

Answer: Option (A)

₹600 – [₹35 + ₹25] = ₹540

3. Which of the following statement is false regarding Real Options?

(A) Real Options methodology is an approach to capital budgeting that relies on Option Pricing theory to evaluate projects.

Conferenza.in

(B) Real options approach is intended to supplement, and not replace, capital budgeting analyses based on standard Discounted Cash Flow (DCF) methodologies.
(C) Real options are different from financial options as their periods start from the end of 1st year and are higher than financial options.
(D) Real options are normally traded in the market and are priced.

Answer: Option (D)
Refer difference between Financial and Real Options.

Faculty Notes:
Real options are embedded in projects — the option to expand, to defer, to abandon. They are not listed instruments and carry no market price, which is precisely what makes them harder to value than financial options.
The other three statements are true, so (D) is the false one.

Case Scenario 6

You as an investor had purchased a 4-month European Call Option on the equity shares of X Ltd. for ₹10, of which the current market price is ₹132 per share and the exercise price ₹150. You expect the price to range between ₹120 to ₹190. The expected share price of X Ltd. and related probability is given below:

Expected Price (₹)	120	140	160	180	190
Probability	0.05	0.20	0.50	0.10	0.15

ICAI Case Scenario Booklet, CS 40 (5 × 2 = 10 Marks), MTP Nov 24 S1

Answer:

1. Expected price of share of X Ltd. at the end of 4 months shall be…….
(A) ₹160.00
(B) ₹160.50
(C) ₹158.00
(D) ₹140.00

Answer: Option (B)
₹120 x 0.05 + ₹140 x 0.20 + ₹160 x 0.50 + ₹180 x 0.10 + ₹190 x 0.15 = ₹160.50

2. Suppose if the exercise price prevails at the end of 4 months the Value of Call Option shall be……
(A) ₹0
(B) ₹18
(C) ₹10
(D) ₹14

Answer: Option (A)

Conferenza.in

Share can either be purchased from market or from the seller of the option.

3. In case the option is held to its maturity, the expected value of the call option shall be……

(A) ₹0
(B) ₹18
(C) ₹10
(D) ₹14

Answer: **Option (D)**
₹10 x 0.50 + ₹30 x 0.10 + ₹40 x 0.15 = ₹14

4. In the given different scenarios of expected prices of share of X Ltd. at the time of maturity the option shall be in-the-money in …… scenarios.

(A) two
(B) three
(C) five
(D) In none of the scenario

Answer: **Option (B)**
When spot price exceeds exercise price it will be beneficial to purchase share from the option seller.

5. In the given different scenarios of expected prices of share of X Ltd. at the time of maturity the option shall be at-the-money in …… scenarios.

(A) two
(B) three
(C) five
(D) In none of the scenario

Answer: **Option (D)**
In none of the case the expected spot price is ₹150.

Case Scenario 7

Suppose you are a risk manager at a financial institution, and your company has loaned a significant amount of ₹500 crore to a company X Ltd. for a period of 3 years at 6-month at MCLR plus 200 bps. You are concerned about X Ltd.'s ability to repay the debt due to recent market volatility. To protect your institution from potential default, you decide to purchase a Credit Default Swap (CDS) from ABC Bank Ltd. for same notional amount at a premium quoted at 1% per year through cash settlement. On the respective reset dates for the same period actual MCLR interest rate comes out as follows:

Reset	MCLR
1	9.75%

Conferenza.in

Reset	MCLR
2	10.00%
3	10.25%
4	10.35%
5	10.50%
6	10.60%

ICAI Case Scenario Booklet, CS 41 (5 × 2 = 10 Marks), MTP Nov 24 S2

Answer:

1. The primary purpose of a Credit Default Swap (CDS) is.....

(A) to increase the value of bonds.
(B) to protect against default risk of a debt obligation.
(C) to provide guaranteed profit to the buyer.
(D) to create a new form of loan.

Answer: Option (B)
Refer the concept of Credit Default Swap.

Faculty Notes:
A CDS is insurance on a debt obligation. The buyer pays a periodic premium; if the reference borrower defaults, the seller makes good the loss.
It transfers credit risk from one party to another. It does not raise the bond's value, guarantee anyone a profit, or create a fresh loan.

2. Which of the following statements is true about CDS contracts?

(A) CDS contracts cannot be used for speculation.
(B) CDS contracts are governed by government regulations.
(C) CDS contracts are private agreements between two parties.
(D) CDS contracts eliminate all risks for the buyer.

Answer: Option (C)
CDS Contracts can also be used for speculation purpose as well. Regulated by ISDA. CDS provide protection against default risk only.

3. Which organization publishes the guidelines and rules for conducting Credit Default Swap transactions?

(A) Federal Reserve
(B) International Swap and Derivative Association (ISDA)
(C) Securities and Exchange Commission (SEC)
(D) World Trade Organization (WTO)

Answer: Option (B)
Being OTC in nature.

Conferenza.in

4. Assuming no default occurs the total premium your company will pay during the designated loan period shall be.....

(A) ₹5 crore
(B) ₹10 crore
(C) ₹15 crore
(D) ₹30 crore

Answer: Option (C)
₹500 crore x 1% x 3 = ₹15 crore

5. Suppose if the lender defaults somewhere in the beginning of third year of loan (after payment of interest upto 2 years) and the market value of a reference loans falls to 75% of its par value, then ABC Bank will pay your company .....in a cash settlement.

(A) ₹15 crore
(B) ₹30 crore
(C) ₹125 crore
(D) ₹500 crore

Answer: Option (C)
₹500 crore(1 – 0.75) = ₹125 crore

Case Scenario 8

Following information is related to actions taken in different situation of financial options:

Situation Action	Exercise Price Premium Spot Price
I Exercised	140 20 160
II Exercised	200 15 175
III Lapsed	300 25 400

ICAI Case Scenario Booklet, CS 53 (3 × 2 = 6 Marks), Nov 24

Answer:

1. In Situation III, the investor's position and the amount of profit / loss is.....

(A) Put option, ₹(25)
(B) Call option, ₹75
(C) Short position, ₹100
(D) Long position, ₹(100)

Answer: Option (A)
Since option is lapsed. Thus, only loss is the loss of premium i.e., ₹25.

Conferenza.in

2. In Situation I, the investor's position and the amount of profit or loss is…….

(A) Put option and ₹20
(B) Call option and ₹0
(C) Put option and ₹0
(D) Call option and ₹20

Answer: Option (B)

Spot price is more than exercise price. Hence Call option.

Profit = ₹160 - ₹140
= ₹20

Net profit = ₹20 - ₹20
= ₹0

3. In Situation II, the investor's position and the amount of profit / loss is……..

(A) Put option and ₹10
(B) Call option and ₹10
(C) Put option and ₹25
(D) Call option and ₹25

Answer: Option (A)

Spot price is Less than exercise price. Hence Put option.

Profit = ₹200 - ₹175
= ₹25

Net profit = ₹25 - ₹15
= ₹10

Conferenza.in

CHAPTER 10

Interest Rate Risk Management

Case Scenario 1

A Ltd. is planning to borrow an amount of ₹300 crores for a period of 3 months in the coming 6 months' time from now. The current rate of interest is 9% p.a., but it is likely to go up in 6 months' time. The company wants to hedge itself against the likely increase in interest rate. You as CFO has been asked to suggest both traditional as well as modern methods to hedge interest rate risk. Suppose the banker of A Ltd. has quoted the following Forward Rate Agreement (FRA) rates:

3x6	8.10%	8.15%
6x9	8.20%	8.30%
9 x 12	8.35%	8.45%

A Ltd. has already issued redeemable bonds or debentures.

ICAI Case Scenario Booklet, CS 18 (5 × 2 = 10 Marks), MTP May 26 S2

***Answer*:**

1. In an FRA contract, the company intending to borrow funds in future should…….

(A) buy FRA at bid rate.
(B) sell FRA at bid rate.
(C) buy FRA at offer rate.
(D) sell FRA at offer rate.

Answer: Option (C)
A future borrower buys FRA at the offer rate to lock in borrowing cost.

2. If interest rates rise above the FRA rate, the A Ltd. under FRA will……

(A) incur loss and pay banker.
(B) neither gain nor lose.
(C) receive compensation from banker.
(D) cancel the contract.

Answer: Option (C)
FRA compensates the borrower when market rates exceed the agreed rate.

3. The settlement under an FRA is made……

(A) at the end of the loan period.
(B) at the beginning of the loan period.

Conferenza.in

(C) at the maturity of FRA.
(D) along with repayment of principal.

Answer: Option (B)
FRA is settled at the start of the underlying loan period.

4. The FRA settlement amount is discounted because……
(A) interest rates are uncertain
(B) FRA is settled in advance
(C) principals are not exchanged
(D) only interest differential is paid

Answer: Option (B)
Settlement relates to a future interest period but is paid upfront.

5. Interest Rate Futures differ from FRAs mainly because Futures are……
(A) OTC instruments
(B) tailor-made contracts
(C) standardised and exchange traded
(D) settled only at maturity

Answer: Option (C)
Except (c) other points features are related to FRA.

Case Scenario 2

You are an investment analyst working for a financial advisory firm. You have been asked to analyze the bond market's yield curve to assist your clients in making investment decisions. The yield curve represents the relationship between the interest rates (yield) and the time to maturity for debt securities, usually government bonds.

