JAIPURIA INSTITUTE OF MANAGEMENT
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POST GRADUATE DIPLOMA IN MANAGEMENT

Vth Trimester (Batch 2017-19)

REAPPEAR- END TERM EXAMINATIONS (SET-II)

Course Name	Investment Management	Course Code	FIN501
Max. Time	2 hours	Max. Marks	40

Instructions: ATTEMPT ALL QUESTIONS.

Q1.

(a) Explain how to create the following strategies using Options:

(i) A butterfly spread using Calls.

(ii) A Straddle.

(b) For each of the above trading strategies, evaluate the maximum potential profits and losses associated with each of these strategies.

(c) Use put-call parity to show that the cost of a butterfly spread created from European puts is identical to the cost of butterfly spread created from European calls. (10)

Q2. Consider the following data for a one factor economy. All portfolios are well diversified.

Portfolio	E (r)	Beta
A	12%	1.2
F	6%	0

Suppose that another portfolio E, is well diversified with a beta of .6 and expected return of 8%. Would an arbitrage opportunity exist? If So, what would be the strategy . (5)

Q3. Mahima, is an analyst at Infoline Securities. She was asked to develop a capital market expectations outlook, which includes some expected return on Indian equities, In order to develop this outlook, her firm's research department has provided her with the following information:

Indicator

Expected dividend yield: 1.75%

Expected inflation rate: 3%

Real growth rate: 4%

Percentage change in number of shares outstanding: 0.5%

Percentage change in P/E: 0.75%

Using the above information calculate expected return in Indian equities. (5)

Q4. Briefly explain the method to value bonds and their relationship with general Interest rates. Below are the characteristics of one Long term and One short term bond fund, you are required to evaluate their risk parameters such as Avg Maturity, Modified duration etc. and calculate expected change in prices in both funds in case interest rates decline by 50 bps (0.5%). (10)

Reliance Ultra Short Duration Fund

Portfolio Aggregates

	Fund	1Y High	1Y Low	Category
Number of Securities	55	119	32	38
Modified Duration (yrs)	0.41	0.42	0.10	0.34
Average Maturity (yrs)	0.44	0.47	0.11	0.39
Yield to Maturity (%)	9.43	9.53	6.85	8.37

ICICI Prudential Long Term Bond Fund

Portfolio Aggregates

	Fund	1Y High	1Y Low	Category
Number of Securities	10	29	9	7
Modified Duration (yrs)	6.85	7.16	4.88	8.57
Average Maturity (yrs)	10.57	11.20	7.24	18.05
Yield to Maturity (%)	8.13	8.35	7.66	7.92

Q5. . Suppose the rate of return on short term default less government security is about 5%. Suppose also that the expected rate of return required by the market for a portfolio with a beta of 1 is 12%.

a. What is the expected rate of return on the market portfolio? (3 marks)

b. What would be expected rate of return on a stock with beta zero. (3 marks)

c. Suppose you consider buying a share of stock at 40 Rs. The stock is expected to pay 3Rs dividend next year and you expect to sell it for 41Rs. The Stock risk has been evaluated at beta = -0.5. Is the stock overpriced or underpriced? (4 marks)