



CA Test Series.org (Since 2015)

CA Final | CA Inter | CA IPCC | CA Foundation Online Test Series

Question Paper	
ADVANCED FINANCIAL MANAGEMENT	Duration: 3 Hours
Details: Full Test-2	Marks: 100

Instructions:

- All the questions are compulsory
- Properly mention test number and page number on your answer sheet, Try to upload sheets in arranged manner.
- In case of multiple choice questions, mention option number only Working notes are compulsory wherever required in support of your solution
- Do not copy any solution from any material. Attempt as much as you know to fairly judge your performance.

Legal: Material provided by catestseries.org is subject to copyright. No part of this publication may be reproduced, distributed, or transmitted in any form or by any means, including photocopying, recording, or other electronic or mechanical methods, without the prior written permission of the publisher. For permission requests, write to the publisher, addressed "Attention: Permissions Coordinator," at exam@catestseries.org. If any person caught of copyright infringement, strong legal action will be taken. For more details check legal terms on the website: catestseries.org

PART I – Case Scenario based MCQs

Answer all Questions.

Case Scenario-I

Two friend 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 friends analyze the market data for the few months and came out with expected returns on two stocks for a particular market.

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

Based on above scenario, answer the following questions:

1. The Beta of Defensive stock is.....

- A) 2
- B) 0.5
- C) 4
- D) 1

2. If the market return is equally likely to be 7% or 25% then expected return of Aggressive stock shall be.....

- A) 18%

B) 13.50%

C) 22%

D) 11%

3. The Modern Portfolio Theory was propounded by

A) William Sharpe

B) Black Scholes

C) Stephen Ross

D) Harry Markowitz

(3 x 2 = 6 Marks)

Case Scenario II

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.

On the basis of above information, choose the most appropriate answer to the MCQs.

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

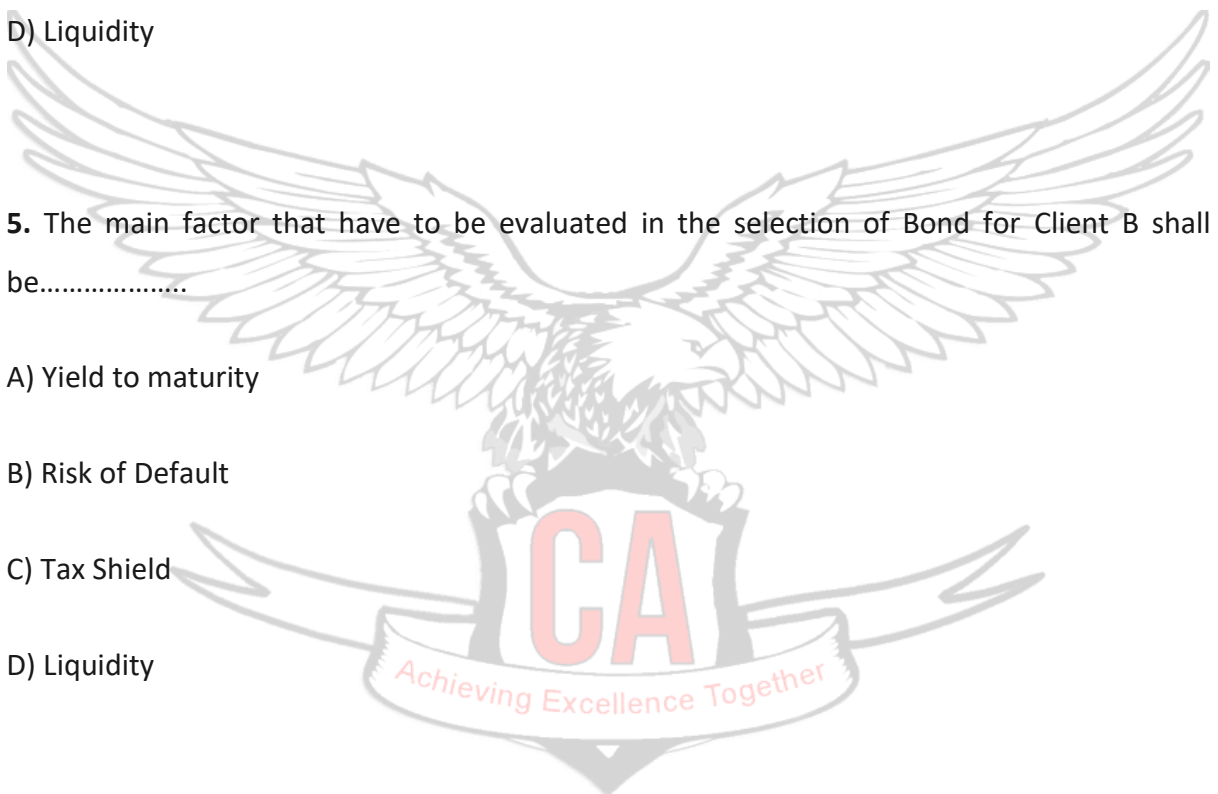
- A) Yield to maturity
- B) Risk of Default
- C) Tax Shield
- D) Liquidity