For simplicity, assume the following yield data for government bonds over various maturities (measured in years): Yield Curve Table

Maturity (Years)	Yield (%)
1 Year	3.00%
2 Years	4.00%
3 Years	5.00%
5 Years	6.00%
7 Years	6.40%
10 Years	7.00%
15 Years	7.40%
30 Years	7.60%

Conferenza.in

ICAI Case Scenario Booklet, CS 43 (5 × 2 = 10 Marks), MTP Nov 24 S2

Answer:

1. The main characteristic of a normal yield curve is……..

(A) Short-term yields are higher than long-term yields.
(B) Short-term yields are lower than long-term yields.
(C) Yields remain the same across all maturities.
(D) Yields fluctuate randomly over different maturities.

Answer: Option (B)
Long term bonds carry higher interest rate risk.

2. Based on the revised yield data, what is the yield spread between the 10- year bond and the 1-year bond?

(A) 2.0%
(B) 3.5%
(C) 4.0%
(D) 5.0%

Answer: Option (C)
7.00% - 3.00% = 4.00%

3. An inverted yield curve typically indicates……

(A) Economic growth
(B) Economic uncertainty
(C) An upcoming recession
(D) Inflationary pressure

Answer: Option (C)
Investors are pessimistic about long term perspective of the economy.

4. If an investor is looking to invest for 2 years starting 3 years from now, the forward rate he would expect shall be……

(A) 7.41%
(B) 7.52%
(C) 7.76%
(D) 7.93%

Answer: Option (B)
[(1.06)5/(1.05)3]½ - 1 = 7.52%

5. If an investor is looking to invest for 2 years starting 5 years from now, the forward rate he would expect shall be……

(A) 7.41%

Conferenza.in

(B) 7.52%
(C) 7.76%
(D) 7.93%

Answer: Option (A)
[(1.064)7/(1.06)5]½ - 1 = 7.41%

Case Scenario 3

P Ltd. is planning to borrow an amount of ₹60 crores for a period of 3 months in the coming 6 month's time from now. The current rate of interest is 9% p.a., but it is likely to go up in 6 month's time. The company wants to hedge itself against the likely increase in interest rate.

You as CFO has been asked to suggest both traditional as well as modern methods to hedge interest rate risk. Suppose the banker of P Ltd. has quoted the following Forward Rate Agreement (FRA) rates:

3x6	9.10%	9.15%
6x9	9.20%	9.30%
9 x 12	9.35%	9.45%

P Ltd. has already issued redeemable bonds or debentures.

ICAI Case Scenario Booklet, CS 50 (4 × 2 = 8 Marks)

Answer:

1. Which of the following rate shall be applicable for FRA to hedge the interest rate risk if P Ltd. agrees to adopt this method to hedge interest rate risk?

(A) 9.10% p.a.
(B) 9.30% p.a.
(C) 9.35% p.a.
(D) 9.45% p.a.

Answer: Option (B)
P Ltd. is planning to borrow after 6 months for a period of 3 months and higher of two rates shall be taken.

2. If the actual rate of interest after 6 months happens to be 9.60%, approximately the settlement amount of.....

(A) ₹733,855 shall be paid by P Ltd. to its Banker.
(B) ₹439,453 shall be paid by P Ltd. to its Banker.
(C) ₹439,453 shall be paid by Banker to P Ltd.
(D) ₹733,855 shall be paid by Banker to P Ltd.

Conferenza.in

Answer: Option (C)
₹60 crore × [(9.60% – 9.30%) ÷ (1 + 0.096 ÷ 4)] × (1 ÷ 4) = ₹4,39,453

3. If the actual rate of interest after 6 months happens to be 8.80%, approximately the settlement amount of.....

(A) ₹733,855 shall be paid by P Ltd. to its Banker.
(B) ₹439,453 shall be paid by P Ltd. to its Banker.
(C) ₹439,453 shall be paid by Banker to P Ltd.
(D) ₹733,855 shall be paid by Banker to P Ltd.

Answer: Option (A)
₹60 crore × [(8.80% – 9.30%) ÷ (1 + 0.088 ÷ 4)] × (1 ÷ 4) = ₹7,33,855

4. Which of the following technique is not the modern technique to hedge the interest rate risk.

(A) Interest Rate Futures
(B) Interest Rate Options
(C) Interest Rate Swaps
(D) Forward Rate Agreement

Answer: Option (D)
FRA is a traditional technique to manage interest rate risk.

Conferenza.in

cover full exposure. Following information are available:

Rate (1$ =)	Bid	Ask
Spot rate	£0.7720	£0.7840
6 months forward rate	£0.7910	£0.8040

Interest rates	US	UK
6 months deposit rate	4.50% p.a.	5.50% p.a.
6 months borrowing rate	6.00% p.a.	7.50% p.a.

Option	Strike rate	Price
Call	£0.8100	£0.01
Put	£0.8100	£0.02

Future Rates of 1$	Probability
£0.7800	30%
£0.8100	50%
£0.8300	20%

From the information given above, choose the correct answer to the question No. 12 to 15:

May 25 (4 × 2 = 8 Marks), Booklet CS 4

Answer:

12. What will be the total expected value of option hedge in pounds, if the full exposure of 20 Million is covered?

(A) £16.125 million
(B) £16.50 million
(C) £15.88 million
(D) £15.70 million

Answer: Option (C)
The firm receives dollars, so it buys the put at £0.8100, premium £0.02.
At £0.7800 → exercise: 0.8100 – 0.02 = 0.79
At £0.8100 → indifferent: 0.8100 – 0.02 = 0.79

Conferenza.in

At £0.8300 → lapse: 0.8300 – 0.02	= 0.81
Expected	= 0.3(0.79) + 0.5(0.79) + 0.2(0.81)
	= 0.794 × $20 million
	= £15.88 million

13. If ABC Ltd. is using forward hedge strategy, what will be total proceed in pound?

(A) £15.40 million
(B) £15.88 million
(C) £16.125 million
(D) £15.82 million

Answer: Option (D)
The firm sells dollars, so the bank buys at its forward bid of £0.7910.
$20 million × 0.7910 = £15.82 million

14. What will be expected spot rate at the end of 6 months and expected cost (proceed) if no hedge strategy is adopted by the company?

(A) £0.805/$, £16.10 million
(B) £0.85/$, £15.8 million
(C) £0.7720/$, £15.44 million
(D) £0.7910/$, £15.82 million

Answer: Option (A)

Expected spot	= 0.30(0.7800) + 0.50(0.8100) + 0.20(0.8300)
	= 0.234 + 0.405 + 0.166
	= £0.805
$20 million × 0.805	= £16.10 million

15. Identify which option gives the highest proceed.

(A) Option hedge
(B) Forward hedge
(C) Money market hedge
(D) No hedge

Answer: Option (D)
No hedge £16.10 m > Option hedge £15.88 m > Forward hedge £15.82 m Note: highest expected proceed is not the same as lowest risk — no hedge loses badly if the spot settles at £0.78.

Case Scenario 2

On 3rd April, 2025, Royal Bank quotes the following:

Conferenza.in

Particulars	Bid	Ask
Spot Exchange Rate (US$1)	₹84.2525	₹85.5945
2 months' swap points	60	80
3 months' swap points	150	178

In a spot transaction, delivery is made after two days. Assume spot date as 5th April, 2025 and 1 swap point = 0.0001. Calculation up to 4 decimal places.

From the information given above, choose the correct answer to the following question No. 10 to 12:

Sep 25 (3 × 2 = 6 Marks), Booklet CS 8

Answer:

10. The swap points for 2 months & 15 days (i.e., for 20th June, 2025) will be

(A) Bid – 90 and Ask – 98
(B) Bid – 105 and Ask – 129
(C) Bid – 98 and Ask – 90
(D) Bid – 129 and Ask – 105

Answer: Option (B)

From the spot date of 5 April, 2 months is 5 June and 3 months is 5 July — a 30-day gap. 20 June is 15 days into that gap, so interpolate half the difference:

Bid = 60 + (150 – 60) × 15/30
= 60 + 45
= 105

Ask = 80 + (178 – 80) × 15/30
= 80 + 49
= 129

11. Foreign exchange rate for 20th June, 2025 will be

(A) Bid – ₹85.2525 and Ask – ₹84.5945
(B) Bid – ₹84.5945 and Ask – ₹85.2525
(C) Bid – ₹84.2630 and Ask – ₹85.6074
(D) Bid – ₹85.6074 and Ask – ₹84.2630

Answer: Option (C)

Bid = ₹84.2525 + (105 × 0.0001)
= ₹84.2630

Ask = ₹85.5945 + (129 × 0.0001)
= ₹85.6074

Points are added, so the US$ is at a premium against the ₹.

Conferenza.in

12. On an average rate, the annual rate of premium/discount of US $ on Indian ₹ will be

(A) Bid – 0.0498% and Ask – 0.0524% (Premium)
(B) Bid – 0.0598% and Ask – 0.0723% (Discount)
(C) Bid – 0.0723% and Ask – 0.0598 % (Premium)
(D) Bid – 0.0598% and Ask – 0.0723% (Premium)

Answer: Option (D)

Period is 2 months 15 days	= 2.5 months, so annualise by 12 / 2.5.
Bid	= (0.0105 ÷ 84.2525) × (12 / 2.5) × 100
	= 0.0598%
Ask	= (0.0129 ÷ 85.5945) × (12 / 2.5) × 100
	= 0.0723%

Since the forward rate exceeds the spot, it is a premium — option (B) has the right figures but the wrong label.

Case Scenario 3

The Inter Banking Rates on 28th June 2025 were as follows: Spot US$1 = ₹86.50/55; 1 Month forward premium 5/8.

