PRESIDENCY UNIVERSITY
BENGALURU   SET B

SCHOOL OF MANAGEMENT
MID TERM EXAMINATION - NOV 2023

Semester : Semester III - 2022

Course Code : MBA3005

Course Name : Sem III - MBA3005 - Investment Management

Program : MBA

Date : 3-NOV-2023

Time : 10:00AM - 11:30AM

Max Marks : 50

Weightage : 25%

Instructions:
(i) Read all questions carefully and answer accordingly.
(ii) Question paper consists of 3 parts.
(iii) Scientific and non-programmable calculator are permitted.
(iv) Do not write any information on the question paper other than Roll Number.

PART A

ANSWER ALL THE QUESTIONS   (5 X 2 = 10M)

1. List out the five steps in the Investment process.

                                                                 (CO1) [Knowledge]

2. Name the factors that need to be considered by an investor to form a basis for the expectation of returns from an investment.

                                                                 (CO1) [Knowledge]

3. It is generally said that in order to earn higher return, investor should take higher risk. However, taking higher risk always does not provide higher return. Justify the statement with a suitable example.

                                                             (CO1,CO2) [Knowledge]

4. The standard deviation of the market portfolio is 20 percent, its expected return is 14 percent, and the risk-free asset is 9 percent. What return can an investor expect to earn on an investment of 50 percent of his wealth in the risk-free asset and 50 percent of his wealth in the market portfolio? what is the 50-50 portfolio's risk?

                                                                 (CO2) [Knowledge]

5. Does diversification reduce the risk of investment? Explain with suitable example.

                                                                 (CO2) [Knowledge]

PART B

ANSWER ALL THE QUESTIONS   (3 X 6 = 18M)

6. Answer the following question:
   (a) Alembic ltd. Is expected to pay a dividend of 3.85 rupees and sells currently at Rupees 85. Analyst expect this share price to be rupees 95 at the end of the year. The Beta of the stock is 1.15, if the risk-free rate is 5% and the expected return on the market index is 12%. Provide Your Assessment as to whether the stock is overpriced or underpriced with necessary calculation. (3 marks)
   (b) Morgan Stanley equity fund has earned return of 20% for the year 2020. The Beta of the fund is 1.05 and the risk-free rate of return is 7%. The benchmark return is 15% for the same year. Determine the Alpha of the fund and comment. (3 marks)   (CO2,CO1) [Comprehension]

7. An Investor has two investment options. <u>The details</u> of the investments are given below:

Investment	Annual Returns	Compounding of Returns	Tax on Income
Tax Free Bond	9.5%	Quarterly	NIL
Taxable Bond	12.00%	Annual	20%

If the expected Inflation in the economy is 6% pa, which investment would you prefer and why?

(CO1,CO2) [Comprehension]

8. (a) A portfolio of Non-Dividend Paying Stocks had an Arithmetic Average Returns of 9.5% and a CAGR of 7.5% between 01.01.2015 to 31.12.2019. If the market value of the portfolio as at the beginning of 2015 was Rs 88000, what is the market value of the portfolio at the end of 2019? (4 marks)
(b) State any two application of CAPM model. (2 marks)

(CO1) [Comprehension]

PART C

ANSWER THE FOLLOWING QUESTION   (2 X 11 = 22M)

9. Mr Salim is not new to investing but new to equity investing. Exactly a year ago, he started equity investing by choosing two stocks and invested in them. The details of the stocks and their values and other details are as follows:

Sl. No.	Invested Amount ₹	Current Value ₹	Standard Deviation	Beta
Reliance Industries	150000	185000	22%	1.65
Infosys	250000	285000	16%	0.85

(CO2) [Application]

The Correlation between the returns of these two stocks for the period was 0.45.
Considering the above information and as an Investment Expert, you are required to **COMPUTE** and **EXPLAIN** the following:

1. Returns earned by each of the Stock and also the Returns earned by Mr Salim on the Portfolio (3 Marks)
2. Beta of the Portfolio (2 marks)
3. Risk of the Portfolio (3 Marks)
4. Diversification Benefit derived by Mr Salim on this Portfolio (2 Marks)

10. Mutual Funds are ready made portfolios, which an investor can just pick and invest based on his investment goals. However there are a number of Mutual Fund Schemes across various Asset Management Companies from which the investor needs to make a choice based on their past performance. A set of Risk Adjusted Measures of performance are very popular and are very wide used as reference for Mutual Fund performance and ranking. Assume that you are a Personal Banker with HDFC Bank and you are talking to a client of yours for investing a rather high amount in Mutual Funds. Your client has asked you to rank the performance of select six Mutual Fund Schemes using Total Risk, Market Risk and also Fund Manager Performance, so that he will invest in the top three ranked funds in equal amount. The details of the Funds and the Benchmark performance is as follows:

Fund / Benchmark Name	Returns %	Total Risk %	Beta
HDFC Top 200 Fund	18%	22%	.85
IDFC Equity Fund	22%	26%	1.25
ICICI Bluechip Fund	26%	30%	1.50
SBI Magnum Fund	20%	22%	1.05
Tata PE Fund	24%	32%	1.45
UTI Master Growth Fund	14%	18%	.90
Nifty Index	20%	24%	
India Govt. Bond	7.5%		

(CO2) [Application]

As required by your Client, **RANK** the Funds based on a) Total Risk b) Market Risk and c) Fund Manager Performance.