Name: **Enrolment No:**	

UPES

End Semester Examination, May 2025

Course: Investment Analysis and Portfolio Management **Semester: VI**

Program:INT-BBA- MBA **Time: 03 hrs.**

Course Code: FINC3068_3 **Max. Marks: 100**

Instructions:

SECTION A
10Qx2M=20Marks

S. No.		Marks	CO
Q 1	A market participant has a time horizon of one week. He is typically: A. A Trader B. An investor C. A speculator D. A gambler	**2**	**CO1**
Q2	The true value of a security is its: A. Market value B. Discounted value C. Value at which it was issued D. None of the above	**2**	**CO1**
Q3	Nifty is a: A. Value weighted index B. Equal weighed index C. Price weighted index D. Hybrid index	**2**	**CO1**
Q4	Variance will always be A. Positive B. Negative C. Variable D. Very High	**2**	**CO1**

Q5	Which of the following is true? A. The geometric mean is always less than the arithmetic mean B. The geometric mean is always greater than the arithmetic mean C. The geometric mean and the arithmetic mean are always the same D. The geometric mean is always less than the arithmetic mean, except when all the return values being considered are equal	**2**	**CO1**
Q6	In a loan amortization schedule, as the number of years increases, in the equated instalment, the proportion of : A. The interest amount increases B. The principal repayment amount increases C. The annual instalment amount decreases D. Both a and c	**2**	**CO1**
Q7	Diversification eliminates risk if returns are: A. Not perfectly positively correlated. B. Perfectly positively correlated C. Perfectly negatively correlated D. All the above	**2**	**CO1**
Q8	What is the expected return of a zero-beta security?. A. Market return B. Risk-free rate of return C. Market return- Risk- free return D. Market return + Risk-free return	**2**	**CO1**
Q9	The first person to show quantitatively why and how diversification reduces risk was: A. Tobin B. Markowitz C. Modigliani D. Jacobs	**2**	**CO1**
Q10	As per the CAPM, the beta of a security is proportional to the variance of the market: A. Inversely B. Directly C. Occasionally D. There is no proportionality	**2**	**CO1**

SECTION B **4Qx5M= 20 Marks**			
Q11	Why is standard deviation commonly employed as a measure of risk?	**5**	**CO2**
Q12	Discuss the common misconceptions surrounding the Efficient Market Hypothesis.	**5**	**CO2**
Q13	What are the basic assumptions of Capital Asset Pricing Model (CAPM)?	**5**	**CO2**
Q14	What is beta and how is it measured? What adjustment is made to historical betas?	**5**	**CO2**
SECTION-C **3Qx10M=30 Marks**			
Q15	The probability distribution of the rate of return on Goldman Limited is as follows: Rate of Return Probability 60 % 0.2 40 % 0.3 20 % 0.5 A. What is the expected rate of return? B. What is the standard deviation of the return?	**10**	**CO3**
Q16	Explain the fundamental and technical approaches to security valuation. Compare their methods, key features, and use cases with examples.	**10**	**CO3**
Q17	A. Explain Random Walk Model and Efficient Market Hypothesis. B. Distinguish the key differences between Random Walk Model and Efficient Market Hypothesis	**10**	**CO3**

SECTION-D 2Qx15M= 30 Marks			
Q18	The following table gives an analyst's expected return on two stocks for particular market returns Market Return — Aggressive Stock — Defensive Stock 6 % — 8 % — 15 % 20 % — 50 % — 25 % A. What is the ratio of the beta of the aggressive stock to the beta of the defensive stock? B. If the risk-free rate is 4 % and the probability that the market return would turn out to be 6 % and 20 % are 0.7 and 0.3 respectively, what is the market risk premium? C. What is the alpha of the defensive stock? D. Provide analysis of the stocks performance.	**15**	**CO4**
Q19	You have recently graduated as a major in finance and have been hired as a financial planner by Jubilee Securities, a financial services company. Your boss has assigned you the task of investing Rs.1,000,000 for a client who has a 1-year investment horizon. You have been asked to consider only the following investment alternatives: T-bills, stock A, stock B, stock C, and market index.	**15**	**CO4**

The economics cell of Jubilee Securities has developed the probability distribution for the state of the economy and the equity researchers of Jubilee Securities have estimated the rates of return under each state of the economy.

You have gathered the following information from them:

State of the Economy	Probability	Returns on Alternative Investments				
		T-Bills	Stock A	Stock B	Stock C	Market Portfolio
•Recession	0.2	6.0%	(18.0%)	25.0%	(6.0%)	(10.0%)
• Normal	0.5	6.0	20.0	5.0	15.0	16.0
• Boom	0.3	6.0	42.0	(12.0)	26.0	30.0

Your client is a very curious investor who has heard a lot relating to portfolio theory and asset pricing theory. He requests you to answer the following question:

a. What is the expected return and the standard deviation of return for stocks A,B,C, and the market portfolio?
b. What is the covariance between the returns on A and B? returns on A and C? returns on B and C?
c. What is the coefficient of correlation between the returns of A and B?
d. What is the expected return and standard deviation on a portfolio in which the weights assigned to stocks A, B, and C are 0.4, 0.4, and 0.2 respectively?
e. The beta coefficients for the various alternatives, based on historical analysis, are as follows:

Security	Beta
T-bills	0.00
A	1.30
B	(0.60)
C	0.95

i. What is the SML relationship?

ii. What is the alpha for stocks A, B, and C?

f. Suppose the following historical returns have been earned for the stock market and the stock of company D.

Period	Market	D
1	(5%)	(15%)
2	4	7
3	8	14
4	15	22
5	9	5

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

Or

Distinguish the three levels of market efficiency.

A. Describe the tests commonly employed to verify the weak-form efficient market hypothesis.
B. How is an event study done? Discuss the evidence of event studies.
C. How is portfolio study done?
D. What calendar anomalies have been found?