On 1st May 2025, Mr. M an exporter enters into a forward contract with DMP Bank to sell US$2,50,000 on 31st July 2025 at the rate US $1 = 86.80. However, Mr. M received the amount on 28th June 2025. Mr. M requested the bank to take the delivery of the remittance on 30th June 2025 i.e. before due date.

Note 1: Consider 365 days in a year. Note 2: Prevailing Prime Lending Rate is 15% p.a.

From the information given above, choose the correct answer to the questions below:

Jan 26 (3 × 2 = 6 Marks)

Answer:

1. Swap loss is _____.

(A) ₹12,500
(B) ₹32,500
(C) ₹45,000
(D) ₹25,000

Answer: Option (B)

On early delivery the bank sells spot at its bid ₹86.50 and buys 1-month forward

at the ask ₹86.55 + ₹0.08	= ₹86.63
Swap loss	= (86.63 – 86.50) × US$2,50,000
	= ₹32,500

Conferenza.in

2. Interest on outlay of funds shall approximately be _____.

(A) ₹955 payable by Mr. M
(B) ₹414 payable by Mr. M
(C) ₹955 payable by DMP Bank
(D) ₹414 payable by DMP Bank

Answer: **Option (A)**

Bank pays the customer at the contract rate ₹86.80 but realises only ₹86.50 in the spot market

Outlay = (86.80 – 86.50) × 2,50,000
= ₹75,000, funded from 30 June to 31 July (31 days)

Interest = ₹75,000 × 15% × 31/365
= ₹955, payable by Mr. M

3. What is the net conversion rate per US $ realised by Mr. M?

(A) ₹86.6738
(B) ₹86.3662
(C) ₹86.3738
(D) ₹86.6662

Answer: **Option (D)**

Contract rate ₹86.8000
Less: swap loss per $(32,500 ÷ 2,50,000) = ₹0.1300
Less: interest per $(955 ÷ 2,50,000) = ₹0.0038
Net conversion rate = ₹86.6662

Early delivery is never free — the customer bears both the swap difference and the funding cost for the unexpired period.

Case Scenario 4

Green Agro Exports Ltd. entered a 3-month forward contract on January 1, 2026 to buy USD 2,00,000 (import payment due April 1, 2026). USD-INR Bank Quotes:

Date	Spot Bid	Spot Ask	1M Fwd Bid	1M Fwd Ask	2M Fwd Bid	2M Fwd Ask	3M Fwd Bid	3M Fwd Ask
01.01.202	683.20	83.55	-	-	-	-	83.60	84.00
01.02.202	683.80	84.15	-	-	83.95	84.35	-	-
01.03.202	683.40	83.75	83.70	84.05	84.10	84.45	-	-
01.04.202	684.20	84.50	84.30	84.65	-	-	-	-

From the information given above, choose the correct answer to the questions below:

Conferenza.in

May 26 (3 × 2 = 6 Marks), MTP May 26 S2

Answer:

1. On March 1, 2026, what is the maturity settlement cost vs net extra cost of closing the original contract and rebooking a 1-month forward?

(A) Maturity ₹1,68,00,000; Extra ₹60,000
(B) Maturity ₹1,68,00,000; Extra ₹10,000
(C) Maturity ₹1,68,00,000; Extra ₹70,000
(D) Maturity ₹1,67,20,000; Extra ₹70,000

Answer: Option (C)

Original contract: the company buys USD, so the bank sells at its 3M Fwd Ask of ₹84.00
Maturity settlement cost = USD 2,00,000 × ₹84.00
= ₹1,68,00,000
Cancellation on 1 March: bank buys back at 1M Fwd Bid ₹83.70 → loss of ₹0.30 × 2,00,000 = ₹60,000
Rebooking at 1M Fwd Ask ₹84.05 costs ₹0.05 × 2,00,000 = ₹10,000 more
Net extra cost = ₹60,000 + ₹10,000
= ₹70,000

2. If the import obligation is settled early on March 1, 2026, what total cash outflow is required that day to close the forward contract and make the import payment?

(A) ₹1,67,40,000
(B) ₹1,68,10,000
(C) ₹1,68,70,000
(D) ₹1,68,90,000

Answer: Option (B)

Cancellation of the forward on 1 March costs ₹60,000 (as computed above)
Buying USD in the spot market at the Ask of ₹83.75 = 2,00,000 × 83.75 = ₹1,67,50,000
Total cash outflow = ₹1,67,50,000 + ₹60,000
= ₹1,68,10,000

3. Green Agro Exports Ltd. cancels the import and closes the USD 2,00,000 forward contract (Jan 1, 2026; 84.00 Ask). What are the mark-to-market gain/(loss) on the following dates?

(A) Feb 1: – ₹10,000; Mar 1: – ₹60,000; Apr 1: + ₹40,000
(B) Feb 1: + ₹10,000; Mar 1: + ₹60,000; Apr 1: – ₹40,000
(C) Feb 1: – ₹30,000; Mar 1: – ₹60,000; Apr 1: + ₹40,000
(D) Feb 1: – ₹10,000; Mar 1: – ₹30,000; Apr 1: + ₹20,000

Answer: Option (A)

A long (bought) forward is closed out by selling forward for the same maturity, so it is marked against the relevant Bid for the remaining tenor.
Feb 1 — 2 months to run, 2M Fwd Bid ₹83.95: (83.95 – 84.00) × 2,00,000 = – ₹10,000

Conferenza.in

Mar 1 — 1 month to run, 1M Fwd Bid ₹83.70: (83.70 – 84.00) × 2,00,000 = – ₹60,000
Apr 1 — maturity, Spot Bid ₹84.20: (84.20 – 84.00) × 2,00,000 = + ₹40,000

Note — variance from the ICAI paper

The Spot Bid for 01.04.2026 has been corrected in this compiler from ₹83.20 to ₹84.20. As printed in the ICAI paper the figure fails the table's own internal checks — it gives a bid-ask spread of ₹1.30 where every other spot row shows ₹0.35, and a spot-to-1-month premium of ₹1.10 where the previous month shows ₹0.30 — and it produces a mark-to-market of – ₹1,60,000, which is not among the four options. At ₹84.20 the spread returns to ₹0.30 and the answer computes to the keyed + ₹40,000. This rate is used by no other question in the case scenario.

The sign flips at maturity because the rupee weakened past the contracted ₹84.00 — the company would have gained on the contract it cancelled.

Case Scenario 5

ABC Inc., a U.S. firm, will require £600,000 in 6 months and is evaluating different strategies to hedge against currency risk. The available market data is as follows: Current Spot Rate: 1 £ = $2.50 6-months Forward Rate: 1 £ = $2.45

Interest Rates:

- UK (per annuam):
  - Deposit Rate: 9.00%
  - Borrowing Rate: 10.00%
- US (per annuam):
  - Deposit Rate: 10%
  - Borrowing Rate: 11.00%

Option Contract:

- Call option available on £, expiring in 6 months with:
  - Exercise price: $2.46
  - Premium: $0.05

ABC Inc. has forecasted the following probabilities for spot rates after 6 months:

Spot Rate	Probability
$2.39	25%
$2.44	60%
$2.56	15%

ICAI Case Scenario Booklet, CS 19 (5 × 2 = 10 Marks)

Conferenza.in

Answer:

1. Since ABC Inc. will require £600,000 in future, it is said to be……..

(A) Long in £
(B) Short in £
(C) Long in $
(D) Neutral in currency

Answer: Option (B)
Future payment in pounds means exposure to appreciation of £.

2. Under a forward contract, the dollar cost of £600,000 is……

(A) certain but flexible
(B) uncertain but capped
(C) certain and fixed
(D) nil

Answer: Option (C)
Forward contract locks in the exchange rate.

3. Which hedging technique allows ABC Inc. to benefit if the Pound depreciates while protecting against appreciation?

(A) Forward contract
(B) Money market hedge
(C) Call option on £
(D) Futures contract

Answer: Option (C)
Options provide downside protection with upside benefit.

4. If the spot rate after 6 months happens to be $2.39/£, ABC Inc. under option hedge will……..

(A) exercise the option.
(B) let the option lapse.
(C) cancel the contract.
(D) incur loss equal to intrinsic value.

Answer: Option (B)
Market rate is better than exercise price.

5. Which of the following hedging methods involves borrowing and lending in two currencies simultaneously?

(A) Forward hedge
(B) Option hedge

Conferenza.in

(C) Money market hedge
(D) Futures hedge

Answer: Option (C)
In remaining methods only one transaction in two currencies is involved.

Case Scenario 6

On 1 October 2023 Mr. X an exporter enters into a forward contract with a BNP Bank to sell US$1,00,000 on 31 December 2023 at ₹85.40/$. However, due to the request of the importer, Mr. X received the amount on 28 November 2023. Mr. X requested the bank the take delivery of the remittance on 30 November 2023 i.e., before due date. The inter-banking rates on 28 November 2023 was as follows:

Spot	₹85.22/85.27
One Month Premium	10/15

Note:

1. Consider 365 days in a year.
2. Prevailing Prime Lending Rate is 12%

ICAI Case Scenario Booklet, CS 31 (5 × 2 = 10 Marks), RTP Jan 26, MTP May 24 S2

Answer:

1. The bank may accept the request of customer of delivery before due date of forward contract provided the customer is ready to bear the loss if any consisting of……

(A) Swap Difference
(B) Interest on Outlay of Fund
(C) Swap Difference Plus Interest on Outlay of Fund
(D) Fixed Charges Plus Swap Difference and Interest on Outlay of Fund

Answer: Option (D)
Refer the concept of Early Delivery under Fate of Forward Contract.