5. 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

6. 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



(3 x 2 = 6 Marks)

Case Scenario-III

Bank A is in need of fund for a period of 14 days. To meet this financial need on 20th September 2013 Bank A enters into an agreement with Bank B under which it will sell 10% Government of India Bonds issued on 1st January 2013 @ 5.65% for Rs. 8 crore (Face value is Rs. 1,00,000 per Bond).

The clean price of same Bond is Rs. 99,420 and the Initial Margin be 2% and the maturity date of Bond is 31st December 2018. Consider 360 days in a year and interest is payable annually.

Based on above Case Scenario, answer the following questions:

7. 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 Option

8. Dirty Price of the Bond will approximately be.....

- A) Rs. 103,530
- B) Rs. 106,700
- C) Rs. 105,000
- D) Rs. 108,160

9. The start proceeds of the transaction shall be approximately

- A) Rs. 8,38,36,604
- B) Rs. 8,36,52,800
- C) Rs. 8,58,36,804
- D) Rs. 8,48,52,585

10. The amount of Accrued Interest per Bond shall be approximately

- A) Rs. 7280
- B) Rs. 7200
- C) Rs. 7340
- D) Rs. 7140

(4 x 2 = 8 Marks)

Case Scenario-IV

SM Limited has a market capitalization of Rs. 3,000 crore and the current earnings per share (EPS) is Rs. 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 Board expects post buy back market price per share (MPS) of Rs. 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%.

Based on above Case Scenario, select the most appropriate alternative.

11. The number of shares proposed to be bought back is.....

- A) 12 lakhs
- B) 15 lakhs
- C) 20 lakhs
- D) 22 lakhs

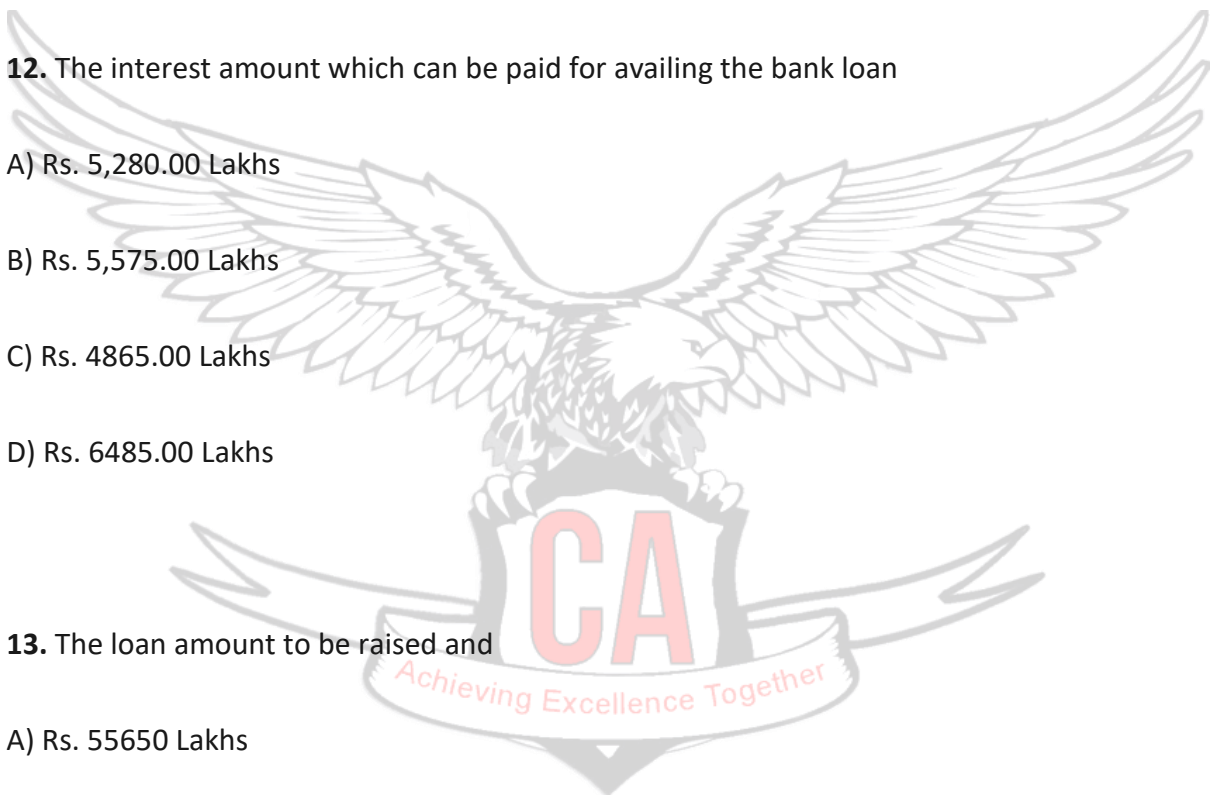
12. The interest amount which can be paid for availing the bank loan

