Mock Test Paper - Series I: November, 2025

Date of Paper: 19th November, 2025

Time of Paper: 2 P.M. to 5 P.M.

FINAL COURSE: GROUP – I

PAPER – 2: ADVANCED FINANCIAL MANAGEMENT

Time Allowed – 3 Hours **Maximum Marks – 100**

1. *The question paper comprises two parts, Part I and Part II.*
2. *Part I comprises Case Scenario based Multiple Choice Questions (MCQs)*
3. *Part II comprises questions which require descriptive type answers.*

PART I – Case Scenario based MCQs (30 Marks)

Part I is compulsory.

Case Scenario I

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'.

Based on the above information answer the following questions:

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

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

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.

   (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. **(3 x 2 = 6 Marks)**

Case Scenario II

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 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 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 :-

EPS 50%

Market Price 25%

Book Value 25%

4. The swap ratio based on given weights shall be.....

   (a) 0.825

   (b) 0.925

(c) 0.952

(d) 0.752

5. 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

6. Post merger the EPS of the P Ltd. shall be.....

(a) 5.39

(b) 5.25

(c) 5.28

(d) 5.47

7. 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 **(4 x 2 = 8 Marks)**

Case Scenario III

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

	Bond A	**Bond B**
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

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

8. 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

9. 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

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

    (a) -4.03

    (b) -2.49

    (c) -3.63

    (d) -3.98 **(3 x 2 = 6 Marks)**

Case Scenario IV

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	40
Sales volumes	
Year 1	20000 units
Year 2	30000 units
Year 3	30000 units

The applicable discount rate is 10% p.a.

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

11. 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

12. 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

13. 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

14. 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%

15. 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% **(5 x 2 = 10 Marks)**

PART – II DESCRIPTIVE QUESTIONS

Question No.1 is compulsory. Candidates are required to answer any four questions from the remaining five questions.

Working notes should form part of the answers.

Maximum Marks – 70 Marks

1. (a) True Life Inc., a US based company, has won a contract to implement a project in India. The project will require an initial investment of ₹ 8000 million. The whole project along with the equipment will be sold to the Indian Government for ₹ 9600 million in one-year time. Since the Indian Government will pay for the amount in Indian Rupee (₹), the company is worried about exposure due to exchange rate volatility.

(i) Construct a swap that will help the True Life Inc. to reduce the exchange rate risk.

(ii) Assume that the Indian Government offers a swap at spot rate which is ₹/USD 80 in one year. The spot rate after one year is expected to be ₹/USD 84. Further, you may also assume that the True Life Inc., can also take a USD loan at 6% per annum.

Advise whether the company should opt for this option or just do nothing.

(6 Marks)

(b) XY Ltd., paid a dividend of ₹ 3 for the current year. The dividend is expected to grow at 30% for the next 5 years and at 15% per annum thereafter. The return on 182 days T-bills is 12% per annum and the market return is expected to be around 16% with a variance of 24%.

The Co-Variance of XY's return with that of the market return is 30%.

You are required to:

(i) Calculate the Required Rate of Return

(ii) Calculate the Intrinsic Value of the Stock

The PVF at 17% is given below:

Year	1	2	3	4	5
PVF (17%)	0.855	0.731	0.624	0.534	0.456

(4 Marks)

(c) Explain the various steps involved in the Business Succession Strategy. **(4 Marks)**

2. (a) The Closing values of NSE Nifty from 2nd January, 2024 to 12th January, 2024 were as follows:

Days	Date	Day	Nifty
1	2	TUE	21,742
2	3	WED	21,665
3	4	THU	21,517
4	5	FRI	21,462
5	6	SAT	No Trading
6	7	SUN	No Trading
7	8	MON	21,238
8	9	TUE	21,182
9	10	WED	20,997
10	11	THU	20,926
11	12	FRI	20,901

You are required to:

(i) Calculate Exponential Moving Average (EMA) of Nifty during the above period. The previous day exponential moving average of Nifty can be assumed as 21,500, The value of exponent for 31 days EMA is 0.062

(ii) Give brief analysis on the basis of your calculations. **(6 Marks)**

Note: Round off calculations upto two decimal points.

(b) A firm is considering a proposal to set up a cement manufacturing plant with an initial investment of ₹ 150 crore. The firm has the option to abandon the project after one year by selling it to a competitor for ₹ 100 crore if the market conditions are unfavorable and the demand is low, the project's value will decline by 60%. However, if the market conditions turn out to be favorable and the demand for cement is high, the value of the project at the end of year 1 will increase by 50%.

Given that the risk free rate of interest as 8%, what will be the value of the abandonment option? **(4 Marks)**

(c) Explain how Distributed Ledger Technology (DTL) is already in use in fields like financial services, healthcare, travel industry and economic forecasts. **(4 Marks)**

3. (a) A Japanese company imports hi-tech printer cartridges from US worth $1 million. The chief financial officer of the company wishes to know the best strategy for protection against uncertainty, for the payment that has to be made at the end of

3 months. Financial team of the company has collected the following options for evaluation:

Table-1: Exchange rates quoted in FOREX Market:

¥/$ Quotations	Bid Price	Offer/Ask Price
Spot Rates	146.03	146.63
3M – Forward Rates	144.03	145.00
6M – Forward Rates	146.35	146.70

Table-2: Options Market rates for European options with 3 months expiry:

Type of Option	Strike Price (X) (¥/$)	Premium (%) for Call & Put Options
Call & Put	145.20	1.6766% (Call) & 1.7414% (Put)
Call & Put	146.00	1.3505% (Call) & 2.1006% (Put)

The expected spot price at expiry is ¥/$: 144.90/145.05

Suggest the best strategy for CFO of the Japanese Company to protect against uncertainty, with respect to the following alternatives:

(i) Forward Hedge

(ii) Buy 3 months call, X = 145.20

(iii) Sell 3 months put, X = 145.20

(iv) Buy call & sell put both having X = 146.00 **(6 Marks)**

(b) Shares of V Ltd. are being quoted at a trailing Price Earning (PE) ratio of 8 times. The company retains ₹ 5 per share which is 45% of its Earning Per Share.