Faculty Notes:
On early delivery the bank recovers three separate things: a flat handling charge, the swap difference from squaring its own position on a date it had not planned for, and interest on any funds it is out of pocket in the meantime.
Options (A) to (C) each leave one of the three out, which is why the full combination in (D) is the answer.

2. In case of early delivery bank shall charge interest on outlay of fund at a rate not less than……..

(A) 8%

Conferenza.in

(B) 10%
(C) 12%
(D) 18%

Answer: Option (C)
Refer the concept of Early Delivery under Fate of Forward Contract.

Faculty Notes:
FEDAI rules set the floor for interest on outlay of funds in an early delivery at 12% per annum. The bank is free to charge more than that, but not less.

3. Swap Difference for US$1,00,000 is……..
(A) ₹5,000
(B) ₹20,000
(C) ₹18,000
(D) ₹8,000

Answer: Option (B)
Bank Sells at Spot Rate on 28 November 2023 ₹85.22 Bank Buys at Forward Rate of 31 December ₹85.42 2023 (85.27 + 0.15) Swap Loss per US$ ₹00.20 Swap loss for US$1,00,000 ₹20,000

4. Interest on outlay of funds shall be approximately…….
(A) ₹92 payable by X
(B) ₹183 payable by X
(C) ₹183 payable by Bank
(D) ₹122 payable by Bank

Answer: Option (B)
On 28th November Bank sells at ₹85.22 It buys from customer at ₹00.18 Interest on Outlay fund for US$1,00,000 for ₹00.20 31 days
(US$100000 x 00.18 x 31/365 x 12%) ₹183

5. Net inflow to Mr. X is approximately……..
(A) ₹85,42,183
(B) ₹85,20,000
(C) ₹85,19,817
(D) ₹85,40,000

Answer: Option (C)
Amount received on sale (₹85.40 x ₹85,40,000 1,00,000) Less: Charges for early delivery payable to bank (₹20,183) ₹85,19,817

Conferenza.in

Case Scenario 7

An Indian exporting firm, Rohit and Bros. exported good worth of AUD 1 million to an importer in Sydney. Rohit and Bros. are worried about likely depreciation of AUD in near future as it is likely that the export sum will be received after 3 months. Today as such as there is no derivative contract is available in AUD to hedge itself from such depreciation. The following data is given:

Spot rate	:	₹56.00/AUD
3 months interest rate : India	:	12 per cent per annum
: Australia	:	5 per cent per annum

ICAI Case Scenario Booklet, CS 45 (5 × 2 = 10 Marks)

Answer:

1. …….. hedging technique can be used Rohit and Bros. to hedge itself against the risk of depreciation of AUD.

(A) Forward Contract
(B) Future Contract
(C) Option Contract
(D) Money Market Hedge

Answer: Option (D)
Money Market Hedging technique is used when derivatives to hedge the risk are not available.

2. Suppose if Rohit and Bros. want to borrow some amount in AUD in such a manner that the receivable amount can be used to repay the amount borrowed along with interest. The amount to be borrowed by Rohit and Bros. shall be approximately……

(A) AUD 1 million
(B) AUD 9,87,654
(C) ₹5,53,08,624
(D) ₹5,69,67,882

Answer: Option (B)
AUD 1000000/(1+0.05/4) = AUD 987654

3. Suppose if Rohit and Bros. borrows a designated amount in AUD for 3 months in such a manner that the receivable amount can be used to repay the amount borrowed along with interest and plan to invest same amount in Indian spot market. The same amount available for investment shall be approximately……

(A) AUD 1 million
(B) AUD 9,87,654

Conferenza.in

(C) ₹5,53,08,624
(D) ₹5,69,67,882

Answer: Option (C)
AUD 987654 x ₹56.00 = ₹55308624

4. Suppose if Rohit and Bros. borrows a designated amount for 3 months in AUD in such a manner that the receivable amount can be used to repay the amount borrowed along with interest. Further he plans to invest same amount in Indian spot market. The amount obtained after 3 months of investment shall be approximately……

(A) AUD 1 Million
(B) AUD 9,87,654
(C) ₹5,53,08,624
(D) ₹5,69,67,883

Answer: Option (D)
₹55308624(1 + 0.12/4) = ₹56967883

5. Suppose if Interest Rate Parity theory is held between INR and AUD, then forward rate between INR and AUD for 6 month should be……..

(A) ₹51.54/AUD
(B) ₹57.91/AUD
(C) ₹52.50/AUD
(D) ₹59.73/AUD

Answer: Option (B)
₹56 (1 + 0.12/2)/(1 + 0.05/2) = ₹57.91

Case Scenario 8

XYZ Ltd., a U.S. firm, will require £300,000 in 180 days and is evaluating different strategies to hedge against currency risk. The available market data is as follows: Current Spot Rate: 1 £ = $2.00 180-Day Forward Rate: 1 £ = $1.96 Interest Rates:

- UK (180 days):
  - Deposit Rate: 4.5%
  - Borrowing Rate: 5%

- US (180 days):
  - Deposit Rate: 5%
  - Borrowing Rate: 5.5%

Option Contract:

- Call option available on £, expiring in 180 days with:

Conferenza.in

- Exercise price: $1.97
- Premium: $0.04

XYZ Ltd. has forecasted the following probabilities for spot rates after 180 days:

Spot Rate	Probability
$1.91	25%
$1.95	60%
$2.05	15%

ICAI Case Scenario Booklet, CS 49 (5 × 2 = 10 Marks), MTP Sep 25 S1

Answer:

1. The expected dollar amount needed .....if XYZ Ltd. does not hedge.

(A) $5,88,000
(B) $6,05,741
(C) $5,95,560
(D) $5,86,500

Answer: Option (D)
($1.91 x 0.25 + $1.95 x 0.60 + $2.05 x 0.15) £300000 = £5,86,500

2. If XYZ Ltd. chooses the forward contract option, the expected dollar amount needed in 180 days, the total dollar amount required shall be.....

(A) $5,88,000
(B) $6,05,741
(C) $5,95,560
(D) $5,86,500

Answer: Option (A)
$1.96 x £300000 = $5,88,000

3. Under the money market hedge, approximately how much will XYZ Ltd. need to repay after 180 days?

(A) $5,88,000
(B) $6,05,741
(C) $5,95,560
(D) $5,86,500

Answer: Option (B)
Borrow $, convert to £, invest £, repay $ loan in 180 days
Amount in £ to be invested = 3,00,000/1.045

Conferenza.in

= £2,87,081

Amount of $ needed to convert into £ = 2,87,081 x 2

= $5,74,162

Interest and principal on $ loan after 180 days = $5,74,162 x 1.055 = $6,05,741

4. If XYZ Ltd. chooses the call option contract, after 180 days the total cost in dollar for £300,000 (inclusive of interest on Premium amount) shall be.....

(A) $5,88,000
(B) $6,05,741
(C) $5,95,560
(D) $5,86,500

Answer: Option (C)

[($1.91 + 0.04) x 0.25 + ($1.95 + 0.04) x 0.60 + ($1.97 + 0.04) x 0.15] £3,00,000 + $12,000 x 5.5% = $5,95,560

5. The expected spot rate per £ after 180 days shall be approximately.....

(A) $1.91
(B) $1.94
(C) $1.96
(D) $2.05

Answer: Option (C)

$1.91 x 0.25 + $1.95 x 0.60 + $2.05 x 0.15 = $1.955 say $1.96

Case Scenario 9

A company is considering hedging its foreign exchange risk. It has made a purchase on 1st July 2024 for which it has to make a payment of US$60,000 on 31st December 2024. The present exchange rate is 1 US$ = ₹83. It can purchase forward 1 US$ at ₹82. The company will have to make an upfront premium @ 2% of the forward amount purchased. The cost of funds to the company is 12% per annum.

The company hedges its foreign exchange risk using the above-mentioned forward contract.

MTP Jan 26 S2 (3 × 2 = 6 Marks)

Answer:

1. If the exchange rate on 31st December 2024 happens to be ₹86 per US$, then due to the forward position taken the company will make……

(A) a loss of ₹1,04,304
(B) a profit of ₹1,35,696
(C) a loss of ₹2,24,304
(D) a profit of ₹2,55,696

Conferenza.in

Answer: Option (B)

Faculty Notes:

First fix the all-in cost of the hedge, which is the same for all three questions:

Forward outflow	= US$60,000 × ₹82
	= ₹49,20,000
Upfront premium	= 2% × ₹49,20,000
	= ₹98,400
Interest on the premium for 6 months	= ₹98,400 × 12% × 6/12
	= ₹5,904
Total outflow with the hedge	= 49,20,000 + 98,400 + 5,904
	= ₹50,24,304
Unhedged at ₹86	= 60,000 × 86
	= ₹51,60,000
Gain	= 51,60,000 – 50,24,304
	= ₹1,35,696

2. If the exchange rate on 31st December 2024 happens to be ₹80 per US$, then due to the forward position taken the company will make……

(A) a loss of ₹1,04,304
(B) a profit of ₹1,35,696
(C) a loss of ₹2,24,304
(D) a profit of ₹2,55,696

Answer: Option (C)

Faculty Notes:

Unhedged at ₹80	= 60,000 × 80
	= ₹48,00,000
Loss	= 50,24,304 – 48,00,000
	= ₹2,24,304

The hedge costs money when the rupee ends stronger than the forward rate — that is the price of certainty, not a mistake.

