

Question Paper Code: CMB404



INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

MBA III Semester End Examinations (Regular) - January, 2018

Regulation: IARE-R16

Security Analysis And Portfolio Management (MASTER OF BUSINESS MANAGEMENT)

Time: 3 Hours Max Marks: 70

Answer ONE Question from each Unit All Questions Carry Equal Marks All parts of the question must be answered in one place only

UNIT - I

1. (a) Explain the forms of efficient market hypothesis.

[7M]

(b) What is stock market? Write the functions of stock exchange.

[7M]

2. (a) Write a brief note on National Stock Exchange and Bombay Stock Exchange.

[7M]

(b) Explain the different investment avenues.

[7M]

UNIT - II

3. (a) Write the assumptions of CAPM Model.

[7M]

(b) Mr. Suresh is considering the purchase of two stocks X and Y for the next year. The returns of the securities depend on the next year's state of the market. The estimated rates of return are shown in the Table 1. [7M]

Table 1

State of the market	Probability of occurrence	Return of X	Return of Y
recession	0.30	12%	10%
average	0.40	14%	12%
boom	0.30	16%	18%

- i. Find out the Individual Return and Risk
- ii. Find out the Portfolio Return by considering equal proportion
- iii. Find out the Co variances and correlation
- iv. Find out the portfolio Risk by considering equal proportion
- 4. (a) Explain the arbitrage pricing theory.

[7M]

(b) Estimate the stock return by using the arbitrage model. The expected return of the market is 18% and the equity's beta is 1.5. The risk free rate of interest is 9% and market risk and sensitivity index is given in Table 2. [7M]

Table 2

security	market risk	sensitivity index
inflation	8%	1.2
ndustrial production	3%	0.95
risk premium	5%	1.1
interest rate	4%	0.8

UNIT - III

5. (a) Explain the risks involved with bonds.

[7M]

(b) Explain the different bond theories with example.

[7M]

6. (a) Mention the types of bonds. Explain in detail.

[7M]

- (b) i. Determine the price of Rs.1000 zero coupon bond with yield to maturity of 20% and 8 years to maturity.
 - ii. What is the YTM of this bond if its price is Rs.250.

[7M]

UNIT - IV

7. (a) Write the differences between futures and option contracts.

[7M]

(b) Design a SWAP diagram from the Table 3 shown below.

[7M]

Table 3

company	fixed interest rate	floating interest rate
A	10%	LI+.2
В	11.2%	LI+.6

8. (a) Explain the types of derivatives.

[7M]

(b) Explain the steps to design interest rate SWAP.

[7M]

$\mathbf{UNIT} - \mathbf{V}$

9. (a) Write the advantages of mutual funds.

[7M]

(b) The Table 4 is provided regarding the performance of the funds namely ICICI, BIRLA and FRANKLIN for a period of one-year. The risk free rate of interest is 10%. Rank them with the help of Sharpe's and Treynor's index. [7M]

Table 4

funds	Rp	SD	Beta
ICICI	27	5	0.56
BIRLA	25	8	0.74
FRANKLIN	23	3.5	0.89

10. (a) Explain the concept of net asset value.

[7M]

(b) Franklin fund, T-bill and NSE nifty have the following returns over past 5 years given in Table 5. What is the predictive ability of the fund? [7M]

Table 5

Year	Franklin fund $\%$	T-bill %	NSE nifty %
1	9	6	6
2	-6	10	-5
3	14	8	11
4	12	7	10
5	16	9	13