

**St Aloysius College (Autonomous)**  
**Mangaluru**

**Semester IV – P.G. Examination - M.Com.(Finance and Analytics)**

**May/June - 2023**

**INTERNATIONAL FINANCIAL MANAGEMENT**

Time: 3 Hours

Max. Marks: 70

**SECTION - A**

**Answer any FIVE of the following:**

ST. ALOYSIUS COLLEGE  
PG Library  
MANGALORE-575 003 (5x4=20)

1. How is International Financial Management different from Domestic Financial Management?
2. What is 'Balance of Payments'? Explain how BOP indicates the health of the economy.
3. The rate of inflation in India is 8% per annum and in the USA it is 4%. The current spot rate for USD in India is ₹ 46. What will be the expected rate after 1 year and after 4 years applying the Purchasing Power Parity theory?
4. Write a note on International Indebtedness.
5. You have called your foreign exchange trader and asked for quotations on the spot, one, three and six months. The trader has responded with the following: \$ 0.6284/85, 3/7, 9/8, 12/10.
  - i) What does this mean in terms of \$ per Euro?
  - ii) If you wished to buy spot Euros how much would you pay in \$?
  - iii) If you wanted to purchase spot USD how much would you have to pay in Euro?
  - iv) What is the premium or discount in the one, three and six months forward rates in annual % (Assume you are buying Euros)
6. Find the cross rate quote of Swiss Francs in India, given that  
USD/INR 67.07/67.32  
CHF/USD 0.7662/0.7703
7. Explain the types of carbon credit.

**SECTION - B**

**Answer any FOUR of the following:**

**(4x10=40)**

8. Explain in detail the structure of Foreign Exchange Market. State and explain the different types of transactions and settlement dates in Foreign Exchange markets.
9. Companies A and B have the following interest rates:

	A	B
US Dollars (Floating rate)	LIBOR + 0.5%	LIBOR+ 1%
Canadian Dollars (Fixed rate)	5.0%	6.5%

A wants to borrow US Dollars at floating rate of interest and B wants to borrow Canadian dollars at a fixed rate of interest.

**Contd...2**

A financial institution is planning to arrange a swap and requires a 50 basis point spread. If the swap is equally attractive to A and B, what rates of interest will A and B end up paying?

10. Following information is given:

Exchange rate – Canadian Dollar 0.666 per DM (spot)

Canadian Dollar 0.671 per DM (3 months)

Interest rates – DM 7.5% p.a.

Canadian Dollar 9.5% p.a.

To take the possible arbitrage gains, what operations would be carried out?

11. Explain currency exposure and its types.
12. Describe the importance of international monetary system and stages of evolution.
13. What are the factors affecting exchange rates?

**SECTION – C (Compulsory) (1x10=10)**

14. Amte Ltd. has bought Swiss auto parts two months ago. Amte Ltd. will need S.Fr 1,00,000 in 180 days. Amte Ltd. wants to hedge its currency risk. Amte Ltd. considers using:

- a) A forward Hedge
- b) A money market hedge
- c) An option hedge
- d) No hedge

Its analysts develop the following information which can be used to assess the alternative solutions:

- a) Spot rate of S.Fr as of today 0.68\$ per S.Fr
- b) 180-day forward rate of S.Fr as of today 0.70\$ per S.Fr
- c) Interest rates are as follows:  
Deposit rates: 9% in Switzerland, and 13% in the US.  
Borrowing rate: 10% in Switzerland, and 14% in the US.
- d) A call option on S. Fr that expires in 180 days has an exercise price of 0.70\$ per S.Fr and a premium of 1%.
- e) The cost of capital is 12%.

The expected spot rate at expiry would be 0.82\$ per S.Fr. suggest the best choice for the financial manager, including remaining un-hedged.

\*\*\*\*\*



12. A company has two divisions. The output of Division A is product APP. There is a market outside the company for product APP; but this product is mainly used by Division B which has first call on Division A's output. The output of Division B is product BEE which is sold in the external market. The product APP has the following cost structure:

Variable cost per unit ₹ 7

Fixed cost per unit ₹ 3

Management has decided a target rate of return of 12 per cent for each division. The cost structure of product BEE is given below:

Transfer price own variable cost per unit ₹ 15

Fixed cost per unit ₹ 7

Market price per unit ₹ 28

You are required to determine:

- i) Transfer price of product APP per unit under:
    - a. Variable cost method
    - b. Cost plus method
  - ii) Selling price of product BEE
13. Compute labour mix variance from the information given below:

Labour	Standard			Actual		
	Hours	Rate (₹)	Amount (₹)	Hours	Rate (₹)	Amount (₹)
Skilled	75	4	300	80	5	400
Unskilled	<u>50</u>	3	<u>150</u>	<u>70</u>	2	<u>140</u>
	<b>125</b>		<b>450</b>	<b>150</b>		<b>540</b>