3. If the exchange rate on 31st December 2024 happens to be ₹88 per US$, then due to the forward position taken the company will make……

(A) a loss of ₹1,04,304
(B) a profit of ₹1,35,696
(C) a loss of ₹2,24,304
(D) a profit of ₹2,55,696

Answer: Option (D)

Faculty Notes:

Unhedged at ₹88	= 60,000 × 88
	= ₹52,80,000
Gain	= 52,80,000 – 50,24,304

Conferenza.in

= ₹2,55,696

Note the break-even: the hedge pays off above ₹50,24,304 ÷ 60,000 = ₹83.74 per US$, which is why ₹1,04,304 — the bare cost of the premium and its interest — never appears as the answer to any of the three.

Case Scenario 10

An Indian exporting firm, Radhey & Sons, exported dry fruits worth AUD 1 million to an importer in Sydney. Radhey & Sons are worried about a likely depreciation of the AUD in the near future, as the export sum will be received after 3 months. As of today no derivative contract is available in AUD to hedge against such depreciation.

The following data is given:

Particulars	Deposit	Borrowing
Spot rate	₹64.00/AUD	
3 months interest rates (per annum)		
₹	10%	12%
AUD	4%	5%

RTP May 26 (4 × 2 = 8 Marks)

Answer:

1. In a money market hedge for a foreign currency receivable, the exporter should…….

(A) borrow in domestic currency and invest foreign currency
(B) borrow in foreign currency and invest domestic currency
(C) borrow and invest in domestic currency only
(D) borrow and invest in foreign currency only

Answer: Option (B)

Faculty Notes:

A money market hedge creates a liability that mirrors the asset. Radhey & Sons are owed AUD, so they borrow AUD today, convert the proceeds to rupees at the spot rate and deposit the rupees.

When the AUD receivable arrives it repays the AUD loan exactly, and the rupee deposit has grown at the rupee rate — the exchange rate on the day no longer matters.

2. In case Radhey & Sons adopt the Money Market hedge strategy, the interest rate to be used to compute the amount borrowed shall be……

(A) 4% per annum
(B) 5% per annum
(C) 10% per annum
(D) 12% per annum

Conferenza.in

Answer: Option (B)

Faculty Notes:

The firm is borrowing AUD, so it pays the AUD borrowing rate of 5% per annum — not the AUD deposit rate of 4%, which is what it would earn, and not either rupee rate, which applies to the deposit leg.

Amount borrowed= AUD 1 million ÷ (1 + 0.05 × 3/12), so that the loan plus interest is exactly AUD 1 million in three months.

3. If a forward contract in AUD were available, the money market hedge would……..

(A) always be superior
(B) always be inferior
(C) be compared with forward hedge for cost efficiency
(D) become invalid

Answer: Option (C)

Faculty Notes:

The two hedges are alternatives, and which one wins depends on whether the forward rate on offer is better or worse than the rate the money market route implies.

Under Interest Rate Parity they cost the same; in practice they diverge, so the firm prices both and takes the cheaper.

4. Interest Rate Parity theory assumes…….

(A) No capital mobility
(B) Presence of arbitrage opportunities
(C) Efficient markets with no arbitrage opportunities
(D) Fixed exchange rate system

Answer: Option (C)

Faculty Notes:

IRP holds because arbitrageurs would close any gap between the forward premium and the interest differential — so the theory assumes markets efficient enough that no such gap survives.

It needs capital to be mobile, not immobile, and it describes forward rates in a floating system, not a fixed one.

Case Scenario 11

On 20.10.2024 the credit balance of an Indian bank in its NOSTRO account with LMN Bank in London was £1,60,000 and the overbought position was £1,00,000. During the day the following transactions took place.

Events	Time	Amount (£)
DD Purchased	11:08	50,000
Purchased a bill on London	11:50	1,50,000
Sold forward TT	13:15	1,00,000

Conferenza.in

Events	Time	Amount (£)
Forward purchased contract cancelled	13:55	50,000
Remitted by TT	14:45	85,000
Draft in London cancelled	15:00	40,000

MTP May 25 S1 (5 × 2 = 10 Marks), RTP Nov 26

Answer:

1. How much was the total amount of purchase commitments made during the day by the Indian Bank?

(A) £2,00,000
(B) £1,50,000
(C) £3,40,000
(D) £50,000

Answer: Option (D)

Faculty Notes:

The purchases of the day are the DD bought (£50,000), the bill bought on London (£1,50,000) and the cancellation of the draft in London (£40,000), which reverses an earlier sale.

The letter printed in the MTP key is left as it stands — see the note below.

Note — variance from the ICAI paper

The MTP key marks Option (D), £50,000, as correct. Add up the purchases in the table and they come to £2,40,000 — the DD of £50,000, the bill of £1,50,000 and the cancelled draft of £40,000, which reverses an earlier sale. No option offers £2,40,000, so the question does not agree with its own data. The key's letter has been left as ICAI printed it.

2. The final cash balance in the NOSTRO account at the end of 20.10.24 stands at .....

(A) £85,000
(B) £75,000
(C) £20,000
(D) £1,60,000

Answer: Option (B)

Faculty Notes:

Only a TT moves cash on the day it is put through. A DD or a bill purchased changes the exchange position at once but touches the NOSTRO only on realisation, and a forward — or the cancellation of one — settles on its own future date.

Of the six entries, the remittance by TT at 14:45 is the only one that moves cash:

Opening balance £1,60,000 – TT remitted £85,000 = £75,000

Conferenza.in

Note — variance from the ICAI paper

The MTP key marks Option (C), £20,000, as correct. But £20,000 is the balance the bank is told to reach in Question 4 below — it is not the balance the account actually closes at. Question 4's own answer, sell spot TT £55,000, only works if the account stands at £75,000 when the day ends, because 75,000 – 55,000 = 20,000. The closing balance is therefore shown as £75,000 here.

3. The transaction that took place at ……. shall affect both the exchange and cash position of the bank with LMN Bank.

(A) 11:08
(B) 11:50
(C) 14:45
(D) 15:00

Answer: Option (C)

Faculty Notes:

A TT is settled the same day, so the remittance at 14:45 reduces the exchange position and debits the NOSTRO together.

The DD at 11:08 and the bill at 11:50 are purchases that change only the exchange position until they are realised, and the draft cancellation at 15:00 is likewise a position entry.

4. If at the end of the day the bank is required to maintain a credit balance of £20,000 in the NOSTRO account, then it…….

(A) shall buy forward £15,000
(B) shall sell spot TT £55,000
(C) shall buy spot TT £55,000
(D) shall sell forward £55,000

Answer: Option (B)

Faculty Notes:

The account stands at £75,000 and has to be brought down to £20,000, a reduction of £55,000.

Cash is moved only by a spot transaction, and selling sterling spot is what debits the NOSTRO: sell spot TT £55,000.

5. If the bank takes the required steps to maintain a credit balance of £20,000 in the NOSTRO account, then what additional step was required to achieve the overbought position of £65,000?

(A) Buying forward £15,000
(B) Selling forward £65,000
(C) Buying forward £60,000
(D) Selling forward £15,000

Answer: Option (A)

Faculty Notes:

The spot sale of £55,000 in the previous question reduces the exchange position as well as the cash position.

To land on an overbought position of £65,000 the bank buys forward the balance of £15,000, which restores the position without disturbing the NOSTRO again.

Conferenza.in

CHAPTER 12

International Financial Management

Case Scenario 1

A US parent company has subsidiaries in France, Germany, UK and Italy. The amounts due to and from the affiliates is converted into a common currency viz. US dollar and entered in the following matrix.

Inter Subsidiary Payments Matrix (US $ thousands) — columns are the paying affiliate, rows the receiving affiliate.

Receiving affiliate	France	Germany	UK	Italy	Total
France	---	80	120	200	400
Germany	120	---	80	160	360
UK	160	120	---	140	420
Italy	200	60	120	---	380
Total	480	260	320	500	1560

The treasurer of US Parent company is suggesting that by applying Multilateral Netting system the company can save a lot of transfer/ exchange costs. The company's Board agreed with Treasurer's proposal.

ICAI Case Scenario Booklet, CS 32 (5 × 2 = 10 Marks), MTP Sep 25 S2, RTP Nov 26, RTP Jan 26, MTP May 24 S2

Answer:

1. Before applying Multilateral Netting it is necessary to apply……

(A) Unilateral Netting
(B) Bilateral Netting
(C) Multilateral Netting
(D) Interest Rate Swapping

Answer: Option (B)

First settle mutual obligation before proceeding further.

2. Through Multinational Netting these transfers will be reduced to …….

(A) $50,000
(B) $100,000
(C) $150,000
(D) $200,000

Conferenza.in

Answer: Option (D)

Netting Schedule (US $ thousands)

Country	Receipt	Payments	Net Receipt	Net Payment
France	400	480	—	80
Germany	360	260	100	—
UK	420	320	100	—
Italy	380	500	—	120
Total			**200**	**200**

Once each country settles only its net position, the gross transfers of $1,560 thousand collapse to $200 thousand moving each way.

3. The Net Payment/ Net Receipts for France after netting off shall be…….

(A) Net Receipt $40,000
(B) Net Payment $80,000
(C) Net Payment $40,000
(D) Net Receipt $80,000

Answer: Option (B)

France receives 400 and pays 480, so it is a net payer.

Net Payment = 480 – 400
= $80 thousand

See the netting schedule under Question 2.