- A) Rs. 5,280.00 Lakhs
- B) Rs. 5,575.00 Lakhs
- C) Rs. 4865.00 Lakhs
- D) Rs. 6485.00 Lakhs

13. The loan amount to be raised and

- A) Rs. 55650 Lakhs
- B) Rs. 62300 Lakhs
- C) Rs. 66000 Lakhs
- D) Rs. 72450 Lakhs

14. The premium per share paid over the current MPS



A) Rs. 200

B) Rs. 250

C) Rs. 300

D) Rs. 350

15. % premium over CMP shall be

A) 12%

B) 14%

C) 10%

D) 15%

(5 x 2 = 10 Marks)



PART – II DESCRIPTIVE QUESTIONS

Achieving Excellence Together

Answer Question No.1 which is compulsory and any 4 out of the remaining 5 questions

Q-1 (a)

The following data are available for a bond:

Face Value Rs. 10,000 to be redeemed at par on maturity

Coupon rate 8.5 per cent per annum

Years to Maturity 5 years

Yield to Maturity (YTM) 10 per cent

CATESTSERIES.ORG

You are required to calculate:

(i) Current market price of the Bond,

(ii) Macaulay's Duration,

(iii) Volatility of the Bond,

(iv) Convexity of the Bond,

(v) Expected market price if there is a decrease in the YTM by 200 basis points

(a) By Macaulay's Duration based estimate

(b) By Intrinsic Value Method.

Given

Years	1	2	3	4	5
PVIF (10%, n)	0.909	0.826	0.751	0.683	0.621
PVIF (8%, n)	0.926	0.857	0.794	0.735	0.681

(6 Marks)

Q-1 (b)

Excellent Ltd., reported a profit of Rs. 154 lakhs after 30% tax for the financial year 2019-20. An analysis of the accounts revealed that there is an extraordinary loss of Rs. 20 lakhs and the income included extraordinary items of Rs. 16 lakhs. The existing operations, except for the extraordinary items, are expected to continue in the future. In addition, the results of the launch of a new product are expected to be as follows:

	Rs. in lakhs
Sales	140

Material costs	40
Labour costs	24
Fixed costs	20

You are required to:

(i) Calculate the value of the business, given that the capitalization rate is 14%.

(ii) Determine the market price per equity share, with Excellent Ltd.'s share capital being comprised of 2,00,000 at 13% preference shares of Rs. 100 each and 100,00,000 equity shares of Rs. 10 each and the P/E ratio being 12 times. (Ignoring Corporate Dividend Tax).

(4 Marks)

Q-1 (c)

ABC Ltd., a textile company based in Maharashtra, recently decided to diversify into the chemical manufacturing sector in Gujarat. In its eagerness to commence production, the company neglected to obtain key environmental and industrial clearances required under Gujarat's local laws. As a result, operations were temporarily suspended by the authorities and the company was fined heavily for non-compliance.

In a separate incident within the finance department, a junior executive mistakenly processed a vendor payment of Rs. 3,00,000 instead of the actual due amount of Rs. 30,000. The company had no system in place for secondary verification of such transactions, and the overpayment remained unrectified for several weeks, affecting its cash flow.

Identify the type of risk involved in each of the two situations. Explain each risk in detail and discuss how such risks could be mitigated in future.