**SECTION – C (Compulsory)**

**(1×10=10)**

14. A company has a contribution/ sales ratio of 40%. It maintains a margin of safety of 20%. If its annual fixed cost amounts to ₹ 24 Lakhs calculate its
- a) Break Even Sales
  - b) Margin of safety
  - c) Total Sales
  - d) Total Variable Cost
  - e) Profit

\*\*\*\*\*

**St Aloysius College (Autonomous)  
Mangaluru**

**Semester IV – P.G. Examination - M.Com.(Finance and Analytics)**

**May/June – 2023**

**FINANCIAL DERIVATIVES**

Time: 3 Hours

Max. Marks: 70

**SECTION - A**

Answer any **FIVE** of the following:

(5×4=20)

1. Explain the various participants of derivative markets.
2. Describe the settlement problems of forward contracts.
3. Examine the factors affecting call and put option pricing.
4. Explain the comparative cost advantage theory in Swaps.
5. The price of an equity shares of Onida Pictres Ltd. (a non-dividend paying) company is ₹ 30. The risk free rate is 12% p.a. with continuous compounding. An investor wants to enter in to a six months forward contract. Find out forward price.
6. Suppose the spot price of wheat is ₹ 550 per quintal, the six-month forward price is ₹ 600. Risk free rate of return is 5% p.a and cost of carry is 6% p.a. Identify arbitrage opportunity.
7. Explain the advantages and disadvantages of credit derivatives.

ST. ALOYSIUS COLLEGE  
P.G. LIBRARY

MANGALORE-575 003

**SECTION – B**

Answer any **FOUR** of the following:

(4×10=40)

8. Explain the different types credit derivatives.
9. Describe functions and criticism of derivatives.
10. Explain combination strategies under hedging using options.
11. Assume that company X and company Y require 1 Million for five years term and have been offered the following rates.

Company	Fixed	Floating
X	9.2%	MIBOR + 0.2%
Y	10.50%	MIBOR +0.5%

Company X desires to borrow in floating rate of interest and Company Y wants to borrow at fixed rate of interest. Create a swap where an intermediary bank is willing to mediate the transaction for a commission of 20 basis points which will appear equally attractive to both the parties.

12. Following information is available on put options of RIL shares with the contract size of 500 shares.

Strike Price (₹)	1540	1560	1580
Premium (₹)	6	4	2

**Contd...2**

Help the investor to create a butterfly spread and find out the gain or loss at various ranges of settlement prices of ₹ 1500, ₹ 1550, ₹ 1570 and ₹ 1600 per stock and interpret the results. Show the diagrammatic representation of the same.

13. The share of X Ltd. are currently priced at ₹ 415 and call option exercisable in 3 months' time has an exercise rate of ₹ 450. Risk free interest rate is 10% p.a and standard deviation of share price is 22 %(Volatility). Based on the assumptions that X Ltd is not going to declare any dividend for the next 3 months is the option worth buying for ₹ 25?

**SECTION – C (Compulsory)**

**(1x10=10)**

14. On 1/07/2022 Bharath Oil Ltd bought ten oil futures expiring on 28/7/2022 at an exercise price of \$45 per barrel. The standard size of the contract is 1,00,000 barrels. The initial margin is 10% of the contract value and maintenance margin is 80% of initial margin. Prepare a statement of marking to market if the closing prices of oil in the spot market for the subsequent days are as follows.

Day	Settlement Price(\$/Barrel)
1	45.50
2	44.90
3	44.05
4	43.75
5	44.00
6	43.05
7	43.85
8	43.50

\*\*\*\*\*

**St Aloysius College (Autonomous)  
Mangaluru**

**Semester IV – P.G. Examination - M.Com.(Finance and Analytics)**

**May/June – 2023**

**CORPORATE LAW, ETHICS AND GOVERNANCE**

Time: 3 Hours

Max. Marks: 70

**SECTION - A**

**Answer any FIVE of the following:**

**(5x4=20)**

1. What is corporate governance? Explain the issues in Indian Corporate Governance.
2. List the Legal compliances and stages in the formation of Joint Stock Company.
3. What are ethical dilemmas? How to overcome it?
4. Identify the advantages of Business Ethics.
5. What is the role played by "Whistle blowing" in the context of corporate scandals?
6. Discuss the measures to mitigate unethical practices in companies.
7. Explain the need for CSR in today's Corporate world.

**SECTION - B**

**Answer any FOUR of the following:**

**(4x10=40)**

8. Under what circumstances does the court allow the "Lifting the Corporate Veil".
9. Explain the doctrine of Indoor management with exceptions.
10. Explain the benefits of Corporate Social Responsibility. Which of the CSR Models is best applicable in India?
11. Discuss the role played by National Company Law Tribunal and Appellate Tribunal and Special Courts in the Company Law administration in India.
12. Discuss in detail the various components of ethics in accounting and finance.
13. Describe the powers and functions of SEBI.