4. The Net Payment/ Net Receipts for Italy after netting off shall be…….

(A) Net Receipt $60,000
(B) Net Payment $120,000
(C) Net Payment $60,000
(D) Net Receipt $120,000

Answer: Option (B)

Italy receives 380 and pays 500, so it is a net payer.

Net Payment = 500 – 380
= $120 thousand

See the netting schedule under Question 2.

5. Suppose if the transfer charges are 0.01% of the amount transferred then by applying multilateral netting techniques there will be reduction in overall cost of transfer by ……..

(A) US $136
(B) US $156
(C) US $1,360
(D) US $1,560

Conferenza.in

Answer: Option (A)

(1560 – 200) x 0.01% x 1000 = 136

Conferenza.in

CHAPTER 13

Business Valuation

Case Scenario 1

During one business meeting at ABC Ltd., one of the members presented data relating to 3 companies X Ltd., Y Ltd. and Z Ltd. whose operating Income are equal, but their capital structure is different. (in ₹000)

	X Ltd.	Y Ltd.	Z Ltd.
Total invested capital	40,00,000	40,00,000	40,00,000
Debt/Assets ratio	0.8	0.5	0.2
Shares outstanding	1,22,000	1,66,000	2,00,000
Post tax Cost of Debt	10.40%	8.45%	9.75%
Cost of Equity	26%	22%	20%
Operating Income (EBIT)	10,00,000	10,00,000	10,00,000

The Tax rate is uniform 35% in all cases. The industry PE ratio is 10X.

ICAI Case Scenario Booklet, CS 12 (5 × 2 = 10 Marks)

Answer:

1. The weighted average cost of capital of Y Ltd. shall be approximately …….

(A) 13.52%
(B) 15.23%
(C) 17.95%
(D) 18.00%

Answer: Option (B)

8.45% x 0.50 + 22% x 0.50 = 15.23%

2. The Economic Valued Added (EVA) of X Ltd. is…….

(A) ₹109200 Thousand
(B) ₹171600 Thousand
(C) ₹282000 Thousand
(D) ₹391000 Thousand

Answer: Option (A)

1000000(1 – 0.35) – [{10.40% x 0.80 + 26% x 0.20} 4000000]

3. The price per share of Z Ltd. shall be ……..

(A) ₹28.60

Conferenza.in

(B) ₹31.90
(C) ₹31.46
(D) ₹29.45

Answer: **Option (A)**
[{1000000(1 – 0.35) – 0.20 x 4000000 x 9.75%} x 10]/200000

4. The estimated market capitalisation of Y Ltd. is…….
(A) ₹80,29,900 Thousand
(B) ₹48,10,000 Thousand
(C) ₹52,91,000 Thousand
(D) ₹59,41,650 Thousand

Answer: **Option (B)**
[{1000000 x (1 – 0.35) – 0.50 x 4000000 x 8.45%} x 10]

5. Earning per share of X Ltd. approximately is……..
(A) ₹2.60
(B) ₹2.90
(C) ₹2.86
(D) ₹2.15

Answer: **Option (A)**
[{1000000 x (1 – 0.35) – 0.80 x 4000000 x 10.40%}]/ 122000

Case Scenario 2

During one business meeting at XYZ Ltd., one of the member pointed out that while evaluating the performance of any company one should not only see its Operating Income but should also analyse its Capital structure as well. Weighted Average Cost of Capital changes on the basis of capital structure keeping all other factors unchanged. He presented data relating to 3 companies Alpha Ltd., Beta Ltd. and Gama Ltd. whose operating Income are equal, but their capital structure is different. The following information relating to these 3 companies is as follows:

(in ₹000)

	Alpha Ltd.	Beta Ltd.	Gama Ltd.
Total invested capital	20,00,000	20,00,000	20,00,000
Debt/Assets ratio	0.8	0.5	0.2
Shares outstanding	61,000	83,000	1,00,000
Pre tax Cost of Debt	16%	13%	15%
Cost of Equity	26%	22%	20%
Operating Income (EBIT)	5,00,000	5,00,000	5,00,000

The Tax rate is uniform 35% in all cases. The industry PE ratio is 11X.

Conferenza.in

ICAI Case Scenario Booklet, CS 30 (5 × 2 = 10 Marks), MTP Sep 25 S2, MTP May 24 S2

Answer:

1. The weighted average cost of capital of Alpha Ltd. shall approximately be …….

(A) 13.520%
(B) 15.225%
(C) 17.950%
(D) 18.000%

Answer: Option (A)
16%(1 – 0.35) x 0.80 + 26% x 0.20 = 13.52%

2. The Economic Valued Added (EVA) of Beta Ltd. is…….

(A) ₹54600 Thousand
(B) ₹20500 Thousand
(C) (-) ₹34000 Thousand
(D) ₹21500 Thousand

Answer: Option (B)
500000(1 – 0.35) – [{13%(1 – 0.35) x 0.50 + 22% x 0.50}
2000000] = 20500

3. The price per share of Gama Ltd. shall be ……..

(A) ₹28.60
(B) ₹31.90
(C) ₹31.46
(D) ₹29.45

Answer: Option (C)
[(500000 – 0.20 x 2000000 x 15%) (1 – 0.35) x 11]/100000 = ₹31.46

4. The estimated market capitalisation of Alpha Ltd. is…….

(A) ₹26,47,700 Thousand
(B) ₹31,46,000 Thousand
(C) ₹17,44,600 Thousand
(D) ₹23,73,800 Thousand

Answer: Option (C)
[(500000 – 0.80 x 2000000 x 16%) (1 – 0.35) x 11] = 1744600

5. Earning per share of Beta Ltd. approximately is……..

(A) ₹2.60
(B) ₹2.90
(C) ₹2.86

Conferenza.in

(D) ₹2.15

Answer: Option (B)

[(500000 – 0.50 x 2000000 x 13%) (1 – 0.35)]/ 83000 = ₹2.90

Conferenza.in

Mergers, Acquisitions and Corporate Restructuring

Company	No. of Shares	Market Price Per Share (₹)	P/E Ratio
ABC Ltd.	12,00,000	16	20 times
XYZ Ltd.	4,00,000	20	10 times

ABC Ltd. plans to acquire the whole of XYZ Ltd. by issuing shares at its market price of ₹16. It is expected that the price of ABC Ltd. share will remain constant after this acquisition. Purchase Consideration is ₹80,00,000. Calculation up to 2 decimal places.

From the information given above, choose the correct answer to the following question No. 13 to 15:

Sep 25 (3 × 2 = 6 Marks), Booklet CS 9

Answer:

13. EPS of ABC Ltd. & XYZ Ltd. before acquisition are respectively

(A) ₹0.8 & ₹2.0
(B) ₹2.0 & ₹0.8
(C) ₹0.8 & ₹1.04
(D) ₹1.04 & ₹0.8

Answer: Option (A)

EPS = Market Price ÷ P/E Ratio
ABC Ltd. = ₹16 ÷ 20
= ₹0.80
XYZ Ltd. = ₹20 ÷ 10
= ₹2.00

14. EPS of ABC Ltd. after acquisition is

(A) ₹0.84
(B) ₹0.96
(C) ₹1.04
(D) ₹1.14

Answer: Option (C)

Conferenza.in

Shares issued	= ₹80,00,000 ÷ ₹16
	= 5,00,000 shares
Total shares after acquisition	= 12,00,000 + 5,00,000
	= 17,00,000
Total earnings	= (12,00,000 × 0.80) + (4,00,000 × 2.00)
	= ₹9,60,000 + ₹8,00,000
	= ₹17,60,000
EPS	= ₹17,60,000 ÷ 17,00,000
	= ₹1.04

15. P/E Ratio of ABC Ltd. after acquisition is

(A) 20 times
(B) 15.38 times
(C) 10 times
(D) 14.55 times

Answer: Option (B)

Market price is expected to remain at ₹16.

P/E = ₹16 ÷ ₹1.04
= 15.38 times

The acquirer's EPS rises from ₹0.80 to ₹1.04 because it bought earnings on a P/E of 10 using its own shares priced on a P/E of 20 — the classic bootstrapping effect.

Case Scenario 2

Ujwal Bank Ltd. (UBL) and Suraksha Bank Ltd. (SBL) are Scheduled Banks proposing to merge. UBL is a strong Private Sector Bank with stable capital adequacy, while SBL has negative CRAR due to heavy NPAs.

Particulars	UBL	SBL
Book Value per share (₹)	50	25
Market Price per share (₹)	200	50
CRAR %	12	(–) 2
NPA %	2	12
No. of shares in thousands	50000	20000
Price Earning Ratio (PE Ratio)	20	10

Weights for swap ratio are Book Value per share 20%, Market Price per share 40%, CRAR (%) 20% and balance for NPA%.