(4 Marks)

Q-2 (a)

Mayuri is interested to construct a Portfolio of Securities X and Y. She has collected the following information:

	X	Y
Expected Return (ER)	19%	23%
Risk (σ)	14%	18%

Mayuri has 5 Portfolio options of X and Y as follows:

- (i) 50% of funds in each X and Y
- (ii) 75% of funds in X and 25% in Y
- (iii) 25% of funds in X and 75% in Y
- (iv) 60% of funds in X and 40% in Y
- (v) 35% of funds in X and 65% in Y

Suppose if Co-efficient of correlation (r) between X and Y is 0.16, you are required to calculate:

- (i) Expected Return under different Portfolio Options.
- (ii) Risk Factor associated with these Portfolio Options.
- (iii) Which Portfolio is best from the point of view of Risk?
- (iv) Which Portfolio is best from the point of view of Return?

(6 Marks)

Q-2 (b)

The following table shows interest rates for the United States Dollar and French Franc. The

spot exchange rate is 7.05 Franc per Dollar. Complete the missing entries:

	3 Months	6 Months	1 Year
Dollar interest rate (annually compounded)	11½%	12¼%	?
Franc interest rate (annually compounded)	19½%	?	20%
Forward Franc per Dollar	?	?	7.5200
Forward discount per Franc (percent per year)	?	6.3%	

(4 Marks)

Q-2 (c)

Explain the concept of sustainable growth and its importance for an organization. Also, discuss the factors that make an organization financially sustainable.

(4 Marks)

Q-3 (a)

DK Ltd. is considering an investment proposal in Sri Lanka involving an initial investment of LKR 25 billion. The current spot exchange rate is INR/LKR 0.370. The risk free rate in India is 6% and the same in Sri Lanka is 5.02%.

The project will generate a cash flow of LKR 5 billion in the first year. The cash flow will increase by LKR 1 billion each year for the next 4 years. The project will wind up on completion of 5 years with no salvage value. The required rate of return for the project is 8%

(i) You are required to find out the investment worth of the project by using

(1) Home Currency Approach

(2) Foreign Currency Approach

(ii) Compare the outcome under both the approaches.

Given:

PVIF (8%, t)	0.92593	0.85734	0.79383	0.73503	0.68058
PVIF (7%, t)	0.93457	0.87344	0.81630	0.76290	0.71299

Note: Excepts rates show all calculations in Billion upto four decimal points.

(6 Marks)

Q-3 (b)

The following market data is available:

Spot USD/JPY 116.00

Deposit rates p.a.	USD	JPY
3 months	4.50%	0.25%
6 months	5.00%	0.25%

- Whether 3 months FRA rate at 3 months forward for Yen should be Nil or not.
- What should be 3 months FRA rate at 3 months forward?
- Analyse is any arbitrage opportunity available if the 6 & 12 months LIBORS for USD are 5% & 6.5% respectively and Bank XYZ is quoting 6/12 USD FRA at 6.50 – 6.75%.?

(4 Marks)

Q-3 (c)

In a rational, well ordered and efficient market, technical analysis may not work very well". Is

it true? List out the reasons for this statement regarding Technical Analysis.

(4 Marks)

Q-4 (a)

The following information was extracted from the books of M/s Murugan Ltd.:

Face Value of Bond	Rs. 1000
Coupon Interest Rate	8.5%
Time Period of Maturity Remaining	4 Years
Interest Payment	Annual, at the end of the year
Principal Repayment	At the end of the Bond maturity
Conversion Ratio (Number of shares per Bond)	30
Current Market Price per Share	Rs. 55
Market Price of Convertible Bond	Rs. 1725

It can issue plain bonds without conversion option at an Interest rate of 10.5%.

Year	t ₁	t ₂	t ₃	t ₄
PVIF@10.5%	0.905	0.819	0.741	0.671

Based on the above data, you are requested to calculate:

- (i) Straight value of bonds
- (ii) Conversion Value of Bond
- (iii) Conversion Premium

(iv) Percentage of Down Turn Risk

(v) Conversion Parity Price

(6 Marks)

Q-4 (b)

Mr. Ram purchased an open ended load fund with a NAV of Rs. 50 per unit and a 3% sales load. One year later Ram sold the fund with a NAV of Rs. 54 per unit with a back end load of 3% as well. During the year, fund paid a Rs. 0.25 dividend per unit and distributed Rs. 0.40 in capital gains per unit. If Ram invested Rs. 10,000 in this fund, what was Ram's return in rupee and in percentage terms over the year? What would be the position if it was a no load fund?

(4 marks)

Q-4 (c)

Statement: "Stamp duty, taxation issues, and lack of standardization are the primary factors impeding the growth of securitization in India, while foreclosure laws have little to no effect on the attractiveness of mortgage-backed securities."

Do you agree with this statement? Justify your answer with appropriate explanations and examples.

