Name: **Enrolment No:**	

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, Dec 2023

Course: BA-ECO **Semester: V**
Program: Financial Economics **Time: 03 hrs.**
Course Code: ECON3025P **Max. Marks: 100**

Instructions:

SECTION A
10Qx2M=20Marks

S. No.		Marks	CO
Q 1	MCQ		
I.	Which of the following is a measure of the sensitivity of a stock's return to the market return? a) Alpha b). Beta c) R-squared d) Standard deviation	**2**	**CO1**
II.	Which of the following is an example of systematic risk? a) A company's CEO resigns b). A natural disaster occurs c) A company announces a new product d) A company's earnings report beats expectations	**2**	**CO1**
III.	Which of the following is an example of unsystematic risk? a) Interest rate changes b) Exchange rate fluctuations c). A company's CEO resigns	**2**	**CO1**

	d) A terrorist attack occurs		
IV.	The Capital Asset Pricing Model (CAPM) is used to: a) Calculate a stock's intrinsic value b) Measure a stock's risk c). Estimate a stock's expected return d) All of the above	**2**	**CO1**
V.	The term "diversification" refers to: a) Investing in multiple stocks in the same industry b) Investing in stocks and bonds c.) Spreading investments across different asset classes and sectors d) Investing in high-risk, high-reward stocks	**2**	**CO1**
VI.	The time value of money refers to: a) The fact that money can earn interest over time b) The fact that the value of money changes over time due to inflation c) The fact that the present value of money is greater than its future value d).The fact that the future value of money is greater than its present value	**2**	**CO1**
VII.	An investor who wants to invest in a portfolio of stocks that replicates the performance of a market index would choose: a) An actively managed mutual fund b). A passively managed mutual fund or an exchange-traded fund (ETF) c) A hedge fund d) A private equity fund	**2**	**CO1**

VIII.	The term "leverage" refers to: a). The use of borrowed funds to increase potential returns b) The degree of risk associated with an investment c) The potential return on an investment d) The market value of an asset	**2**	**CO1**
IX.	The term "beta" measures: a) The potential return on an investment b) The degree of risk associated with an investment c) The sensitivity of a stock's return to the market return d). The sensitivity of a bond's price to changes in interest rates	**2**	**CO1**
X.	Which of the following best describes the time value of money? a.) The idea that money is worth more today than it will be in the future b) The idea that money is worth more in the future than it is today c) The idea that money has no value over time d) The idea that money is worth the same amount regardless of when it is received	**2**	**CO1**
SECTION B **4Qx5M= 20 Marks**			
Q2	Mr. Nadeem owes a total of $3,060 which includes 12% interest for the three years he borrowed the money. How much did he originally borrow?	**5**	**CO2**
Q3	Explain the concept of systematic risk. What are the different types of systematic risk	2+3	**CO2**
Q4	What is beta? How is it interpreted?	**2+3**	**CO2**

<table>
<tr><td>Q5</td><td>write notes on:

a) interest rate risk; and

b) market risk</td><td>2.5+2.5</td><td>CO2</td></tr>
<tr><td colspan="4">SECTION-C
3Qx10M=30 Marks</td></tr>
<tr><td>Q6</td><td>From the following information you are required to calculate the risk.
<table><tr><td>Possible return</td><td>Probability</td></tr><tr><td>30</td><td>0.10</td></tr><tr><td>40</td><td>0.30</td></tr><tr><td>50</td><td>0.40</td></tr><tr><td>60</td><td>0.10</td></tr><tr><td>70</td><td>0.10</td></tr></table></td><td>10</td><td>CO3</td></tr>
<tr><td>Q7</td><td>With the following information, you are required to calculate the Beta of a stock using regression model:
ΣXY = 2160.49; ΣX = 49.82; ΣY = 111.69; ΣX2 = 1432.75; n = 12
Where, Y is the stock return and X is the market return.</td><td>10</td><td>CO3</td></tr>
<tr><td>Q8</td><td>Initial investment is Rs 25,000

Net Cash Flow at the end of:

1st year = Rs 12,000; 2nd year = Rs. 3,000; 3rd year =Rs. 8,000; 4th year= 8,000.

Cost of Capital/Discount Rate is 10%.

The present Value of Re 1 at 10% cost of capital from 1st year to 4th year are 0.909, 0.826, 0.751, and 0.683.

Calculate Net-Present Value and comment on the same.</td><td>10</td><td>CO3</td></tr>
<tr><td colspan="4">SECTION-D
2Qx15M= 30 Marks</td></tr>
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Q9	a) ABC Co Ltd. Issues 1000, 10% debenture of Rs 100 each at a discount of 2% redeemable debenture after 10 years. If the marginal tax rate is 50%, find out the after-tax cost of debenture. b) Suppose a share is currently selling at ₹120. An investor who is interested in the share anticipates that the company will pay a dividend of Rs 5 in the next year. Moreover, he expects to sell the share at ₹175 after one year. Calculate the expected return from the investment.	**10 + 10 =15**	**CO4**
Q10	Explain the concept of diversification with suitable example.	15	CO4