From the information given above, choose the correct answer to the questions below:

Jan 26 (3 × 2 = 6 Marks)

Conferenza.in

Answer:

1. The swap ratio based on information given shall be for 1 share of UBL _____ shares of SBL.

(A) 1.07
(B) 0.20
(C) 0.86
(D) 1.73

Answer: Option (B)

Book Value: (25 ÷ 50) × 20% = 0.10
Market Price: (50 ÷ 200) × 40% = 0.10
CRAR: (–2 ÷ 12) × 20% = –0.0333
NPA (lower is better, so inverted): (2 ÷ 12) × 20% = +0.0333
Swap ratio = 0.10 + 0.10 – 0.0333 + 0.0333
= 0.20

2. Based on swap ratio total number of shares issued by UBL to SBL shall be _____ (in Thousands).

(A) 21,400 shares
(B) 24,000 shares
(C) 17,200 shares
(D) 4,000 shares

Answer: Option (D)

20,000 thousand shares of SBL × 0.20 = 4,000 thousand shares

3. Post merger Earning Per Share (EPS) of UBL shall be ₹ _____.

(A) ₹11.11
(B) ₹12.50
(C) ₹8.50
(D) ₹10.00

Answer: Option (A)

UBL = 200 ÷ 20
EPS
= ₹10; earnings
= 50,000k × 10
= ₹5,00,000k
SBL EPS= 50 ÷ 10
= ₹5; earnings
= 20,000k × 5
= ₹1,00,000k
Combined earnings ₹6,00,000k ÷ (50,000k + 4,000k) shares = ₹11.11

Conferenza.in

The negative CRAR and the high NPA very nearly cancel: –0.0333 against +0.0333, leaving the swap ratio driven entirely by book value and market price.

Case Scenario 3

XYZ Ltd. is professionally engaged in providing consultancy services related to corporate mergers and acquisitions. It is on an expansion mode and decided to hire freshly qualified Chartered Accountants for the post of "M&A Consultant". For selection of the candidate, each candidate needs to pass a written test. Following are some of the questions asked in the test to identify the concepts related to M&A.

You are an examinee in the written test paper, therefore you are required to choose the correct option to the questions below:

May 26 (3 × 2 = 6 Marks)

Answer:

1. AB Ltd., the target company, may issue a substantial amount of convertible debentures to its existing shareholders to be converted at a future date when it faces a takeover threat. The tactic used by AB Ltd. is called _____.

(A) White Knight
(B) Poison Put
(C) Poison Pill
(D) White Squire

Answer: Option (C)

Issuing convertible debentures to existing shareholders increases the number of shares and makes it harder and costlier for the acquirer to gain control — the classic Poison Pill defence.
Note: in the question paper, "target" was mistakenly referred to as "acquiring".

2. Identify the correct meaning from among the following options when X Ltd., a target company, adopts "Greenmail" tactics to defend itself from hostile takeover.

(A) When X Ltd. issues bonds that encourage the holder to cash in at higher prices.
(B) When X Ltd. offers hefty compensations to its managers if they get ousted due to takeover.
(C) When X Ltd. makes a counter bid for the acquirer company.
(D) When X Ltd. offers the acquirer a higher price for its shares than the market price.

Answer: Option (D)

Greenmail involves the target buying back its own shares from the potential bidder at a premium to the market price, so as to remove the threat.
Option (A) describes a Poison Put, (B) Golden Parachutes and (C) the Pac-Man Defence.

Conferenza.in

3. R Ltd. is a parent company and J Ltd. is its subsidiary. J Ltd. is growing at a faster pace than R Ltd. and also carries higher valuations. To unlock the value of J Ltd. and generate cash, R Ltd. may make J Ltd. go public through an IPO but keep a controlling stake. Such tactic is called _____.

(A) Split-up
(B) Carve Out
(C) Sell-Off
(D) Spin-Off

Answer: Option (B)
In an Equity Carve-out the parent sells a portion of a subsidiary to the public through an IPO, generating cash while retaining a controlling stake.
A Spin-off distributes shares to existing shareholders and raises no cash; a Split-up dissolves the parent.

Case Scenario 4

A Ltd. wants to acquire D Ltd. and has offered a swap ratio of 1:2 (0.5 shares for every one share of D Ltd.). Following information is provided:

	A Ltd.	D Ltd.
Profit after tax	₹72,00,000	₹14,40,000
Equity shares outstanding (Nos.)	24,00,000	7,20,000
PE Ratio	5 times	3.5 times
Market price per share	₹15	₹7

ICAI Case Scenario Booklet, CS 11 (4 × 2 = 8 Marks)

Answer:

1. The number of equity shares to be issued by A Ltd. for acquisition of D Ltd. would be……

(A) 3,36,000
(B) 3,60,000
(C) 4,80,000
(D) 6,00,000

Answer: Option (B)
720000 x 0.50 = 360000

2. The EPS of A Ltd. after the acquisition would be……

(A) ₹2
(B) ₹3
(C) ₹3.13

Conferenza.in

(D) ₹4.00

Answer: Option (C)
(₹72,00,000 + ₹14,40,000)/(2400000 + 360000) = ₹3.13

3. The equivalent earnings per share of D Ltd. would be……..

(A) ₹1
(B) ₹1.50
(C) ₹1.57
(D) ₹2.00

Answer: Option (C)
₹3.13 x 0.50 = ₹1.57

4. If A Ltd. PE multiple remains unchanged then market capitalisation of A Ltd. after the acquisition would be……

(A) ₹50.40 Lakh
(B) ₹360.00 Lakh
(C) ₹431.94 Lakh
(D) ₹400.00 Lakh

Answer: Option (C)
(₹3.13 x 5 = ₹15.65) x 2760000

Case Scenario 5

The company ABC Ltd. proposes to take over XYZ Ltd. The chief executive of the company thinks that shareholders always look for the earnings per share. Therefore, he considers maximization of the earnings per share as his company's objective. The following information is available in respect of ABC Ltd. and XYZ Ltd.

	ABC Ltd.	XYZ Ltd.
Net Profit (Post Tax)	₹400 Lakh	₹315 Lakh
P/E ratio	10.50	10.00
Current market price per share	₹840	₹1700

The company is planning to borrow funds @ 15% rate of interest and buys out the target company by paying cash. Assume tax rate @30%.

ICAI Case Scenario Booklet, CS 17 (3 × 2 = 6 Marks)

Answer:

1. The total market value of equity of XYZ Ltd. is approximately……..

(A) ₹3150 lakh

Conferenza.in

(B) ₹3400 lakh
(C) ₹4200 lakh
(D) ₹16800 lakh

Answer: Option (A)
₹315 Lakh x 10.00 = ₹3150 Lakh

2. Suppose if XYZ Ltd. is borrowing funds at a high interest rate to finance acquisition it will affect its EPS mainly due to……
(A) increase in operating profit.
(B) increase in interest burden.
(C) increase in market price of shares.
(D) increase in tax liability.

Answer: Option (B)
This will increase the outflow of cash on account of higher interest as well as will increase in financial risk.

3. Suppose if ABC Ltd. is offering about ₹4030 Lakh to XYZ Ltd. for the proposed acquisition it will result in……
(A) EPS accretion
(B) EPS dilution
(C) No Change
(D) Risk free EPS

Answer: Option (B)
Post acquisition the EPS will be reduced to ₹58.37.

Case Scenario 6

P Ltd. is studying the possible acquisition of Q Ltd. by way of merger. The following data are available:

Firm	After-tax earnings	No. of equity	Market price per	Book Value Per share
		shares	share	
P Ltd.	₹10,00,000	2,00,000	₹75	₹210
Q Ltd.	₹3,00,000	50,000	₹60	₹105

The merger shall be gone through by exchange of equity shares and the exchange ratio is set according to different weights assigned to different basis as mentioned below :-

Conferenza.in

EPS	50%
Market Price	25%
Book Value	25%

ICAI Case Scenario Booklet, CS 25 (4 × 2 = 8 Marks), MTP Jan 26 S1

Answer:

1. The swap ratio based on given weights shall be.....

(A) 0.825
(B) 0.925
(C) 0.952
(D) 0.752

Answer: Option (B)

EPS of P Ltd. = ₹10,00,000 ÷ 2,00,000
= ₹5
EPS of Q Ltd. = ₹3,00,000 ÷ 50,000
= ₹6
On EPS = 6 ÷ 5 × 0.50
= 0.60
On market price = ₹60 ÷ ₹75 × 0.25
= 0.20
On book value = ₹105 ÷ ₹210 × 0.25
= 0.125
Swap ratio = 0.60 + 0.20 + 0.125
= 0.925

2. Based on swap ratio as per assigned weights the total number of shares issued by P Ltd to Q Ltd. shall be.....

(A) 46250
(B) 41250
(C) 47600
(D) 37600

Answer: Option (A)

0.925 x 50000 = 46,250

3. Post merger the EPS of the P Ltd. shall be.....

(A) 5.39
(B) 5.25
(C) 5.28
(D) 5.47

Answer: Option (C)

Conferenza.in

(1000000 + 300000) / (200000 + 46250) = 5.28

4. In case Q Ltd. wants to be sure that its EPS is not diminished by the merger, the relevant exchange ratio to achieve the same objective should be.....

(A) 0.83
(B) 1.20
(C) 1.30
(D) 1.10

Answer: Option (B)
Ratio of EPS

Case Scenario 7

AES Ltd. wants to acquire DNF Ltd. and has offered a swap ratio of 1:2 (0.5 shares for every one share of DNF Ltd.). Following information is provided:

	AES Ltd.	DNF Ltd.
Profit after tax	₹36,00,000	₹7,20,000
Equity shares outstanding (Nos.)	12,00,000	3,60,000
PE Ratio	10 times	7 times
Market price per share	₹30	₹14

ICAI Case Scenario Booklet, CS 29 (4 × 2 = 8 Marks), MTP May 24 S1

Answer:

1. The number of equity shares to be issued by AES Ltd. for acquisition of DNF Ltd. would be.....

(A) 1,68,000
(B) 1,80,000
(C) 2,40,000
(D) 3,00,000

Answer: Option (B)
360000 x 0.50 = 180000

2. The EPS of AES Ltd. after the acquisition would be.....

(A) ₹2
(B) ₹3
(C) ₹3.13
(D) ₹4.00

Answer: Option (C)
(₹36,00,000 + ₹7,20,000)/(1200000 + 180000) = ₹3.13

Conferenza.in

3. The equivalent earnings per share of DNF Ltd. would be……..

(A) ₹1
(B) ₹1.50
(C) ₹1.57
(D) ₹2.00

Answer: Option (C)
₹3.13 x 0.50 = ₹1.57

4. If AES Ltd. PE multiple remains unchanged then its expected market price per share after the acquisition would be……

(A) ₹14
(B) ₹30
(C) ₹31.30
(D) ₹40.00

Answer: Option (C)
₹3.13 x 10 = ₹31.30

Case Scenario 8

The company X Ltd. proposes to take over Y Ltd. The chief executive of the company thinks that shareholders always look for the earnings per share. Therefore, he considers maximization of the earnings per share as his company's objective. The following information is available in respect of X Ltd. and Y Ltd.