You are required to compute:

(i) The cost of equity to the company if the market expects a growth rate of 15% p.a.

(ii) If the anticipated growth rate is 16% per annum, calculate the indicative market price with the same cost of capital.

(iii) If the company's cost of capital is 20% p.a. & the anticipated growth rate is 19% p.a., calculate the market price per share.

Note: Round off calculations upto 2 decimals. **(4 Marks)**

Either

(c) Explain Berkus Approach for valuing Startups. **(4 Marks)**

Or

(c) Explain two approaches that are used to calculate External Funding Requirement (EFR) and the type of funding. **(4 Marks)**

4. (a) A company is considering Projects X and Y with following information:

Project	Expected NPV (₹)	Standard deviation
X	1,22,000	90,000
Y	2,25,000	1,20,000

(i) Which project will you recommend based on the above data?

(ii) Explain whether your opinion will change, if you use coefficient of variation as a measure of risk.

(iii) Which measure is more appropriate in this situation and why? **(4 Marks)**

(b) ANP Plan, a hedge fund currently has assets of ₹ 20 crore. CA. X, the manager of fund charges fee of 0.10% of portfolio asset. In addition to it he charges incentive fee of 2%. The incentive will be linked to gross return each year in excess of the portfolio maximum value since the inception of fund. The maximum value the fund achieved so far since inception of fund about one and half year ago was ₹ 21 crores.

You are required to compute the fee payable to CA. X, if return on the fund this year turns out to be:

(i) 29%, (ii) 4.5%, (iii) -1.8% **(6 Marks)**

(c) Explain the advantages and disadvantages of Foreign Currency Convertible Bonds. **(4 Marks)**

5. (a) Mr. Abhishek is interested in investing ₹ 2,00,000 for which he is considering following three alternatives:

(i) Invest ₹ 2,00,000 in Mutual Fund X (MFX)

(ii) Invest ₹ 2,00,000 in Mutual Fund Y (MFY)

(iii) Invest ₹ 1,20,000 in Mutual Fund X (MFX) and ₹ 80,000 in Mutual Fund Y (MFY)

Average annual return earned by MFX and MFY is 15% and 14% respectively. Risk free rate of return is 10% and market rate of return is 12%.

Covariance of returns of MFX, MFY and market portfolio Mix are as follow:

	MFX	MFY	Mix
MFX	4.800	4.300	3.370
MFY	4.300	4.250	2.800
Mix	3.370	2.800	3.100

You are required to calculate:

(i) variance of return from MFX, MFY and market return,

(ii) portfolio return, beta, portfolio variance and portfolio standard deviation,

(iii) expected return, systematic risk and unsystematic risk; and

(iv) Sharpe ratio, Treynor ratio and Alpha of MFX, MFY and Portfolio Mix.

(8 Marks)

(b) XYZ Limited borrows £ 15 Million of six months SONIA + 10.00% for a period of 24 months. The company anticipates a rise in SONIA, hence it proposes to buy a Cap Option from its Bankers at the strike rate of 8.00%. The lump sum premium is 1.00% for the entire reset periods and the fixed rate of interest is 7.00% per annum. The actual position of SONIA during the forthcoming reset period is as under:

Reset Period	SONIA
1.	9.00%
2.	9.50%
3.	10.00%

You are required to show how far interest rate risk is hedged through Cap Option.

For calculation, work out figures at each stage up to three decimal points and amount nearest to £. It should be part of working notes. **(6 Marks)**

6. (a) PQR Ltd. is considering a project in US, which involve an initial investment of ₹ 124.50 Crore. The project will have useful life of 5 years Current spot exchange rate is INR/USD is 83. The risk free rate in US is 4.186% and the same in India is 6.9768%. Cash inflows in USD from the project are as follows:

Year	1	2	3	4	5
Cash inflow	30,00,000	40,00,000	50,00,000	60,00,000	70,00,000

PQR Ltd. is expecting net surplus of ₹ 1858.08 lakh to be received after closure of the project. There is no salvage value. PQR Ltd. want to take a forward cover to protect itself from exchange rate fluctuations.

N	1	2	3	4	5
PVIF (6.976%, n)	0.935	0.874	0.817	0.764	0.714
PVIF (4.186%, n)	0.959	0.921	0.884	0.849	0.815
PVIF (12%, n)	0.893	0.797	0.712	0.636	0.567

You are required to recommend one INR/USD rate for the forward cover, if required rate of return on this project in Indian Rupee is 15%? **(8 Marks)**

(b) SAM Ltd. has just paid a dividend of ₹ 2 per share and it is expected to grow @ 6% p.a. After paying dividend, the Board declared to take up a project by retaining the next three annual dividends. It is expected that this project is of same risk as the existing projects. The results of this project will start coming from the 4th year onward from now. The dividends will then be ₹ 2.50 per share and will grow @ 7% p.a.

An investor has 1,000 shares in SAM Ltd. and wants a receipt of at least ₹ 2,000 p.a. from this investment.

Show that the market value of the share is affected by the decision of the Board. Also show as to how the investor can maintain his target receipt from the investment for first 3 years and improved income thereafter, given that the cost of capital of the firm is 8%. **(6 Marks)**