



Name:

Enrolment No:

UPES

End Semester Examination, May 2023

Course: Financial Economics I

Program: BA Eco (Hons)

Course Code: ECON2029P

Semester: IV

Time : 03 hrs.

Max. Marks: 100

Instructions: Answer the questions as per the section and serial no. of the questions.

SECTION A  
10Qx2M=20Marks

S. No.		Marks	CO
Q 1	A market where new securities are bought and sold for the first time is known as a _____ Market. a) Primary b) Secondary c) Tertiary d) Capital	2	CO1
Q 2	The call option price is higher when: a) The sticking price is higher than the stock price b) The sticking price is lower than the stock price c) The option period is shorter d) The option period is longer and the strike price is lower	2	CO1
Q 3	Mr. John invested ₹2000 in gold, which he bought at ₹520 per gram. After two years, he sold them at ₹566 per gram. His annual rate of return from this investment is approximately _____ a) 4% b) 3.3% c) 4.4% d) 5.4%	2	CO2
Q 4	This type of risk is avoidable through proper diversification. a) portfolio risk b) systematic risk c) unsystematic risk d) total risk	2	CO1
Q 5	If the price level was 100 in 2022 and 102 in 2023, the inflation rate was: a) 102% b) 20% c) 2%	2	CO2

Q 6	The yield curve usually slopes upward for the following reason: A) Longer maturity bonds typically pay higher interest rates than bonds with shorter maturity B) Longer maturity bonds typically pay lower interest rates than bonds with shorter maturity C) Default risk is higher for shorter maturity bonds D) Longer maturity bonds are not taxable	2	CO1
Q 7	The Ease and Speed with which you can exchange an asset for goods, services, or other assets is its: a) Risk b) Time to maturity c) Velocity d) Liquidity	2	CO1
Q 8	A perpetuity is distinguished from other bonds in that it: a) Never matures b) Pays continuously compounded interest c) Is issued only by the U.S. government d) will be used to purchase another bond when it matures unless the owner specifies otherwise.	2	CO1
Q 9	If nominal rate of return and inflation rate are 12.4% and 5.6% respectively, what is the real rate of return? a) 6.44% b) 6.33% c) 6.23% d) 6.13%	2	CO2
Q 10	A sum of ₹1000 deposited today in a bank is doubled in a period of 6 years. What is the annual rate of interest? a) 11.25% b) 12.25% c) 10% d) 11%	2	CO2

**SECTION B**  
**4Qx5M= 20 Marks**

Q 11	What are the different investment alternatives provided by different financial markets?	5	CO2
Q 12	What do you mean by forward contract and futures contract? Explain this with examples.	5	CO2
Q 13	If you invest Rs. 5,000 today at a compound interest rate of 9 per cent, what will be its future value after 5 years?	5	CO2
Q 14	What do you mean by fixed income securities? Give suitable examples and importance of it.	5	CO2

**SECTION-C**  
**3Qx10M=30 Marks**

Q 15	<p>What do you mean by Short Sales? Show the calculation of R and r associate with short selling.</p> <p>( You can assume that you decide to short 100 shares of Adani Power and the current share price is \$10 per share and After 1 year, the share price will drop to \$9 per year)</p>	10	CO3
Q 16	<p><b>This question deals with bond prices and interest rates.</b></p> <p><math>P_b</math> = price of the bond today in \$  <math>i</math> = interest rate on a bond</p> <p><b>(a) What is the interest rate on the bond if its price is \$75?</b></p> <p>b) Prove that as Bond price increases the interest rate falls  c) What is the price of the bond today if the interest rate is 8%</p>	10	CO3
Q 17	<p>What is Capital Asset Pricing Model? Explain it will the suitable diagrams and equations.</p>	10	CO3
<p><b>SECTION-D</b>  <b>2Qx15M= 30 Marks</b></p>			
Q	<p>Consider two stocks, A and B, such that <math>\sigma_A = 0.30</math>, <math>\sigma_B = 0.80</math>, <math>R_A = 0.10</math>, <math>R_B = 0.06</math> and <math>r_f = 0.02</math>.</p> <p>(a) What is the minimum variance portfolio when <math>\rho_{AB} = 0</math> and what is its volatility?  (b) What is the minimum variance portfolio when <math>\rho_{AB} = 0.6</math> and what is its volatility?  (c) What is the minimum variance portfolio when <math>\rho_{AB} = -0.6</math> and what is its volatility?</p>	15	CO4
	<p>Suppose the market premium is 9%, market volatility is 30% and the risk-free rate is 3%.</p> <p>(a) What is the equation of the SML?  (b) Suppose a security has a beta of 0.6. According to the CAPM, what is its expected return?  (c) A security has a volatility of 60% and a correlation with the market portfolio of 25%. According to the CAPM, what is its expected return?  (d) A security has a volatility of 80% and a correlation with the market portfolio of -25%. According to the CAPM, what is its expected return?</p>	15	CO4