Particulars	X Ltd.	Y Ltd.
Net Profit	₹80 Lakh	₹15.75 Lakh
P/E ratio	10.50	10.00
Current market price per share	₹42	₹85

ICAI Case Scenario Booklet, CS 52 (3 × 2 = 6 Marks), Nov 24

Answer:

1. If the company borrows funds @ 15% rate of interest and buys out Target Company by paying cash, how much it should offer to maintain its EPS assuming tax rate @30%.

(A) 210 Lakhs
(B) 315 Lakhs
(C) 150 Lakhs
(D) 0 Lakhs

Answer: Option (C)
The amount available for Interest Payment = Total PBT

Conferenza.in

(₹136.79 Lakh) Less PBT of X Ltd. (₹114.29 Lakh) = ₹22.50 Lakh
Cash can be offered = ₹22.50 Lakhs/0.15
= ₹150 Lakhs

2. Maximum exchange ratio which the company should offer so that the company could keep EPS at current level is.....

(A) 1:0.952
(B) 1:2.125
(C) 1:2.023
(D) 1:0.196

Answer: Option (B)

EPS (Y Ltd.) = ₹8.5 & EPS (X Ltd.)
= ₹4
Exchange Ratio = 8.5/4
= 2.125

3. No. of shares to be issued by X Ltd. shall be approximately.....

(A) 3.9375 Lakhs
(B) 1.7639 Lakhs
(C) 3.7485 Lakhs
(D) 0.3631 Lakhs

Answer: Option (A)

No. of Shares of Y Ltd. = 1.8529 Lakh Shares [₹15.75 Lakh/ ₹8.50]
No. of shares to be issued by X Ltd. = 1.8529 Lakh × 2.125
= 3.9375 Lakh

Case Scenario 9

SM Limited has a market capitalization of ₹3,000 crore and the current earnings per share (EPS) is ₹200 with a price earnings ratio (PER) of 15. The Board of directors is considering a proposal to buy back 20% of the shares at a premium which can be supported by the financials of the company. The Boards expects post buy back market price per share (MPS) of ₹3057. Post buy back PER will remain same. The company proposes to fund the buy back by availing 8% bank loan since available resources are committed for expansion plans. Applicable income tax rate is 30%.

ICAI Case Scenario Booklet, CS 56 (5 × 2 = 10 Marks)

Answer:

1. The number of shares proposed to be bought back is.....

(A) 12 lakhs
(B) 15 lakhs

Conferenza.in

(C) 20 lakhs
(D) 22 lakhs

Answer: Option (C)

MPS = ₹200 × 15
= ₹3000 per share
Original shares = (₹3000 Crore)/(₹3000)
= 1 crores shares
No. of shares proposed to be bought back = 1 crores × 20% = 20 Lakhs shares

2. The interest amount which can be paid for availing the bank loan shall be……

(A) ₹5,280.00 Lakhs
(B) ₹5,575.00 Lakhs
(C) ₹4865.00 Lakhs
(D) ₹6485.00 Lakhs

Answer: Option (A)

Post buy back EPS = (₹3057 per share)/15
= ₹203.80 per share
Post buy back Earnings after tax = ₹203.80 × 80 Lakhs shares
= ₹16,304 Lakhs
Post buy back Earnings before tax (A) = (16,304)/(1 - 0.30)
= ₹23,291. 43 Lakhs
Pre buy back Earnings after tax = 200 × 100 Lakhs shares
= ₹20,000 Lakhs
Pre buy back Earnings before tax (B) = (20,000)/(1 - 0.30)
= ₹28,571.43 Lakhs
Interest to be paid for availing bank loan (A) - (B) = ₹5,280 Lakhs

3. The loan amount to be raised shall be……..

(A) ₹55650 Lakhs
(B) ₹62300 Lakhs
(C) ₹66000 Lakhs
(D) ₹72450 Lakhs

Answer: Option (C)

Loan amount to be raised = ₹5,280 Lakhs /0.08
= ₹66,000 Lakhs

4. The premium per share paid over the current MPS shall be……..

(A) ₹200
(B) ₹250

Conferenza.in

(C) ₹300
(D) ₹350

Answer: Option (C)
Buy back price per share = ₹66,000 Lakhs /20 Lakhs
= ₹3,300 per share
Premium per share paid over the current MPS = ₹3300 - ₹3000 = ₹300 per share

5. % premium over current MPS shall be……..
(A) 12%
(B) 14%
(C) 10%
(D) 15%

Answer: Option (C)
% = ₹300/ ₹3000 × 100
Premium
= 10%

Case Scenario 10

P Ltd. is studying the possible acquisition of Q Ltd., which is in the same industry, by way of merger. The following data are available:

Firm	After-tax earnings	No. of equity shares	Market price per share	Book value per share
P Ltd.	₹10,00,000	2,00,000	₹75	₹210
Q Ltd.	₹3,00,000	50,000	₹60	₹105

The Boards of Directors of both companies are in the process of negotiating the terms of the proposed merger. In case P Ltd. considers buying out Q Ltd. by paying cash, it shall borrow the required funds @ 15% rate of interest per annum. Both companies are in the tax bracket of 35%.

MTP May 26 S1 (5 × 2 = 10 Marks)

Answer:

1. In case P Ltd. wants to be sure that its EPS is not diminished by the merger, the relevant exchange ratio to achieve the same objective should be.....
(A) 0.33
(B) 1.20
(C) 1.30
(D) 1.10

Conferenza.in

Answer: Option (B)

Faculty Notes:

P Ltd.'s present EPS = ₹10,00,000 ÷ 2,00,000
= ₹5.00

Combined earnings = 10,00,000 + 3,00,000
= ₹13,00,000

To hold EPS at ₹5, total shares may not exceed 13,00,000 ÷ 5 = 2,60,000

So new shares issuable = 2,60,000 – 2,00,000
= 60,000 against Q's 50,000 shares

Exchange ratio = 60,000 ÷ 50,000
= 1.20 shares of P for each share of Q

2. The type of merger of P Ltd. & Q Ltd. shall be ……..

(A) Horizontal Merger
(B) Vertical Merger
(C) Congeneric Merger
(D) Reverse Merger

Answer: Option (A)

Faculty Notes:

Both firms are in the same industry and at the same stage of the value chain, which is the definition of a horizontal merger.

Vertical would join a supplier to a customer, congeneric would join related but different lines, and reverse would have the smaller company absorb the larger.

3. Suppose P Ltd. is exchanging its share on a one-to-one basis for Q Ltd. and post-merger there is no change in the P/E ratio of any of the companies, then post-merger market capitalisation shall be ……

(A) ₹125.00 Lakh
(B) ₹130.00 Lakh
(C) ₹187.50 Lakh
(D) ₹195.00 Lakh

Answer: Option (D)

Faculty Notes:

One-for-one means 50,000 new shares, so total shares = 2,50,000

Combined EPS = ₹13,00,000 ÷ 2,50,000
= ₹5.20

P Ltd.'s P/E = ₹75 ÷ ₹5.00
= 15 times, and it is unchanged

Market price = 5.20 × 15
= ₹78; capitalisation
= 2,50,000 × 78

Conferenza.in

= ₹1,95,00,000 i.e. ₹195 Lakh.

4. Suppose P Ltd. is offering about ₹35 Lakh to Q Ltd. for the proposed acquisition — it will result in……

(A) EPS accretion
(B) EPS dilution
(C) No Change
(D) Risk free EPS

Answer: **Option (B)**

Faculty Notes:

A cash purchase issues no shares, so P Ltd. still has 2,00,000 — but it now carries the borrowing.

Interest	= ₹35,00,000 × 15%
	= ₹5,25,000; after tax at 35%
	= ₹3,41,250
Combined earnings	= 13,00,000 – 3,41,250
	= ₹9,58,750
EPS	= 9,58,750 ÷ 2,00,000
	= ₹4.79 against ₹5.00 before, so the merger dilutes EPS.

5. Suppose instead of a friendly takeover, P Ltd. attempts a hostile takeover of Q Ltd. To defend itself, Q Ltd. offers substantial compensation to its managers in the event they are removed due to the takeover. This defensive tactic adopted by Q Ltd. is called……

(A) Crown Jewels
(B) Poison Pill
(C) White Knight
(D) Golden Parachutes

Answer: **Option (D)**

Faculty Notes:

Large severance packages payable to managers who lose their jobs in a takeover are Golden Parachutes — they raise the cost of the bid and soften the landing for the team.

Crown Jewels sells the assets the bidder wants, a Poison Pill floods the register with cheap shares, and a White Knight is a friendlier rival bidder.

Conferenza.in