(4 Marks)

Or

Q-4 (c)

The Start-up India Seed Fund Scheme (SISFS) aims to bridge the funding gap for early-stage start-ups. Explain the eligibility criteria for start-ups to avail benefits under SISFS and critically examine how it addresses the unique challenges faced by start-ups. Highlight potential limitations of the scheme.

(4 Marks)

Q-5 (a)

Following is the information related to three mutual funds:

Year	MF-A	MF-B	MF-C
2020	10%	5%	14%
2021	8%	10%	10%
2022	12%	8%	18%

Correlation between market and mutual fund:

	MF-A	MF-B	MF-C
Correlation with market	0.45	0.25	0.65

Variance of the market is 9% and rate of return of government bond is 7%.

You are required to Rank the Mutual fund using Sharpe's ratio and Treynor's ratio.

(7 Marks)

Q-5 (b)

ICL is proposing to take over SVL with an objective to diversify. While ICL growth rate is 18%, the SVL growth rate is 15%. Both the companies pay dividend regularly. The summarized Profit & Loss Account of both the companies are as follows:

Rs. in Crores

Particulars	ICL	SVL
-------------	-----	-----

Net Sales	9090	3000
PBIT	5960	1440
Interest	1500	50
Provision for Tax	2880	890
PAT	1580	500
Dividends	470	304.35

	ICL		SVL	
Fixed Assets				
Land & Building (Net)	1440		380	
Plant & Machinery (Net)	1800		700	
Furniture & Fixtures (Net)	60	3300	20	1100
Current Assets		1550		1160
Less: Current Liabilities				
Creditors	460		260	
Overdrafts	70		20	
Provision for Tax	290		100	
Provision for dividends	120	940	100	480
Net Assets		3910		1780
Paid up Share Capital (Rs. 10 per share)	500		250	

Reserves and Surplus	2100	2600	1320	1570
Borrowing		1310		210
Capital Employed		3910		1780

Market Price Share (Rs.)	175	98
Cost of Equity	25%	20%

ICL's Land & Buildings are stated at current prices. SVL's Land & Buildings are revalued three years ago. There has been an increase of 7.65 per cent per year in the value of Land & Buildings.

SVL is expected to grow @ 18 per cent each year, after merger.

ICL is interested to do justice to the shareholders of both the Companies. For the swap ratio weights are assigned to different parameters by the Board of Directors as follows:

Net Worth Per Share*	25%
EPS (Earning per share)	30%
Share price as per Dividend Growth Model	20%
Market Price per share	25%

* After required adjustment.

You are required to suggest the swap ratio based on above weights and total number of shares.

Note: Round off calculations upto two decimal points.

(7 Marks)

Q-6 (a)

Following is the information available pertaining to shares of Omni Ltd.:

Current Market Price (Rs.)	420.00
Strike Price (Rs.)	450.00
Maximum Price (Rs.) expected in next 3 months' time	525.00
Minimum Price (Rs.) expected in next 3 months' time	378.00
Continuously Compounded Rate of Interest (p.a.) (%)	8.00%
e^{rt}	1.0202

From the above:

(i) Calculate the 3 months call option by using Binomial Method and Risk Neutral Method.

Are the calculated values under both the models are same?

(ii) State also clearly the basis of Valuation of options under these models.

(7 Marks)

Q-6 (b)

A Ltd. company has undertaken market research at a cost of Rs. 4 Lakhs in order to forecast the future Cash Flows of an Investment Project with an expected life of four years as follows:

Year	1	2	3	4
Sales revenue	Rs. 25,00,000	Rs. 51,40,000	Rs. 1,37,80,000	Rs. 90,60,000
Costs	Rs. 10,00,000	Rs. 20,00,000	Rs. 50,00,000	Rs. 35,00,000

These forecast Cash Flows are before considering inflation of 4.7% p.a., The Capital Cost of the project, payable at the start of first year will be Rs. 40 Lakhs. The Investment Project will have zero scrap value at the end of the fourth year. The level of working capital investment at the start of each year is expected to be 10% of the incremental sales revenue in that year.

Capital allowances would be available on the Capital Cost of the Investment Project on a 25% reducing balances basis. A Ltd. pays tax on Profit at an annual rate of 30% per year with tax being paid one year in arrears.

A Ltd. has a nominal (money terms) after tax Cost of Capital of 12% per year. Discount Factor at 12% is as under:

Year	1	2	3	4	5
Discount Factor	0.893	0.797	0.712	0.636	0.567

Calculate the net Present Value of the Investment Project in nominal terms and comment on its financial acceptability.

(7 Marks)