**SECTION - C (Compulsory)**

**(1x10=10)**

14. You are the Managing Director of Metro Rail Corporation (MRC) of a metropolitan city and you have received orders and funding for construction of the metro track and a parking space in a densely forested area of the city with houses of few underprivileged families as well in it. For the construction, the forest has to be cleared and the families have to be moved to some other place. The locals have started a protest after knowing about the order. They are highly raged about cutting down thousands of trees and the affected families have also joined them because the forest holds emotional value for them. On the other hand, the minister who directly controls the MRC is pressuring you to start the felling process as soon as possible. You know that going against his orders will have serious repercussions.
  - (a) What are the ethical issues involved and the options available to you in such a situation?
  - (b) Also, suggest a course of action you would like to follow.

\*\*\*\*\*

**St Aloysius College (Autonomous)**  
**Mangaluru**

**Semester IV – P.G. Examination - M.Com.(Finance and Analytics)**

**May/June – 2023**

**PORTFOLIO THEORY AND MANAGEMENT**

Time: 3 Hours

Max. Marks: 70

**SECTION - A**

ST. ALOYSIUS COLLEGE  
PG Library  
MANGALORE-575 003

Answer any **FIVE** of the following:

(5x4=20)

1. Explain the various forms of market efficiencies.
2. List out the sources of investment information.
3. Distinguish between systematic risk and unsystematic risk.
4. Identify the various assumptions and limitations of Markowitz Model.
5. "When we introduce risk-free borrowing and lending to the Markowitz Portfolio Analysis, the efficient frontier changes from curvy shape to straight line". Elaborate the statement in the light of Capital Market Line.
6. The return on Mutual fund portfolio during the last few years was 18%, when the return on the market portfolio was 15%. The standard deviation of the portfolio return was 28% whereas the standard deviation of the market portfolio return was 20%. The portfolio beta was 1.2. the risk-free rate was 9%. You are required to calculate Fama's net selectivity for the portfolio, showing the decomposition of performance.
7. Suppose the following historical returns have been earned for the market index and stock D:

PERIOD	1	2	3	4	5
RETURN ON MARKET INDEX%	(5)	4	8	15	9
RETURN ON STOCK D%	(12)	6	12	20	6

What is the beta for the stock D? How would you interpret it?

**SECTION - B**

Answer any **FOUR** of the following:

(4x10=40)

8. The Commonwealth corporation's earnings and dividends have been growing at the rate of 12% p.a. this growth rate is expected to continue for 4 years. After that the growth rate would fall to 8% for the next four years. Beyond that the growth rate is expected to be 5% forever. If the last dividend was ₹ 1.50 and the investor's required rate of return on the stock of Commonwealth is 14%, how much should be the market value per share of Commonwealth Corporation's equity stock?
9. Stocks R and S display the following returns over the past 2 years:

YEAR	STOCK R RETURN (%)	STOCK S RETURN (%)
2022	10	12
2023	16	18

- a. What is the expected return on a portfolio made up of 40% of R and 60% S?



- b. What is the standard deviation for each stock?
  - c. What is the covariance of stock R and S.?
  - d. Determine the correlation coefficient of stock R and S.
  - e. What is the portfolio risk of a portfolio made up of 40% of R and 60% of S?
10. Discuss the strategies for portfolio revision.
  11. Following portfolios are being considered for investment. During the period under consideration the risk-free rate was 7 percent:

Portfolio	K	L	M	N
Return (%)	20	25	15	22
$\beta$	1	1.5	0.60	1.10
S.D(%)	5	10	3	6

Market return and its standard deviation are 13% and 4% respectively.

- a) Evaluate the performance of above portfolios using Sharpe's, Treynor's and Jensen's measure.
  - b) Calculate unsystematic risk. Which portfolio has highest unsystematic risk during the evaluation period?
12. What are the objectives of Personal Financial Planning? Discuss the areas of personal investments.
  13. Discuss the key tenets of Benjamin Graham and Warren Buffet's strategy for investing.

### SECTION – C (Compulsory)

(1x10=10)

14. Following information is available in respect of various securities and market:

SECURITY	A	B	C	D	E	T-Bills	NIFTY50
Estimated Return (%)	22	16	18	9	26	8	15
BETA	1.80	2	1.10	0.95	1.40	-	1

- a. Determine the SML equation.
- b. What is the expected return or required return as per CAPM?
- c. Which of the securities are underpriced or over-priced? Why?
- d. Based on your answer, if you were to buy only one security, which one would you buy and why?

\*\*\*\*\*